



|                               |   |
|-------------------------------|---|
| <b>Publication Year</b>       | 1998  |
| <b>Acceptance in OA @INAF</b> | 2023-02-10T13:42:34Z  |
| <b>Title</b>                  | TC/TM DATABASE FOR THE EPIC MOS CAMERA SYSTEM (EMCS)  |
| <b>Authors</b>                | LA PALOMBARA, NICOLA  |
| <b>Handle</b>                 | <a href="http://hdl.handle.net/20.500.12386/33400">http://hdl.handle.net/20.500.12386/33400</a> |

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| FIX  | Fix bit pattern | F   | n/a  | 0   | 0   | 99 |    |         |         |         |          |          |

**RAW VALUE            MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1001 | D Prim PW Consum | V   | A    | 3   | 12  | 16 |    |         |         |         |          |          |

This field contains the measurement of the primary current consumed in the EMDH.

**CALIBRATION CURVE**    Eng. Value [A] = ((Binary Value \* 20) / 4095) - 10

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1002 | D P.S. Temp #1 | V   | degC | 3   | 12  | 16 |    |         |         |         |          |          |

This field contains the first temperature measured in a hot point inside the EMDH Power Supply.

**CALIBRATION CURVE**    Eng. Value [°C] = (Binary Value \* (-0.1268)) + 345.74

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1003 | D P.S. Temp #2 | V   | degC | 3   | 12  | 16 |    |         |         |         |          |          |

This field contains the first temperature measured in a hot point inside the EMDH Power Supply.

**CALIBRATION CURVE**    Eng. Value [°C] = (Binary Value \* (-0.1268)) + 345.74

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1004 | D +5 V PW Supply | V   | V    | 3   | 12  | 16 |    |         |         |         |          |          |

This field contains the monitor of the EMDH Power Supply +5V secondary voltage.

**CALIBRATION CURVE**    Eng. Value [V] = (((Binary Value \* 20) / 4095) - 10) \* 2

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1005 | D DBU Power +6V | V   | V    | 3   | 12  | 16 |    |         |         |         |          |          |

This field contains the monitor of the DBU +6V Power Line.

**CALIBRATION CURVE**    Eng. Value [V] = (((Binary Value \* 20) / 4095) - 10) \* 2

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1006 | D +15V PW Supply | V   | V    | 3   | 12  | 16 |    |         |         |         |          |          |

This field contains the monitor of the EMDH Power Supply +15V secondary voltage.

**CALIBRATION CURVE**    Eng. Value [V] = (((Binary Value \* 20) / 4095) - 10) \* 2

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1007 | D -15V PW Supply | V   | V    | 3   | 12  | 16 |    |         |         |         |          |          |

This field contains the monitor of the EMDH Power Supply -15V secondary voltage.

**CALIBRATION CURVE**    Eng. Value [V] = (((Binary Value \* 20) / 4095) - 10) \* 2

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1008 | G EMCS Oper Mode | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains indication about the selected EMCS operating mode. This parameter must be considered together with the following parameter E1009, it is affected by TC K0001-8.

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | Safe StandBy |
| 1         | Idle         |
| 2         | Prime        |
| 3         | Fast         |
| 4         | Offset       |
| 5         | CCD Diagnos. |
| 6         | Extraheating |
| 16        | InFlightTest |

# EMCS TM PARAMETER DETAILED LIST

| PREF  | NAME          | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|---------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1009 | G EMCS Status | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field indicates the execution status of the selected EMCS operating mode. This parameter must be considered together with the preceding parameter E1008, it is affected by TC K0001-8.

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | Valid Mode   |
| 1         | EnteringMode |
| 2         | Leaving Mode |
| 255       | NotValidMode |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1010 | D Door HOP Stat. | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This field contains indication about the status of the Door HOP switch used to power the actuators in the EMCH. This parameter is influenced by TCs K0044/45.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1011 | D Ven Val HOP St | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This field contains indication about the status of the Venting Valve HOP switch used to power the actuators in the EMCH. This parameter is influenced by TCs K0047/48.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1012 | D FW Coil 1 Stat | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This field contains indication about the status of the FW Coil 1 switch used to power the actuators in the EMCH. This parameter is influenced by TCs K0049/50.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1013 | D FW Coil 2 Stat | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This field contains indication about the status of the FW Coil 2 switch used to power the actuators in the EMCH. This parameter is influenced by TCs K0049/50.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1014 | D Ann Heater St. | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This field contains indication about the status of the Annealing Heater switch used to power the actuators in the EMCH. This parameter reaches the status set by TC K0035 Load Extraheating configuration only after TC K0007 Enter Extraheating Mode is executed.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1015 | D Shr Heater St. | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This field contains indication about the status of the Shroud Heater switch used to power the actuators in the EMCH. This parameter reaches the status set by TC K0035 Load Extraheating configuration only after TC K0007 Enter Extraheating Mode is executed, it can be modified by TC K0115 Apply / Remove Power Shroud Heater.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1016 | D Door HOP LCP | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This field contains indication about the last commanded position of the Door HOP switch used to power the actuators in the EMCH. This parameter is influenced by TCs K0044/45.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1017 | D VenVal HOP LCP | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This field contains indication about the last commanded position of the Vent Val HOP switch used to power the actuators in the EMCH. This parameter is influenced by TCs K0047/48.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1018 D FW Coil 1 LCP V n/a 2 1 1  
 This field contains indication about the last commanded position of the FW Coil 1 switch used to power the actuators in the EMCH. This parameter is influenced by TCs K0049/50.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1019 D FW Coil 2 LCP V n/a 2 1 1  
 This field contains indication about the last commanded position of the FW Coil 2 switch used to power the actuators in the EMCH. This parameter is influenced by TCs K0049/50.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1020 D Ann Heater LCP V n/a 2 1 1  
 This field contains indication about the last commanded position of the Ann. Heater switch used to power the actuators in the EMCH. This parameter reaches the status set by TC K0035 Load Extraheating configuration only after TC K0007 Enter Extraheating Mode is executed.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1021 D Shr Heater LCP V n/a 2 1 1  
 This field contains indication about the last commanded position of the ShroudHeater switch used to power the actuators in the EMCH. This parameter reaches the status set by TC K0035 Load Extraheating configuration only after TC K0007 Enter Extraheating Mode is executed, it can be modified by TC K0115 Apply / Remove Power Shroud Heater.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1022 D Door HOP CLS V n/a 2 1 1  
 This field contains indication about the current limiter status of the Door HOP switch used to power the actuators in the EMCH.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1023 D VenVal HOP CLS V n/a 2 1 1  
 This field contains indication about the current limiter status of the Ven. Val. HOP switch used to power the actuators in the EMCH.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1024 D FW Coil 1 CLS V n/a 2 1 1  
 This field contains indication about the current limiter status of the FW Coil 1 switch used to power the actuators in the EMCH.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1025 D FW Coil 2 CLS V n/a 2 1 1  
 This field contains indication about the current limiter status of the FW Coil 2 switch used to power the actuators in the EMCH.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1026 D Ann Heater CLS V n/a 2 1 1  
 This field contains indication about the current limiter status of the Ann. Heater switch used to power the actuators in the EMCH.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1027 | D Shr Heater CLS | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This field contains indication about the current limiter status of the Shroud Heater switch used to power the actuators in the EMCH.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1028 | D HBR1 Ch. Conf. | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 1 Channel.

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | Disabled     |
| 1         | Imag. Proc.  |
| 2         | Imag.N.Proc. |
| 3         | Imag.R.Proc. |
| 4         | Imag.R.N.Pr. |
| 5         | EDU Thresh.  |
| 6         | Tim. Proces. |
| 7         | Tim.N.Proce. |
| 8         | Tim.C.Proce. |
| 9         | Tim.C.N.Pro. |
| 10        | Transparent  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1029 | D HBR2 Ch. Conf. | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 2 Channel.

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | Disabled     |
| 1         | Imag. Proc.  |
| 2         | Imag.N.Proc. |
| 3         | Imag.R.Proc. |
| 4         | Imag.R.N.Pr. |
| 5         | EDU Thresh.  |
| 6         | Tim. Proces. |
| 7         | Tim.N.Proce. |
| 8         | Tim.C.Proce. |
| 9         | Tim.C.N.Pro. |
| 10        | Transparent  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1030 | D HBR3 Ch. Conf. | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 3 Channel.

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | Disabled     |
| 1         | Imag. Proc.  |
| 2         | Imag.N.Proc. |
| 3         | Imag.R.Proc. |
| 4         | Imag.R.N.Pr. |
| 5         | EDU Thresh.  |
| 6         | Tim. Proces. |
| 7         | Tim.N.Proce. |
| 8         | Tim.C.Proce. |
| 9         | Tim.C.N.Pro. |
| 10        | Transparent  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1031 | D HBR4 Ch. Conf. | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 4 Channel.

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | Disabled     |
| 1         | Imag. Proc.  |
| 2         | Imag.N.Proc. |
| 3         | Imag.R.Proc. |
| 4         | Imag.R.N.Pr. |
| 5         | EDU Thresh.  |

# EMCS TM PARAMETER DETAILED LIST

- 6 Tim. Proces.
- 7 Tim.N.Proce.
- 8 Tim.C.Proce.
- 9 Tim.C.N.Pro.
- 10 Transparent

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1032 | D HBR5 Ch. Conf. | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 5 Channel.

**RAW VALUE            MEANING**

- 0 Disabled
- 1 Imag. Proc.
- 2 Imag.N.Proc.
- 3 Imag.R.Proc.
- 4 Imag.R.N.Pr.
- 5 EDU Thresh.
- 6 Tim. Proces.
- 7 Tim.N.Proce.
- 8 Tim.C.Proce.
- 9 Tim.C.N.Pro.
- 10 Transparent

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1033 | D HBR6 Ch. Conf. | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 6 Channel.

**RAW VALUE            MEANING**

- 0 Disabled
- 1 Imag. Proc.
- 2 Imag.N.Proc.
- 3 Imag.R.Proc.
- 4 Imag.R.N.Pr.
- 5 EDU Thresh.
- 6 Tim. Proces.
- 7 Tim.N.Proce.
- 8 Tim.C.Proce.
- 9 Tim.C.N.Pro.
- 10 Transparent

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1034 | D HBR7 Ch. Conf. | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 7 Channel.

**RAW VALUE            MEANING**

- 0 Disabled
- 1 Imag. Proc.
- 2 Imag.N.Proc.
- 3 Imag.R.Proc.
- 4 Imag.R.N.Pr.
- 5 EDU Thresh.
- 6 Tim. Proces.
- 7 Tim.N.Proce.
- 8 Tim.C.Proce.
- 9 Tim.C.N.Pro.
- 10 Transparent

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1035 | D HBR8 Ch. Conf. | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 8 Channel.

**RAW VALUE            MEANING**

- 0 Disabled
- 1 Imag. Proc.
- 2 Imag.N.Proc.
- 3 Imag.R.Proc.
- 4 Imag.R.N.Pr.
- 5 EDU Thresh.
- 6 Tim. Proces.
- 7 Tim.N.Proce.

- 8 Tim.C.Proce.
- 9 Tim.C.N.Pro.
- 10 Transparent

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1036 | D HBR 1 Buff Occ | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains information about the HBR 1 Channel Buffer Occupation expressed in Kbytes.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1037 | D HBR 2 Buff Occ | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains information about the HBR 2 Channel Buffer Occupation expressed in Kbytes.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1038 | D HBR 3 Buff Occ | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains information about the HBR 3 Channel Buffer Occupation expressed in Kbytes.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1039 | D HBR 4 Buff Occ | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains information about the HBR 4 Channel Buffer Occupation expressed in Kbytes.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1040 | D HBR 5 Buff Occ | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains information about the HBR 5 Channel Buffer Occupation expressed in Kbytes.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1041 | D HBR 6 Buff Occ | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains information about the HBR 6 Channel Buffer Occupation expressed in Kbytes.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1042 | D HBR 7 Buff Occ | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains information about the HBR 7 Channel Buffer Occupation expressed in Kbytes.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1043 | D HBR 8 Buff Occ | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains information about the HBR 8 Channel Buffer Occupation expressed in Kbytes.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1044 | CTimAutResPreVal | V   | sec  | 3   | 12  | 16 |    |         |         |         |          |          |

Preset value (sec) loaded by the Preset Time Counter telecommand in the EMDH counter, used for the automatic reset of the EMCR time.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1045 | D LBR I/F Status | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

This field contains information about the EMDH LBR I/F Status.

| RAW VALUE | MEANING  |
|-----------|----------|
| 0         | I/F OK   |
| 65280     | I/F busy |

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1046 | DLast Com FW Pos | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

This field contains information about the last commanded position of the Filter Wheel, expressed in stepper motor number. This parameter is influenced by TCs K0084/85.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1047 | D HBR1 Disc Even | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

N of valid events received from HBR 1 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 events are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1048 | D HBR2 Disc Even | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

N of valid events received from HBR 2 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 events are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1049 | D HBR3 Disc Even | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

N of valid events received from HBR 3 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 events are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1050 | D HBR4 Disc Even | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

N of valid events received from HBR 4 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 events are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1051 | D HBR5 Disc Even | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

N of valid events received from HBR 5 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 events are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1052 | D HBR6 Disc Even | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

N of valid events received from HBR 6 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 events are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1053 | D HBR7 Disc Even | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

N of valid events received from HBR 7 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 events are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1054 | D HBR8 Disc Even | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

N of valid events received from HBR 8 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 events are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1055 | D HBR1 Disc Fram | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

N of frames received from HBR 1 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 frames are discarded the parameter is set to 65535.

## CALIBRATION CURVE



# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1056 D HBR2 Disc Fram V n/a 3 12 16

N of frames received from HBR 2 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 frames are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1057 D HBR3 Disc Fram V n/a 3 12 16

N of frames received from HBR 3 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 frames are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1058 D HBR4 Disc Fram V n/a 3 12 16

N of frames received from HBR 4 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 frames are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1059 D HBR5 Disc Fram V n/a 3 12 16

N of frames received from HBR 5 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 frames are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1060 D HBR6 Disc Fram V n/a 3 12 16

N of frames received from HBR 6 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 frames are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1061 D HBR7 Disc Fram V n/a 3 12 16

N of frames received from HBR 7 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 frames are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1062 D HBR8 Disc Fram V n/a 3 12 16

N of frames received from HBR 8 channel and discarded by EMDH starting from entering of the counting mode (TLM buffers full). Range from 0 to 32767. In case more than 32767 frames are discarded the parameter is set to 65535.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1065 D Door HOP ArmST V n/a 2 8 8

This field contains the EMDH Door HOP switch arming status. This parameter is influenced by TCs K0043/45

## RAW VALUE MEANING

|   |           |
|---|-----------|
| 0 | Not Armed |
| 1 | Armed     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1066 D VenValHOPArmST V n/a 2 8 8

This field contains the EMDH Venting Valve HOP switch arming status. This parameter is influenced by TCs K0046/48.

## RAW VALUE MEANING

|   |           |
|---|-----------|
| 0 | Not Armed |
| 1 | Armed     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1067 C H/K Ref Status V n/a 2 0 16

This field contains information about the refresh status of the EMCR H/K block contained in this packet. There are some conditions where EMCR is not able to deliver the H/K packet to EMDH, therefore the old valid H/K will be inserted and this flag set.

## RAW VALUE MEANING

|       |              |
|-------|--------------|
| 0     | New EMCR     |
| 65535 | Old EMCR H/K |

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |    |    |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1068 | C EDU 0 Status | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|

This field contains the information about the EMCR EDU 0 status.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |    |    |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1069 | C EDU 1 Status | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|

This field contains the information about the EMCR EDU 1 status.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |    |    |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1070 | C EDU 2 Status | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|

This field contains the information about the EMCR EDU 2 status.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |    |    |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1071 | C EDU 3 Status | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|

This field contains the information about the EMCR EDU 3 status.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |    |    |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1072 | C EDU 4 Status | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|

This field contains the information about the EMCR EDU 4 status.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |    |    |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1073 | C EDU 5 Status | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|

This field contains the information about the EMCR EDU 5 status.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |    |    |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1074 | C EDU 6 Status | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|

This field contains the information about the EMCR EDU 6 status.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |    |    |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1075 | C EDU 7 Status | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|

This field contains the information about the EMCR EDU 7 status.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |   |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|---|---|---|---|--|--|--|--|--|--|
| K1076 | C EMAE -6 V Line | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the information about the voltage value of the -6V line delivered to EMAE.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.082

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |   |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|---|---|---|---|--|--|--|--|--|--|
| K1077 | C EMAE +6 V Line | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the information about the voltage value of the +6V line delivered to EMAE.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.082

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1078 | C EMAE -13V Line | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the information about the voltage value of the -13V line delivered to EMAE.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.195

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1079 | C EMAE +13V Line | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the information about the voltage value of the +13V line delivered to EMAE.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.195

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1080 | C EMAE +28V Line | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the information about the voltage value of the +28V line delivered to EMAE.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.414

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1081 | C EMAE +18V Line | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the information about the voltage value of the +18V line delivered to EMAE.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.260

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1082 | C Signal Ground | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the information about the voltage value of the EMCR Signal Ground. This value can be used for correlation of the other analog acquisitions.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.039

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1083 | C EMAE +32V Line | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the information about the voltage value of the +32V line delivered to EMAE.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.466

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1084 | V EMVC Temp. #1 | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the first temperature measured in a hot point inside the EMVC.

**CALIBRATION CURVE** Eng. Value [°C] = (((Binary Value - 128) \* 0.039) + 1.325) / 0.0681

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1085 | C EMCR Temp. #1 | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the first temperature measured in a hot point inside the EMCR.

**CALIBRATION CURVE** Eng. Value [°C] = (((Binary Value - 128) \* 0.039) + 1.325) / 0.0681

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1086 | C EMCR +5 V Line | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the information about the voltage value of the +5V line used by EMCR.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.082

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1087 | V EMVC Temp. #2 | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the second temperature measured in a hot point inside the EMVC.

**CALIBRATION CURVE** Eng. Value [°C] = (((Binary Value - 128) \* 0.039) + 1.325) / 0.0681

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1088 | C EMCR -13V Line | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the information about the voltage value of the -13V line used by EMCR.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.205

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1089 | C EMCR +13V Line | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the information about the voltage value of the +13V line used by EMCR.

**CALIBRATION CURVE** Eng. Value [V] = (Binary Value - 128) \* 0.205

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1090 | C EMCR Temp. #2 | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the second temperature measured in a hot point inside the EMCR.

**CALIBRATION CURVE** Eng. Value [°C] = (((Binary Value - 128) \* 0.039) + 1.325) / 0.0681

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1091 | CEMAECmEchoErCn | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This field counts the wrong echo received from EMAE as response to each command.

**CALIBRATION CURVE**

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1092 | CEMAELsWrEchoCo | V   | n/a  | 2   | 8   | 8 |    |         |         |         |          |          |

This field contains the address of the last EMAE command whose echo was not correct.

**RAW VALUE**      **MEANING**

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1093 | E CCD 1 VBB | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vbb Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1094 | E CCD 1 VSS | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vss Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1095 | E CCD 1 VID | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vid Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1096 | E CCD 1 VGR | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vgr Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1097 | E CCD 1 VRD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vrd1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1098 | E CCD 1 VOG1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vog1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1099 | E CCD 1 VOG2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vog2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1100 | E CCD 1 VOD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vod1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1101 | E CCD 1 VOD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vod2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1102 | E CCD 1 VRD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vrd2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1103 | E CCD 1 S | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vs Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1104 | E CCD 1 I | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vi Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0613

| PREF  | NAME       | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1105 | E CCD 1 IG | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vig Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.059

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1106 | E CCD 1 R | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vr Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1107 | E CCD 1 RESET 2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vreset2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1108 | E CCD 1 RESET 1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 1 Vreset1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 1 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1109 | A AnCh1/2 SeqRam | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Current status of the Analogue Chain 1/2 Sequencer Ram (Load/Run). This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |      |
|---|------|
| 0 | Load |
| 1 | Run  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1110 | AAAnCh1/2InbCtrlC | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|

Current status of the Analogue Chain 1/2 Port Inhibit On/Off Control C. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1111 | AAAnCh1/2InbCtrlB | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|

Current status of the Analogue Chain 1/2 Port Inhibit On/Off Control B. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1112 | AAAnCh1/2InbCtrlA | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|

Current status of the Analogue Chain 1/2 Port Inhibit On/Off Control A. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1113 | AAAnCh1/2IntSimul | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports if the Analogue Chain 1/2 or the Internal Simulator has been selected as Chain Input. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |              |
|---|--------------|
| 0 | ChainNorNod0 |
| 1 | ChainNorNod1 |
| 2 | Chain/10Nod0 |
| 3 | Chain/10Nod1 |
| 4 | SimulatorMax |
| 5 | Simulator_/2 |
| 6 | Simulator_/4 |
| 7 | Simulator_/8 |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                    |   |     |   |   |   |  |  |  |  |  |  |
|-------|--------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1116 | AAAnCh1/2GatNumSet | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|--------------------|---|-----|---|---|---|--|--|--|--|--|--|

Analogue Chain 1/2 Gatti Number Setting. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1117 | AAAnCh1/2LoadAddL | V | n/a | 3 | 3 | 7 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports the Sequencer RAM Word Address for the Analogue Chain 1/2 (7 Least Significant Bits). This parameter must be read together with E1118.,

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1118 | AAAnCh1/2LoadAddM | V | n/a | 2 | 2 | 2 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports the Sequencer RAM Word Address for the Analogue Chain 1/2 (2 Most Significant Bits). This parameter must be read together with E1117.,

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1119 | A Seq PC FW Mode | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports the current mode of the Wheel Drive Sequencer Ram (Load/Run). This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |      |
|---|------|
| 0 | Load |
|---|------|

1 Run

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1120 | A SeqPCFWDrvInbC | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter reports the status of the Wheel Drive Sequence Inhibit C. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

**RAW VALUE MEANING**

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1121 | A SeqPCFWDrvInbB | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter reports the status of the Wheel Drive Sequence Inhibit B. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

**RAW VALUE MEANING**

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1122 | A SeqPCFWDrvInbA | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter reports the status of the Wheel Drive Sequence Inhibit A. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

**RAW VALUE MEANING**

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1123 | ASeqPCWhDrvDirec | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter reports the movement direction of the Wheel Drive. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

**RAW VALUE MEANING**

|   |          |
|---|----------|
| 0 | Forward  |
| 1 | Backward |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1124 | A SeqPCWhMovTrig | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

FW movement trigger status (this HK can be considered meaningless due to the edge operation)

**RAW VALUE MEANING**

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1125 | AAAnCh1/2LoadData | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This parameter reports the last byte loaded or dumped to/from the Sequencer RAM into Sequencer Analogue Chain 1/2 Load Address. This parameter is automatically generated by EMCR, but it can be modified by TC K0081. Low or high part of the addressed word is shown depending on the value of parameter AAAnCh1/2DataBySe (E1586).

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1126 | A SeqFW LoadAddL | V   | n/a  | 3   | 3   | 7 |    |         |         |         |          |          |

This parameter reports the Sequencer RAM Word Address for the Filter Wheel (7 Least Significant Bits). This parameter must be read together with E1127.,

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1127 | A SeqFW LoadAddM | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

This parameter reports the Sequencer RAM Word Address for the Filter Wheel (2 Most Significant Bits). This parameter must be read together with E1126.,

**RAW VALUE MEANING**

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1128 | A FWActStepCntM | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Filter Wheel Actual Step Counter (MSB) in the EMAE it is loaded with the number of steps to be sent to the FW and decremented to 0 This parameter must be read together with E1138.,

**CALIBRATION CURVE**



| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1129 | A SeqFW LoadData | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This parameter reports the last byte loaded or dumped to/from the Sequencer RAM into Sequencer FW Load Address. This parameter is automatically generated by EMCR, but it can be modified by TC K0081. Low or high part of the addressed word is shown depending on the value of parameter ASeqFWDataBySe (E1590).

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1130 | A AnCh8 PWStatus | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Analogue Chain 8 Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1131 | A AnCh7 PWStatus | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Analogue Chain 7 Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1132 | A AnCh6 PWStatus | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Analogue Chain 6 Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1133 | A AnCh5 PWStatus | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Analogue Chain 5 Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1134 | A AnCh4 PWStatus | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Analogue Chain 4 Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1135 | A AnCh3 PWStatus | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Analogue Chain 3 Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1136 | A AnCh2 PWStatus | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Analogue Chain 2 Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1137 | A AnCh1 PWStatus | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Analogue Chain 1 Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1138 | A FWActStepCntL | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Filter Wheel Actual Step Counter LSB. This parameter must be read together with E1128.,

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1139 | H PreAmp14 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 14.

### RAW VALUE      MEANING

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1140 | H PreAmp13 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 13.

### RAW VALUE      MEANING

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1141 | H PreAmp12 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 12.

### RAW VALUE      MEANING

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1142 | H PreAmp11 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 11.

### RAW VALUE      MEANING

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1143 | H PreAmp10 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 10.

### RAW VALUE      MEANING

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1144 | H PreAmp09 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 9.

### RAW VALUE      MEANING

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1145 | H PreAmp01 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 1.

### RAW VALUE      MEANING

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1146 | H PreAmp02 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 2.

### RAW VALUE      MEANING

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1147 | H PreAmp03 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 3.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1148 | H PreAmp04 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 4.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1149 | H PreAmp05 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 5.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1150 | H PreAmp06 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 6.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1151 | H PreAmp07 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 7.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1152 | H PreAmp08 PW ST | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the on/off status of the EMCH preamplifier 8.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1153 | ASeq7/8ReadOutSy | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports the active/not active status of the Sequencer 7/8 Readout Synchronizer. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |            |
|---|------------|
| 0 | Not Active |
| 1 | Active     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1154 | ASeq5/6ReadOutSy | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports the active/not active status of the Sequencer 5/6 Readout Synchronizer. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |            |
|---|------------|
| 0 | Not Active |
| 1 | Active     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1155 | ASeq3/4ReadOutSy | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports the active/not active status of the Sequencer 3/4 Readout Synchronizer. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |            |
|---|------------|
| 0 | Not Active |
| 1 | Active     |

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1156 ASeq1/2ReadOutSy V n/a 2 1 1  
 This parameter reports the active/not active status of the Sequencer 1/2 Readout Synchronizer. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1157 ASeq7/8FrmTranSy V n/a 2 1 1  
 This parameter reports the active/not active status of the Sequencer 7/8 Frame Transfer Synchronizer. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1158 ASeq5/6FrmTranSy V n/a 2 1 1  
 This parameter reports the active/not active status of the Sequencer 5/6 Frame Transfer Synchronizer. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1159 ASeq3/4FrmTranSy V n/a 2 1 1  
 This parameter reports the active/not active status of the Sequencer 3/4 Frame Transfer Synchronizer. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1160 ASeq1/2FrmTranSy V n/a 2 1 1  
 This parameter reports the active/not active status of the Sequencer 1/2 Frame Transfer Synchronizer. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1161 AFPTCPwStAnHeRe V n/a 2 1 1  
 Focal Plane Annealing Heater Relay Drive Power Status. This parameter is automatically set by EMCR, but it can be modified by TC K0102.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1162 AFPTCPwStVacuSen V n/a 2 1 1  
 Focal Plane Vacuum Sensor Strain Gauge Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1163 AFPTCPwStTemCon V n/a 2 1 1  
 Focal Plane Temperature Control Redundant Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1164 AFPTCPwStTemCon V n/a 2 1 1  
 Focal Plane Temperature Control Nominal Power Status.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1165 | E CCD 2 VBB | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vbb Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1166 | E CCD 2 VSS | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vss Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1167 | E CCD 2 VID | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vid Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1168 | E CCD 2 VGR | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vgr Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1169 | E CCD 2 VRD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vrd1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1170 | E CCD 2 VOG1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vog1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1171 | E CCD 2 VOG2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vog2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1172 | E CCD 2 VOD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vod1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1173 | E CCD 2 VOD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vod2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1174 | E CCD 2 VRD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vrd2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1175 | E CCD 2 S | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vs Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1176 | E CCD 2 I | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vi Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0613

| PREF  | NAME       | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1177 | E CCD 2 IG | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vig Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.059

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1178 | E CCD 2 R | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vr Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME          | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|---------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1179 | E CCD2 RESET2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vreset2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME          | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|---------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1180 | E CCD2 RESET1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 2 Vreset1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 2 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1181 | E CCD 5 VBB | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 5 Vbb Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1182 | E CCD 5 VSS | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 5 Vss Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1183 | E CCD 5 VID | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 5 Vid Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1184 | E CCD 5 VGR | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 5 Vgr Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1185 | E CCD 5 VRD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 5 Vrd1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1186 | E CCD 5 VOG1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 5 Vog1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |              |   |   |   |   |   |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|
| K1187 | E CCD 5 VOG2 | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 5 Vog2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |              |   |   |   |   |   |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|
| K1188 | E CCD 5 VOD1 | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 5 Vod1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |              |   |   |   |   |   |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|
| K1189 | E CCD 5 VOD2 | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 5 Vod2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |              |   |   |   |   |   |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|
| K1190 | E CCD 5 VRD2 | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 5 Vrd2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |           |   |   |   |   |   |  |  |  |  |  |  |
|-------|-----------|---|---|---|---|---|--|--|--|--|--|--|
| K1191 | E CCD 5 S | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 5 Vs Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |           |   |   |   |   |   |  |  |  |  |  |  |
|-------|-----------|---|---|---|---|---|--|--|--|--|--|--|
| K1192 | E CCD 5 I | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 5 Vi Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0613

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |            |   |   |   |   |   |  |  |  |  |  |  |
|-------|------------|---|---|---|---|---|--|--|--|--|--|--|
| K1193 | E CCD 5 IG | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 5 Vig Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.059

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |           |   |   |   |   |   |  |  |  |  |  |  |
|-------|-----------|---|---|---|---|---|--|--|--|--|--|--|
| K1194 | E CCD 5 R | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 5 Vr Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612



| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1195 | E CCD 5 RESET2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 5 Vreset2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1196 | E CCD 5 RESET1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 5 Vreset1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 5 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1197 | A AnCh3/4 SeqRam | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 3/4 Sequencer Ram (Load/Run). This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | Load    |
| 1         | Run     |

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1198 | AAAnCh3/4InbCtrlC | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 3/4 Port Inhibit On/Off Control C. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1199 | AAAnCh3/4InbCtrlB | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 3/4 Port Inhibit On/Off Control B. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1200 | AAAnCh3/4InbCtrlA | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 3/4 Port Inhibit On/Off Control A. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1201 | AAAnCh3/4IntSimul | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

This parameter reports if the Analogue Chain 3/4 or the Internal Simulator has been selected as Chain Input. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | ChainNorNod0 |
| 1         | ChainNorNod1 |
| 2         | Chain/10Nod0 |
| 3         | Chain/10Nod1 |
| 4         | SimulatorMax |
| 5         | Simulator_/2 |
| 6         | Simulator_/4 |
| 7         | Simulator_/8 |

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1204 | AAAnCh3/4GaNumSet | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This parameter reports the Analogue Chain 3/4 Gatti Number Setting presently add to the CCD signal before ADC conversion. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

**CALIBRATION CURVE**

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1205 | AAAnCh3/4LoadAddL | V   | n/a  | 3   | 3   | 7 |    |         |         |         |          |          |

This parameter reports the Sequencer RAM Word Address for the Analogue Chain 3/4 (7 Least Significant Bits). This parameter must be read together with E1206.,

**CALIBRATION CURVE**

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1206 | AAAnCh3/4LoadAddM | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

This parameter reports the Sequencer RAM Word Address for the Analogue Chain 3/4 (2 Most Significant Bits). This parameter must be read together with E1205.,

**RAW VALUE MEANING**

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1207 | AFPNomThCoTemSe | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the focal plane temperature main thermal control setting. The monitor is the read back digital value from the register set by the Set Focal Plane Temperature Main Control telecommand.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 0.869) - 168

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1208 | AAAnCh3/4LoadData | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This parameter reports the last byte loaded or dumped to/from the Sequencer RAM into Sequencer Analogue Chain 3/4 Load Address. This parameter is automatically generated by EMCR, but it can be modified by TC K0081. Low or high part of the addressed word is shown depending on the value of parameter AAAnCh3/4DataBySe (E1587).

**CALIBRATION CURVE**

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1209 | E CCD 4 VSS | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vss Voltage.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1210 | AFPRedThCoTemSet | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the focal plane temperature redundant thermal control setting. The monitor is the read back digital value from the register set by the Set Focal Plane Temperature Redundant Control telecommand.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 0.869) - 168

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1211 | E CCD 4 VGR | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vgr Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1212 | E CCD 4 VBB | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vbb Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1213 | E CCD 4 VOG1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vog1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1214 | E CCD 4 VID | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vid Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1215 | E CCD 4 VOD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vod1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1216 | E CCD 4 VRD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vrd1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1217 | E CCD 4 VRD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vrd2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1218 | E CCD 4 VOG2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vog2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1219 | E CCD 4 I | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vi Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0613

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1220 | E CCD 4 VOD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vod2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1221 | E CCD 4 R | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vr Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1222 | E CCD 4 S | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vs Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1223 | E CCD 4 RESET 1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vreset1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME       | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1224 | E CCD 4 IG | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vig Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.059

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1225 | E CCD 7 VSS | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 7 Vss Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1226 | E CCD 4 RESET2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 4 Vreset2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 4 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1227 | E CCD 7 VGR | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 7 Vgr Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1228 | E CCD 7 VBB | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 7 Vbb Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1229 | E CCD 7 VOG1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 7 Vog1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1230 | E CCD 7 VID | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 7 Vid Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1231 | E CCD 7 VOD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 7 Vod1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1232 | E CCD 7 VRD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 7 Vrd1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1233 | E CCD 7 VRD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 7 Vrd2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1234 | E CCD 7 VOG2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 7 Vog2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1235 E CCD 7 I V V 3 4 8  
This field contains the value of the CCD 7 Vi Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0613

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1236 E CCD 7 VOD2 V V 3 4 8  
This field contains the value of the CCD 7 Vod2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1237 E CCD 7 R V V 3 4 8  
This field contains the value of the CCD 7 Vr Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1238 E CCD 7 S V V 3 4 8  
This field contains the value of the CCD 7 Vs Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1239 E CCD 7 RESET1 V V 3 4 8  
This field contains the value of the CCD 7 Vreset1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1240 E CCD 7 IG V V 3 4 8  
This field contains the value of the CCD 7 Vig Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.059

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1241 AAnCh5/6GaNumSet V n/a 3 4 8  
Analogue Chain 5/6 Gatti Number Setting. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1242 E CCD 7 RESET2 V V 3 4 8  
This field contains the value of the CCD 7 Vreset2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 7 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1243 | AAnCh5/6LoadAddM | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

This parameter reports the Sequencer RAM Word Address for the Analogue Chain 5/6 (2 Most Significant Bits). This parameter must be read together with E1252.,

**RAW VALUE      MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1244 | A AnCh5/6 SeqRam | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 5/6 Sequencer Ram Load/Run. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

**RAW VALUE      MEANING**

|   |      |
|---|------|
| 0 | Load |
| 1 | Run  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1245 | AAnCh5/6InbCtrlC | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 5/6 Port Inhibit On/Off Control C. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

**RAW VALUE      MEANING**

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1246 | AAnCh5/6InbCtrlB | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 5/6 Port Inhibit On/Off Control B. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

**RAW VALUE      MEANING**

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1247 | AAnCh5/6InbCtrlA | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 5/6 Port Inhibit On/Off Control A. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

**RAW VALUE      MEANING**

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1248 | AAnCh5/6IntSimul | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

This parameter reports if the Analogue Chain 5/6 or the Internal Simulator has been selected as Chain Input. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

**RAW VALUE      MEANING**

|   |              |
|---|--------------|
| 0 | ChainNorNod0 |
| 1 | ChainNorNod1 |
| 2 | Chain/10Nod0 |
| 3 | Chain/10Nod1 |
| 4 | SimulatorMax |
| 5 | Simulator_/2 |
| 6 | Simulator_/4 |
| 7 | Simulator_/8 |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1251 | AAnCh5/6LoadData | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This parameter reports the last byte loaded or dumped to/from the Sequencer RAM into Sequencer Analogue Chain 5/6 Load Address. This parameter is automatically generated by EMCR, but it can be modified by TC K0081. Low or high part of the addressed word is shown depending on the value of parameter AAnCh5/6DataBySe (E1588).

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1252 | AAnCh5/6LoadAddL | V   | n/a  | 3   | 3   | 7 |    |         |         |         |          |          |

This parameter reports the Sequencer RAM Word Address for the Analogue Chain 5/6 (7 Least Significant Bits). This parameter must be read together with E1243.,

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1253 | H FPlanNorRanTem | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the focal plane temperature. This field gives a correct monitor only in the range between -180 °C to - 80 °C.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 0.357) - 159

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1254 | H FW NominalStop | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Status of the Filter Wheel Nominal Stop Sensor. This parameter is influenced by TCs K0084/85.

**RAW VALUE MEANING**

|   |              |
|---|--------------|
| 0 | In Position  |
| 1 | Out Position |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1255 | HDoorBellowState | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Status of the Door Bellow Retracted Hall Sensor.

**RAW VALUE MEANING**

|   |              |
|---|--------------|
| 0 | Retracted    |
| 1 | NotRetracted |

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1256 | H Door Open uSw | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Status of the Door Open microswitch.

**RAW VALUE MEANING**

|   |        |
|---|--------|
| 0 | Open   |
| 1 | Closed |

| PREF  | NAME          | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|---------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1257 | H FW Position | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

This parameter gives the Absolute Position of the Filter Wheel, with reference to the mounted filters. This parameter is influenced by TCs K0084/85.

**RAW VALUE MEANING**

|   |              |
|---|--------------|
| 0 | Open         |
| 1 | Filter D     |
| 2 | Filter C     |
| 3 | Filter B     |
| 4 | Filter A     |
| 5 | Closed       |
| 6 | IllegalValue |
| 7 | Not Valid CS |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1258 | H FW Redund Stop | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Status of the Filter Wheel Stop Redundant Sensor. This parameter is influenced by TCs K0084/85.

**RAW VALUE MEANING**

|   |              |
|---|--------------|
| 0 | In Position  |
| 1 | Out Position |

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1260 | AFPRedThCoTemMo | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the focal plane redundant thermal control temperature monitor. This value is used as feedback in the focal plane redundant thermal control.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.01) - 170.1

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1261 | H Vacuum Monitor | V   | mV   | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the EMCH vacuum monitor.

**CALIBRATION CURVE** Eng. Value [mV] = Binary Value \* 39.06

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1262 | H Secon Rad Temp | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the temperature of the EMCH Secondary Radiator.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.689) - 225.9



# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |    |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|----|---|---|---|--|--|--|--|--|--|
| K1263 | A Rad. Mon. FET1 | V | mV | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|----|---|---|---|--|--|--|--|--|--|

This field contains the Radiation Monitor measured by FET 1 in the EMAE.

**CALIBRATION CURVE** Eng. Value [mV] = Binary Value \* 39.06

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |    |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|----|---|---|---|--|--|--|--|--|--|
| K1264 | A Rad. Mon. FET3 | V | mV | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|----|---|---|---|--|--|--|--|--|--|

This field contains the Radiation Monitor measured by FET 3 in the EMAE

**CALIBRATION CURVE** Eng. Value [mV] = Binary Value \* 39.06

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1265 | HDoorBellowPress | V | Bar | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the monitor of the pressure inside the EMCH Door Bellows.

**CALIBRATION CURVE** Eng. Value [Bar] = ((Binary Value \* 39.06)/1000)-2

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |             |   |   |   |   |   |  |  |  |  |  |  |
|-------|-------------|---|---|---|---|---|--|--|--|--|--|--|
| K1266 | E CCD 3 VBB | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 3 Vbb Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |             |   |   |   |   |   |  |  |  |  |  |  |
|-------|-------------|---|---|---|---|---|--|--|--|--|--|--|
| K1267 | E CCD 3 VSS | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 3 Vss Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |             |   |   |   |   |   |  |  |  |  |  |  |
|-------|-------------|---|---|---|---|---|--|--|--|--|--|--|
| K1268 | E CCD 3 VID | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 3 Vid Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |             |   |   |   |   |   |  |  |  |  |  |  |
|-------|-------------|---|---|---|---|---|--|--|--|--|--|--|
| K1269 | E CCD 3 VGR | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 3 Vgr Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |              |   |   |   |   |   |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|
| K1270 | E CCD 3 VRD1 | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 3 Vrd1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |              |   |   |   |   |   |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|
| K1271 | E CCD 3 VOG1 | V | V | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|

This field contains the value of the CCD 3 Vog1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1272 | E CCD 3 VOG2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vog2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1273 | E CCD 3 VOD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vod1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1274 | E CCD 3 VOD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vod2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1275 | E CCD 3 VRD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vrd2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1276 | E CCD 3 S | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vs Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1277 | E CCD 3 I | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vi Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0613

| PREF  | NAME       | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1278 | E CCD 3 IG | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vig Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.059

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1279 | E CCD 3 R | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vr Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1280 | E CCD 3 RESET2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vreset2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1281 | E CCD 3 RESET1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 3 Vreset1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 3 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1282 | E CCD 6 VBB | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vbb Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1283 | E CCD 6 VSS | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vss Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1284 | E CCD 6 VID | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vid Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1285 | E CCD 6 VGR | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vgr Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.121

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1286 | E CCD 6 VRD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vrd1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1287 | E CCD 6 VOG1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vog1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1288 | E CCD 6 VOG2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vog2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.039

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1289 | E CCD 6 VOD1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vod1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1290 | E CCD 6 VOD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vod2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.152

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1291 | E CCD 6 VRD2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vrd2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.081

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1292 | E CCD 6 S | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vs Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1293 | E CCD 6 I | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vi Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0613

| PREF  | NAME       | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1294 | E CCD 6 IG | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vig Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.059

| PREF  | NAME      | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1295 | E CCD 6 R | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vr Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.0612

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1296 | E CCD 6 RESET2 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vreset2 Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1297 | E CCD 6 RESET1 | V   | V    | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the value of the CCD 6 Vreset1 Voltage. The monitor is the read back digital value from the register set by the Set CCD 6 Voltages telecommand.

**CALIBRATION CURVE** Eng. Value [V] = Binary Value \* 0.062

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1298 | A AnCh7/8 SeqRam | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 7/8 Sequencer Ram (Load/Run). This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | Load    |
| 1         | Run     |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1299 | AAnCh7/8InbCtrlC | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 7/8 Port Inhibit On/Off Control C. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1300 | AAnCh7/8InbCtrlB | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 3/4 Port Inhibit On/Off Control B. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1301 | AAnCh7/8InbCtrlA | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Current status of the Analogue Chain 7/8 Port Inhibit On/Off Control A. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1302 | AAnCh7/8IntSimul | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

This parameter reports if the Analogue Chain 7/8 or the Internal Simulator has been selected as Chain Input. This parameter reaches the status set by TC K0080 Set EMAE MUX position only after the Observation has started.

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | ChainNorNod0 |

- 1 ChainNorNod1
- 2 Chain/10Nod0
- 3 Chain/10Nod1
- 4 SimulatorMax
- 5 Simulator\_/2
- 6 Simulator\_/4
- 7 Simulator\_/8

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1305 | AAAnCh7/8GaNSet | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Analogue Chain 7/8 Gatti Number Setting. This parameter is automatically generated by EMCR, but it can be modified by TC K0081.

**CALIBRATION CURVE**

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1306 | AAAnCh7/8LoadAddL | V   | n/a  | 3   | 3   | 7 |    |         |         |         |          |          |

This parameter reports the Sequencer RAM Word Address for the Analogue Chain 7/8 (7 Least Significant Bits). This parameter must be read together with E1307.,

**CALIBRATION CURVE**

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1307 | AAAnCh7/8LoadAddM | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

This parameter reports the Sequencer RAM Word Address for the Analogue Chain 7/8 (2 Most Significant Bits). This parameter must be read together with E1306.,

**RAW VALUE MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1308 | HFPlaneExtRanTem | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the focal plane temperature. This field gives a rough temperature monitor in the range between -180 °C to + 130 °C.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.668) - 223.6

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1309 | AAAnCh7/8LoadData | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This parameter reports the last byte loaded or dumped to/from the Sequencer RAM into Sequencer Analogue Chain 7/8 Load Address. This parameter is automatically generated by EMCR, but it can be modified by TC K0081. Low or high part of the addressed word is shown depending on the value of parameter AAAnCh7/8DataBySe (E1589).

**CALIBRATION CURVE**

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1310 | H FW Motor Temp | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the monitor of the FW motor temperature.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.953) - 273

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1311 | A AE Electr Temp | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the monitor of the EMAE electronics temperature.

**CALIBRATION CURVE** Eng. Value [°C] = 89.794 - (Binary Value \* 1.2723) + (Binary Value^2 \* 6.9E-3) - (Binary Value^3 \* 1.7E10-5)

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1312 | AFPNomThCoTemM | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the focal plane main thermal control temperature monitor. This value is used as feedback in the focal plane main thermal control.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.01) - 170.1

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1313 | A Rad. Mon. FET2 | V   | mV   | 3   | 4   | 8 |    |         |         |         |          |          |

This field contains the Radiation Monitor measured by FET 2 in the EMAE.

**CALIBRATION CURVE** Eng. Value [mV] = Binary Value \* 39.06

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |    |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|----|---|---|---|--|--|--|--|--|--|
| K1314 | A Rad. Mon. FET4 | V | mV | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|----|---|---|---|--|--|--|--|--|--|

This field contains the Radiation Monitor measured by FET 4 in the EMAE

**CALIBRATION CURVE** Eng. Value [mV] = Binary Value \* 39.06

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |      |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|------|---|---|---|--|--|--|--|--|--|
| K1315 | H CH Electr Temp | V | degC | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|------|---|---|---|--|--|--|--|--|--|

This field contains the monitor of the EMCH electronics temperature.

**CALIBRATION CURVE** Eng. Value [°C] = 58.08 - (Binary Value \* 2.2888) + (Binary Value^2 \* 2.9E-2) - (Binary Value^3 \* 1.7E-4) + (Binary Value^4 \* 3.5E-7)

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1316 | CFWExpNomStopSen | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the EMCR expected value of the Filter Wheel nominal Stop Sensor. This parameter value depends on TCs K0084/85. EMCR will use this info to verify the correct execution of the FW related TC.

**RAW VALUE MEANING**

|   |              |
|---|--------------|
| 0 | In Position  |
| 1 | Out Position |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1317 | CFWActStepNumRef | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

This field contains the FW position address (as step number) that EMCR consider as current FW position. EMCR will use this value to calculate the needed motor steps to reach a new position.

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1318 | CGroup1SeqNumber | V | n/a | 3 | 0 | 4 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reportes which EMCR Sequence Table has been loaded in the EMAE Sequencer 1 (EDU 0/1).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|
| K1319 | C Group1 IntTime | V | sec | 3 | 8 | 12 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|

Integration time used in by EMCR to drive EMAE Sequencer 1 (EDU 0/1) during observation. 0,2 < IT < 102,3 = Frame by Frame Readout; 102,4 = Continous Readout; IT > 102,4 = Sequencers will not be started

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1320 | C Gr1 FrstCyDel1 | V | sec | 3 | 0 | 4 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

First part of the First Cycle Delay (delay in the starting of the first cycle readout) applied to EMAE Sequencer 1 (EDU 0/1). This parameter must be read together with E1322.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|
| K1321 | C Group1X0Posit. | V | n/a | 3 | 8 | 12 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|

Window X0 position for EMAE Sequencer 1 (EDU 0/1).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1322 | C Gr1 FrstCyDel2 | V | sec | 3 | 0 | 4 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Second part of the First Cycle Delay applied to EMAE Sequencer 1 (EDU 0/1) operation. This parameter must be read together with E1320.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|
| K1323 | C Group1Y0Posit. | V | n/a | 3 | 8 | 12 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|

Window Y0 position for EMAE Sequencer 1 (EDU 0/1).

**CALIBRATION CURVE**

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1324 CGroup1ReaOuDel1 V sec 3 0 4  
First part of the Readout Delay (further delay in the starting of the frame readouts) applied to EMAE Sequencer 1 (EDU 0/1). This parameter must be read together with E1326.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1325 C Group1 X Size V n/a 3 8 12  
Window X size for EMAE Sequencer 1 (EDU 0/1).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1326 CGroup1ReaOuDel2 V sec 3 0 4  
Second part of the Readout Delay applied to EMAE Sequencer 1 (EDU 0/1) operation. This parameter must be read together with E1324.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1327 C Group1 Y Size V n/a 3 8 12  
Window Y size for EMAE Sequencer 1 (EDU 0/1).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1328 CGroup2SeqNumber V n/a 3 0 4  
This parameter reports which EMCR Sequence Table has been loaded in the EMAE Sequencer 2 (EDU 2/3).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1329 C Group2 IntTime V sec 3 8 12  
Integration time used in by EMCR to drive EMAE Sequencer 2 (EDU 2/3) during observation. 0,2 < IT < 102,3 = Frame by Frame Readout; 102,4 = Continous Readout; IT > 102,4 = Sequencers will not be started

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1330 C Gr2 FrstCyDel1 V sec 3 0 4  
First part of the First Cycle Delay (delay in the starting of the first cycle readout) applied to EMAE Sequencer 2 (EDU 2/3). This parameter must be read together with E1332.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1331 C Group2X0Posit. V n/a 3 8 12  
Window X0 position for EMAE Sequencer 2 (EDU 2/3).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1332 C Gr2 FrstCyDel2 V sec 3 0 4  
Second part of the First Cycle Delay applied to EMAE Sequencer 2 (EDU 2/3) operation. This parameter must be read together with E1330.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1333 C Group2Y0Posit. V n/a 3 8 12  
Window Y0 position for EMAE Sequencer 2 (EDU 2/3).

**CALIBRATION CURVE**



# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1334 CGroup2ReaOuDel1 V sec 3 0 4  
First part of the Readout Delay (further delay in the starting of the frame readouts) applied to EMAE Sequencer 2 (EDU 2/3). This parameter must be read together with E1336.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1335 C Group2 X Size V n/a 3 8 12  
Window X size for EMAE Sequencer 2 (EDU 2/3).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1336 CGroup2ReaOuDel2 V sec 3 0 4  
Second part of the Readout Delay applied to EMAE Sequencer 2 (EDU 2/3) operation. This parameter must be read together with E1334.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1337 C Group2 Y Size V n/a 3 8 12  
Window Y size for EMAE Sequencer 2 (EDU 2/3).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1338 CGroup3SeqNumber V n/a 3 0 4  
This parameter reports which EMCR Sequence Table has been loaded in the EMAE Sequencer 3 (EDU 4/5).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1339 C Group3 IntTime V sec 3 8 12  
Integration time used in by EMCR to drive EMAE Sequencer 3 (EDU 4/5) during observation. 0,2 < IT < 102,3 = Frame by Frame Readout; 102,4 = Continuous Readout; IT > 102,4 = Sequencers will not be started

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1340 C Gr3 FrstCyDel1 V sec 3 0 4  
First part of the First Cycle Delay (delay in the starting of the first cycle readout) applied to EMAE Sequencer 3 (EDU 4/5). This parameter must be read together with E1342.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1341 C Group3X0Posit. V n/a 3 8 12  
Window X0 position for EMAE Sequencer 3 (EDU 4/5).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1342 C Gr3 FrstCyDel2 V sec 3 0 4  
Second part of the First Cycle Delay applied to EMAE Sequencer 3 (EDU 4/5) operation. This parameter must be read together with E1340.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1343 C Group3Y0Posit. V n/a 3 8 12  
Window Y0 position for EMAE Sequencer 3 (EDU 4/5).

**CALIBRATION CURVE**

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1344 CGroup3ReaOuDel1 V sec 3 0 4  
First part of the Readout Delay (further delay in the starting of the frame readouts) applied to EMAE Sequencer 3 (EDU 4/5). This parameter must be read together with E1346.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1345 C Group3 X Size V n/a 3 8 12  
Window X size for EMAE Sequencer 3 (EDU 4/5).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1346 CGroup3ReaOuDel2 V sec 3 0 4  
Second part of the Readout Delay applied to EMAE Sequencer 3 (EDU 4/5) operation. This parameter must be read together with E1344.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1347 C Group3 Y Size V n/a 3 8 12  
Window Y size for EMAE Sequencer 3 (EDU 4/5).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1348 CGroup4SeqNumber V n/a 3 0 4  
This parameter reports which EMCR Sequence Table has been loaded in the EMAE Sequencer 4 (EDU 6/7).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1349 C Group4 IntTime V sec 3 8 12  
Integration time used in by EMCR to drive EMAE Sequencer 4 (EDU 6/7) during observation. 0,2 < IT < 102,3 = Frame by Frame Readout; 102,4 = Continous Readout; IT > 102,4 = Sequencers will not be started

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1350 C Gr4 FrstCyDel1 V sec 3 0 4  
First part of the First Cycle Delay (delay in the starting of the first cycle readout) applied to EMAE Sequencer 4 (EDU 6/7). This parameter must be read together with E1352.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1351 C Group4X0Posit. V n/a 3 8 12  
Window X0 position for EMAE Sequencer 4 (EDU 6/7).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1352 C Gr4 FrstCyDel2 V sec 3 0 4  
Second part of the First Cycle Delay applied to EMAE Sequencer 4 (EDU 6/7) operation. This parameter must be read together with E1350.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1353 C Group4Y0Posit. V n/a 3 8 12  
Window Y0 position for EMAE Sequencer 4 (EDU 6/7).

**CALIBRATION CURVE**

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1354 CGroup4ReaOuDel1 V sec 3 0 4  
 First part of the Readout Delay (further delay in the starting of the frame readouts) applied to EMAE Sequencer 4 (EDU 6/7). This parameter must be read together with E1356.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1355 C Group4 X Size V n/a 3 8 12  
 Window X size for EMAE Sequencer 4 (EDU 6/7).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1356 CGroup4ReaOuDel2 V sec 3 0 4  
 Second part of the Readout Delay applied to EMAE Sequencer 4 (EDU 6/7) operation. This parameter must be read together with E1354.

**CALIBRATION CURVE** Eng value [s] = Binary value \* 0.1

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1357 C Group4 Y Size V n/a 3 8 12  
 Window Y size for EMAE Sequencer 4 (EDU 6/7).

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1358 CEDU0OperatioMod V n/a 2 2 2

**RAW VALUE MEANING**

- 0 Stop
- 1 Run
- 2 Alternate

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1359 CEDU0ScientifMod V n/a 2 2 2

**RAW VALUE MEANING**

- 0 Transparent
- 1 Timing
- 2 Threshold
- 3 Image

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1360 CEDU0Node0TabOff V n/a 2 3 3  
 Offset Table loaded in EDU 0 for Node 0.

**RAW VALUE MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1361 CEDU0Node1TabOff V n/a 2 3 3  
 Offset Table loaded in EDU 0 for Node 1.

**RAW VALUE MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1362 CEDU0TabPattMask V n/a 2 3 3  
 Pattern Mask Table loaded in EDU 0.

**RAW VALUE MEANING**

# EMCS TM PARAMETER DETAILED LIST

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1363 | CEDU1OperatioMod | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

| RAW VALUE | MEANING   |
|-----------|-----------|
| 0         | Stop      |
| 1         | Run       |
| 2         | Alternate |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1364 | CEDU1ScientifMod | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

| RAW VALUE | MEANING     |
|-----------|-------------|
| 0         | Transparent |
| 1         | Timing      |
| 2         | Threshold   |
| 3         | Image       |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1365 | CEDU1Node0TabOff | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Offset Table loaded in EDU 1 for Node 0.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1366 | CEDU1Node1TabOff | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Offset Table loaded in EDU 1 for Node 1.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1367 | CEDU1TabPattMask | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Pattern Mask Table loaded in EDU 1.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1368 | CEDU2OperatioMod | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

| RAW VALUE | MEANING   |
|-----------|-----------|
| 0         | Stop      |
| 1         | Run       |
| 2         | Alternate |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1369 | CEDU2ScientifMod | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

| RAW VALUE | MEANING     |
|-----------|-------------|
| 0         | Transparent |
| 1         | Timing      |
| 2         | Threshold   |
| 3         | Image       |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1370 | CEDU2Node0TabOff | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Offset Table loaded in EDU 2 for Node 0.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1371 | CEDU2Node1TabOff | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Offset Table loaded in EDU 2 for Node 1.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1372 | CEDU2TabPattMask | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Pattern Mask Table loaded in EDU 2.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1373 | CEDU3OperatioMod | V | n/a | 2 | 2 | 2 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

**RAW VALUE            MEANING**

|   |           |
|---|-----------|
| 0 | Stop      |
| 1 | Run       |
| 2 | Alternate |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1374 | CEDU3ScientifMod | V | n/a | 2 | 2 | 2 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

**RAW VALUE            MEANING**

|   |             |
|---|-------------|
| 0 | Transparent |
| 1 | Timing      |
| 2 | Threshold   |
| 3 | Image       |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1375 | CEDU3Node0TabOff | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Offset Table loaded in EDU 3 for Node 0.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1376 | CEDU3Node1TabOff | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Offset Table loaded in EDU 3 for Node 1.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1377 | CEDU3TabPattMask | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Pattern Mask Table loaded in EDU 3.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1378 | CEDU4OperatioMod | V | n/a | 2 | 2 | 2 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

**RAW VALUE            MEANING**

|   |           |
|---|-----------|
| 0 | Stop      |
| 1 | Run       |
| 2 | Alternate |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1379 | CEDU4ScientifMod | V | n/a | 2 | 2 | 2 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

**RAW VALUE            MEANING**

|   |             |
|---|-------------|
| 0 | Transparent |
| 1 | Timing      |
| 2 | Threshold   |
| 3 | Image       |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1380 | CEDU4Node0TabOff | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Offset Table loaded in EDU 4 for Node 0.

**RAW VALUE            MEANING**

# EMCS TM PARAMETER DETAILED LIST

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1381 | CEDU4Node1TabOff | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Offset Table loaded in EDU 4 for Node 1.

**RAW VALUE            MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1382 | CEDU4TabPattMask | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Pattern Mask Table loaded in EDU 4.

**RAW VALUE            MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1383 | CEDU5OperatioMod | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

**RAW VALUE            MEANING**

- 0            Stop
- 1            Run
- 2            Alternate

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1384 | CEDU5ScientifMod | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

**RAW VALUE            MEANING**

- 0            Transparent
- 1            Timing
- 2            Threshold
- 3            Image

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1385 | CEDU5Node0TabOff | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Offset Table loaded in EDU 5 for Node 0.

**RAW VALUE            MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1386 | CEDU5Node1TabOff | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Offset Table loaded in EDU 5 for Node 1.

**RAW VALUE            MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1387 | CEDU5TabPattMask | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Pattern Mask Table loaded in EDU 5.

**RAW VALUE            MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1388 | CEDU6OperatioMod | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

**RAW VALUE            MEANING**

- 0            Stop
- 1            Run
- 2            Alternate

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1389 | CEDU6ScientifMod | V   | n/a  | 2   | 2   | 2 |    |         |         |         |          |          |

**RAW VALUE            MEANING**

- 0            Transparent
- 1            Timing
- 2            Threshold
- 3            Image

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1390 | CEDU6Node0TabOff | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Offset Table loaded in EDU 6 for Node 0.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1391 | CEDU6Node1TabOff | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Offset Table loaded in EDU 6 for Node 1.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1392 | CEDU6TabPattMask | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Pattern Mask Table loaded in EDU 6.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1393 | CEDU7OperatioMod | V | n/a | 2 | 2 | 2 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

**RAW VALUE            MEANING**

|   |           |
|---|-----------|
| 0 | Stop      |
| 1 | Run       |
| 2 | Alternate |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1394 | CEDU7ScientifMod | V | n/a | 2 | 2 | 2 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

**RAW VALUE            MEANING**

|   |             |
|---|-------------|
| 0 | Transparent |
| 1 | Timing      |
| 2 | Threshold   |
| 3 | Image       |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1395 | CEDU7Node0TabOff | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Offset Table loaded in EDU 7 for Node 0.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1396 | CEDU7Node1TabOff | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Offset Table loaded in EDU 7 for Node 1.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1397 | CEDU7TabPattMask | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Pattern Mask Table loaded in EDU 7.

**RAW VALUE            MEANING**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |    |    |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1398 | CEDU0Node0Thres | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|----|----|--|--|--|--|--|--|

Current threshold setting used by EDU 0, when not in alternate mode, regardless the EMAE MUX position. When EDU is set to alternate mode, this parameter indicates the threshold setting applied on Node 0 input.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1399 | C EDU0Node1Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

When EDU 0 is set to alternate mode, this parameter indicates the threshold setting applied on Node 1 input. In the other modes this field is meaningless.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1400 | C EDU1Node0Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

Current threshold setting used by EDU 1, when not in alternate mode, regardless the EMAE MUX position. When EDU is set to alternate mode, this parameter indicates the threshold setting applied on Node 0 input.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1401 | C EDU1Node1Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

When EDU 1 is set to alternate mode, this parameter indicates the threshold setting applied on Node 1 input. In the other modes this field is meaningless.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1402 | C EDU2Node0Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

Current threshold setting used by EDU 2, when not in alternate mode, regardless the EMAE MUX position. When EDU is set to alternate mode, this parameter indicates the threshold setting applied on Node 0 input.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1403 | C EDU2Node1Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

When EDU 2 is set to alternate mode, this parameter indicates the threshold setting applied on Node 1 input. In the other modes this field is meaningless.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1404 | C EDU3Node0Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

Current threshold setting used by EDU 3, when not in alternate mode, regardless the EMAE MUX position. When EDU is set to alternate mode, this parameter indicates the threshold setting applied on Node 0 input.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1405 | C EDU3Node1Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

When EDU 3 is set to alternate mode, this parameter indicates the threshold setting applied on Node 1 input. In the other modes this field is meaningless.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1406 | C EDU4Node0Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

Current threshold setting used by EDU 4, when not in alternate mode, regardless the EMAE MUX position. When EDU is set to alternate mode, this parameter indicates the threshold setting applied on Node 0 input.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1407 | C EDU4Node1Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

When EDU 4 is set to alternate mode, this parameter indicates the threshold setting applied on Node 1 input. In the other modes this field is meaningless.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1408 | C EDU5Node0Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

Current threshold setting used by EDU 5, when not in alternate mode, regardless the EMAE MUX position. When EDU is set to alternate mode, this parameter indicates the threshold setting applied on Node 0 input.

**CALIBRATION CURVE**



| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1409 | C EDU5Node1Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

When EDU 5 is set to alternate mode, this parameter indicates the threshold setting applied on Node 1 input. In the other modes this field is meaningless.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1410 | C EDU6Node0Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

Current threshold setting used by EDU 6, when not in alternate mode, regardless the EMAE MUX position. When EDU is set to alternate mode, this parameter indicates the threshold setting applied on Node 0 input.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1411 | C EDU6Node1Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

When EDU 6 is set to alternate mode, this parameter indicates the threshold setting applied on Node 1 input. In the other modes this field is meaningless.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1412 | C EDU7Node0Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

Current threshold setting used by EDU 7, when not in alternate mode, regardless the EMAE MUX position. When EDU is set to alternate mode, this parameter indicates the threshold setting applied on Node 0 input.

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1413 | C EDU7Node1Thres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

When EDU 7 is set to alternate mode, this parameter indicates the threshold setting applied on Node 1 input. In the other modes this field is meaningless.

**CALIBRATION CURVE**

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1414 | C Selected EDU | V   | n/a  | 3   | 0   | 4 |    |         |         |         |          |          |

EMCR EDU Identifier to be tested

**CALIBRATION CURVE**

| PREF  | NAME              | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1415 | C TestImageHighEn | V   | n/a  | 3   | 8   | 12 |    |         |         |         |          |          |

High Energy Value used to generate the Test Image when the self-generation mode is selected

**CALIBRATION CURVE**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1416 | C TestConfigType | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

Generation Mode of the EMCR Test Image

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | Loaded Image |
| 1         | Built Image  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1417 | CTstConfigPatter | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

Pattern Table used to generate the Test Image when the self-generation mode is selected

| RAW VALUE | MEANING |
|-----------|---------|
|           |         |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1418 | C TestImageLowEn | V   | n/a  | 3   | 8   | 12 |    |         |         |         |          |          |

Low Energy Value used to generate the Test Image when the self-generation mode is selected

**CALIBRATION CURVE**

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1419 | C AnnDriveStatus | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR Annealing Drive Status (ON/OFF).

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1420 | C FW OpConfMotor | V | n/a | 2 | 2 | 2 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Power Configuration of the EMCR Filter Wheel Motor Coil. This parameter depends on TCs K0084/85.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |              |
|---|--------------|
| 0 | Both ON      |
| 1 | Nominal ON   |
| 2 | Redundant ON |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1421 | C FW OpConfRotDir | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|

Selection of the EMCR Filter Wheel Rotation Direction. This parameter depends on TCs K0084/85.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |          |
|---|----------|
| 0 | Forward  |
| 1 | Backward |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1422 | CFW OpConfRotMod | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Selection of the EMCR Filter Wheel Rotation Mode.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |        |
|---|--------|
| 0 | Normal |
| 1 | Step   |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |    |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|----|--|--|--|--|--|--|
| K1423 | CFW OpConfReqPosS | V | n/a | 3 | 7 | 11 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|----|--|--|--|--|--|--|

EMCR Filter Wheel new position address required by TC (in steps) This parameter depends on TCs K0084/85.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |      |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|------|---|---|---|--|--|--|--|--|--|
| K1424 | C Ann.Min.Tem.Set | V | degC | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-------------------|---|------|---|---|---|--|--|--|--|--|--|

Setting of the rough Focal Plane Minimum Temperature used by the EMCR Annealing Thermal Control. This parameter assumes the value loaded with TC K0007 Enter Extraheating Mode. When temperature goes below this value, EMCR commands EMAE to switch-on the Annealing Heater.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.668) - 223.6

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |      |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|------|---|---|---|--|--|--|--|--|--|
| K1425 | C Ann.Max.Tem.Set | V | degC | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-------------------|---|------|---|---|---|--|--|--|--|--|--|

Setting of the rough Focal Plane Maximum Temperature used by the EMCR Annealing Thermal Control. This parameter assumes the values loaded with TC K0007 Enter Extraheating Mode. When temperature goes above this value, EMCR commands EMAE to switch-off the Annealing Heater.

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.668) - 223.6

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1426 | CFW StatusTimeOut | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|

Time-out status for the Filter Wheel movement.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |              |
|---|--------------|
| 0 | NoTimeoutErr |
| 1 | TimeoutError |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                   |   |     |   |   |   |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1427 | C FW StatusPosErr | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|-------------------|---|-----|---|---|---|--|--|--|--|--|--|

Position Error parameter for the Filter Wheel.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |              |
|---|--------------|
| 0 | In Position  |
| 1 | Out Position |

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1428 CFWStatusEMReqSt V n/a 3 7 11  
Number of Filter Wheel steps (calculated by EMCR CTR and asked to EMAE) necessary to reach the required FW position. This parameter depends on TCs K0084/85.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1429 C Rej DH Cm Cnt V n/a 3 4 8  
Counter of the Rejected EMDH Commands due to reception timeout expiration

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1430 C Last Ac DH Com V n/a 3 4 8  
Command Identifier of the last accepted EMCR command (with the exception of the H/K Request Command).

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1431 C EDU Cm OK Cnt V n/a 3 4 8  
Number of EMCR EDU commands successfully executed.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1432 C EDU Cm Rec Cnt V n/a 3 4 8  
Number of EMCR EDU commands successfully executed during the automatic retry procedure foreseen in case of a command rejection.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1433 C EDU Cm Rej Cnt V n/a 3 4 8  
Number of the EMCR EDU Commands rejected even after the automatic retry procedure.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1434 C EDUTabLoaOKCnt V n/a 3 4 8  
Number of the EMCR EDU Table Loading Commands successfully executed.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1435 CEDUTabLoaRecCnt V n/a 3 4 8  
Number of the EMCR EDU Table Loading Commands successfully executed during the automatic retry procedure.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1436 CEDUTabLoaRejCnt V n/a 3 4 8  
Number of the EMCR EDU Table Loading Commands rejected even after the automatic retry procedure.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

K1437 C FIFOEDUCmRej16 V n/a 3 4 8  
Code of the last command rejected by EDU.

## CALIBRATION CURVE

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1438 | C FIFOEDUCmRej15 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-1 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1439 | C FIFOEDUCmRej14 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-2 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1440 | C FIFOEDUCmRej13 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-3 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1441 | C FIFOEDUCmRej12 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-4 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1442 | C FIFOEDUCmRej11 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-5 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1443 | C FIFOEDUCmRej10 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-6 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1444 | C FIFOEDUCmRej9 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-7 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1445 | C FIFOEDUCmRej8 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-8 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1446 | C FIFOEDUCmRej7 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-9 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1447 | C FIFOEDUCmRej6 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-10 command rejected by EDU.

## CALIBRATION CURVE

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1448 | C FIFOEDUCmRej5 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-11 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1449 | C FIFOEDUCmRej4 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-12 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1450 | C FIFOEDUCmRej3 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-13 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1451 | C FIFOEDUCmRej2 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-14 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1452 | C FIFOEDUCmRej1 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-15 command rejected by EDU.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1453 | C EMAE Cm OK Cnt | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Number of EMAE Commands successfully sent by EMCR.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1454 | CEMAE Cm Rec Cnt | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Number of EMAE Commands successfully sent by EMCR during the automatic retry procedure foreseen in case of a command rejection.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1455 | CEMAE Cm Rej Cnt | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Number of EMAE Commands sent by EMCR and rejected even after the automatic retry procedure.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1456 | CEMAESeqLoaOKCn | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Number of EMAE Sequence Loading Commands successfully sent by EMCR.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1457 | CEMAESeqLdRecCnt | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Number of EMAE Sequence Loading Commands successfully sent by EMCR during the automatic retry procedure.

## CALIBRATION CURVE

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1458 | CEMAESeqLdRejCnt | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

Number of EMAE Sequence Loading Commands sent by EMCR and rejected even after the automatic retry procedure.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1459 | CFIFOEMAECmRej1 | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Code of the last command rejected by EMAE.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1460 | CFIFOEMAECmRej1 | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Code of the last-1 command rejected by EMAE.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1461 | CFIFOEMAECmRej1 | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Code of the last-2 command rejected by EMAE.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1462 | CFIFOEMAECmRej1 | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Code of the last-3 command rejected by EMAE.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1463 | CFIFOEMAECmRej1 | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Code of the last-4 command rejected by EMAE.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1464 | CFIFOEMAECmRej1 | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Code of the last-5 command rejected by EMAE.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1465 | CFIFOEMAECmRej1 | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Code of the last-6 command rejected by EMAE.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1466 | CFIFOEMAECmRej9 | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Code of the last-7 command rejected by EMAE.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1467 | CFIFOEMAECmRej8 | V | n/a | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

Code of the last-8 command rejected by EMAE.

## CALIBRATION CURVE

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1468 | CFIFOEMAECmRej7 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-9 command rejected by EMAE.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1469 | CFIFOEMAECmRej6 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-10 command rejected by EMAE.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1470 | CFIFOEMAECmRej5 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-11 command rejected by EMAE.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1471 | CFIFOEMAECmRej4 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-12 command rejected by EMAE.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1472 | CFIFOEMAECmRej3 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-13 command rejected by EMAE.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1473 | CFIFOEMAECmRej2 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-14 command rejected by EMAE.

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1474 | CFIFOEMAECmRej1 | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

Code of the last-15 command rejected by EMAE.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1475 | C BootS/Wversion | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This parameter reports the current version of the S/W contained in the Boot PROM memories.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1476 | C RAM SW version | V   | n/a  | 3   | 4   | 8 |    |         |         |         |          |          |

This parameter reports the current version of the S/W contained in the Program RAM memories.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1477 | C PW ON Test RAM | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

EMCR RAM P/W On test result

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | Failed  |
| 1         | Passed  |

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1478 | CPWONTTestROMBo | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR PROM boot checksum test result

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |        |
|---|--------|
| 0 | Failed |
| 1 | Passed |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1479 | CPWONTTestROMPr | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR PROM program checksum test result

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |        |
|---|--------|
| 0 | Failed |
| 1 | Passed |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |   |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1480 | CPWONTTestRAMPr | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR RAM program checksum test result

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |        |
|---|--------|
| 0 | Failed |
| 1 | Passed |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |   |   |  |  |  |  |  |  |
|-------|----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1481 | C Group 1 EITF | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|---|---|--|--|--|--|--|--|

Occurrence of Extended Integration Time situation in the EMAE sequencers 1.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |             |
|---|-------------|
| 0 | Not Occured |
| 1 | Occured     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1482 | C Operating Mode | V | n/a | 2 | 4 | 4 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR operating mode.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |              |
|---|--------------|
| 0 | Initializat. |
| 1 | Stand-By     |
| 2 | Observation  |
| 3 | Test         |
| 4 | Annealing    |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1483 | TC SequenceCount | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

Sequence Count of the last successfully executed TC.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1484 | EMDH Task Ident. | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

Identifier of the EMDH Task found in Minor or Major Overrun.

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |    |    |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1486 | HBR Identifier | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|----|----|--|--|--|--|--|--|

Identifier of the HBR channel with FIFO full

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1487 | HBR7 Bright P.N. | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

## CALIBRATION CURVE



# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1488 | HBR8 Bright P.N. | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1489 | HBR 1 Active | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates the activation status of HBR 1.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1490 | HBR 2 Active | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates the activation status of HBR 2.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1491 | HBR 3 Active | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates the activation status of HBR 3.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1492 | HBR 4 Active | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates the activation status of HBR 4.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1493 | HBR 5 Active | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates the activation status of HBR 5.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1494 | HBR 6 Active | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates the activation status of HBR 6.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1495 | HBR 7 Active | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates the activation status of HBR 7.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1496 | HBR 8 Active | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates the activation status of HBR 8.

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Not Active |
| 1         | Active     |

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1497 | HBR 1 Processing | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 1 Channel.

## RAW VALUE MEANING

|    |              |
|----|--------------|
| 0  | Disabled     |
| 1  | Imag. Proc.  |
| 2  | Imag.N.Proc. |
| 3  | Imag.R.Proc. |
| 4  | Imag.R.N.Pr. |
| 5  | EDU Thresh.  |
| 6  | Tim. Proces. |
| 7  | Tim.N.Proce. |
| 8  | Tim.C.Proce. |
| 9  | Tim.C.N.Pro. |
| 10 | Transparent  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1498 | HBR 2 Processing | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 2 Channel.

## RAW VALUE MEANING

|    |              |
|----|--------------|
| 0  | Disabled     |
| 1  | Imag. Proc.  |
| 2  | Imag.N.Proc. |
| 3  | Imag.R.Proc. |
| 4  | Imag.R.N.Pr. |
| 5  | EDU Thresh.  |
| 6  | Tim. Proces. |
| 7  | Tim.N.Proce. |
| 8  | Tim.C.Proce. |
| 9  | Tim.C.N.Pro. |
| 10 | Transparent  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1499 | HBR 3 Processing | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 3 Channel.

## RAW VALUE MEANING

|    |              |
|----|--------------|
| 0  | Disabled     |
| 1  | Imag. Proc.  |
| 2  | Imag.N.Proc. |
| 3  | Imag.R.Proc. |
| 4  | Imag.R.N.Pr. |
| 5  | EDU Thresh.  |
| 6  | Tim. Proces. |
| 7  | Tim.N.Proce. |
| 8  | Tim.C.Proce. |
| 9  | Tim.C.N.Pro. |
| 10 | Transparent  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1500 | HBR 4 Processing | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 4 Channel.

## RAW VALUE MEANING

|    |              |
|----|--------------|
| 0  | Disabled     |
| 1  | Imag. Proc.  |
| 2  | Imag.N.Proc. |
| 3  | Imag.R.Proc. |
| 4  | Imag.R.N.Pr. |
| 5  | EDU Thresh.  |
| 6  | Tim. Proces. |
| 7  | Tim.N.Proce. |
| 8  | Tim.C.Proce. |
| 9  | Tim.C.N.Pro. |
| 10 | Transparent  |

# EMCS TM PARAMETER DETAILED LIST

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1501 | HBR 5 Processing | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 5 Channel.

### RAW VALUE      MEANING

|    |              |
|----|--------------|
| 0  | Disabled     |
| 1  | Imag. Proc.  |
| 2  | Imag.N.Proc. |
| 3  | Imag.R.Proc. |
| 4  | Imag.R.N.Pr. |
| 5  | EDU Thresh.  |
| 6  | Tim. Proces. |
| 7  | Tim.N.Proce. |
| 8  | Tim.C.Proce. |
| 9  | Tim.C.N.Pro. |
| 10 | Transparent  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1502 | HBR 6 Processing | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 6 Channel.

### RAW VALUE      MEANING

|    |              |
|----|--------------|
| 0  | Disabled     |
| 1  | Imag. Proc.  |
| 2  | Imag.N.Proc. |
| 3  | Imag.R.Proc. |
| 4  | Imag.R.N.Pr. |
| 5  | EDU Thresh.  |
| 6  | Tim. Proces. |
| 7  | Tim.N.Proce. |
| 8  | Tim.C.Proce. |
| 9  | Tim.C.N.Pro. |
| 10 | Transparent  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1503 | HBR 7 Processing | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 7 Channel.

### RAW VALUE      MEANING

|    |              |
|----|--------------|
| 0  | Disabled     |
| 1  | Imag. Proc.  |
| 2  | Imag.N.Proc. |
| 3  | Imag.R.Proc. |
| 4  | Imag.R.N.Pr. |
| 5  | EDU Thresh.  |
| 6  | Tim. Proces. |
| 7  | Tim.N.Proce. |
| 8  | Tim.C.Proce. |
| 9  | Tim.C.N.Pro. |
| 10 | Transparent  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1504 | HBR 8 Processing | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

This field contains information about the current operating mode selected for HBR 8 Channel.

### RAW VALUE      MEANING

|    |              |
|----|--------------|
| 0  | Disabled     |
| 1  | Imag. Proc.  |
| 2  | Imag.N.Proc. |
| 3  | Imag.R.Proc. |
| 4  | Imag.R.N.Pr. |
| 5  | EDU Thresh.  |
| 6  | Tim. Proces. |
| 7  | Tim.N.Proce. |
| 8  | Tim.C.Proce. |
| 9  | Tim.C.N.Pro. |
| 10 | Transparent  |

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1505 | HBR1BufferStartA | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 1 buffer start address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1506 | HBR1BufferEndAdd | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 1 buffer end address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1507 | HBR2BufferStartA | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 2 buffer start address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1508 | HBR2BufferEndAdd | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 2 buffer end address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1509 | HBR3BufferStartA | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 3 buffer start address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1510 | HBR3BufferEndAdd | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 3 buffer end address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1511 | HBR4BufferStartA | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 4 buffer start address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1512 | HBR4BufferEndAdd | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 4 buffer end address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1513 | HBR5BufferStartA | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 5 buffer start address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1514 | HBR5BufferEndAdd | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 5 buffer end address.

## CALIBRATION CURVE

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1515 | HBR6BufferStartA | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 6 buffer start address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1516 | HBR6BufferEndAdd | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 6 buffer end address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1517 | HBR7BufferStartA | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 7 buffer start address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1518 | HBR7BufferEndAdd | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 7 buffer end address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1519 | HBR8BufferStartA | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 8 buffer start address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1520 | HBR8BufferEndAdd | V   | n/a  | 3   | 14  | 32 |    |         |         |         |          |          |

HBR 8 buffer end address.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1521 | HBR1 Bright P.N. | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1522 | HBR1 Low Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1523 | HBR1 Upp Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1524 | HBR2 Low Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1525 | HBR2 Upp Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1526 | HBR3 Low Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1527 | HBR3 Upp Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1528 | HBR4 Low Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1529 | HBR4 Upp Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1530 | HBR5 Low Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1531 | HBR5 Upp Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1532 | HBR6 Low Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1533 | HBR6 Upp Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1534 | HBR7 Low Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1535 | HBR7 Upp Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1536 | HBR8 Low Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1537 | HBR8 Upp Thresh | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1538 | FastPatternThres | V   | n/a  | 3   | 12  | 16 |    |         |         |         |          |          |

This parameter is the Pattern Threshold set in Timing mode.

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1539 | DeicinLowTempLim | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.668) - 223.6

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1540 | DeicinUppTempLim | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.668) - 223.6

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1541 | DeconLowTempLim | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.668) - 223.6

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1542 | DeconUppTempLim | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.668) - 223.6

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1543 | AnnealLowTempLim | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.668) - 223.6

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1544 | AnnealUppTempLim | V   | degC | 3   | 4   | 8 |    |         |         |         |          |          |

**CALIBRATION CURVE** Eng. Value [°C] = (Binary Value \* 1.668) - 223.6

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1545 | DeicinConfThCont | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

Configuration of the Thermal Control Heater Relay in Deicing Mode

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1546 | DeicinConfShroud | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

Configuration of the Secondary Shroud Heater Relay in Deicing Mode

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1547 | DeicinConfAnneal | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

Configuration of the Annealing Heater Relay in Deicing Mode

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1548 | DecontConfThCont | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

Configuration of the Thermal Control Heater Relay in Decontamination Mode

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1549 | DecontConfShroud | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

Configuration of the Secondary Shroud Heater Relay in Decontamination Mode

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1550 | DecontConfAnneal | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

Configuration of the Annealing Heater Relay in Decontamination Mode

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1551 | AnnealConfThCont | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

Configuration of the Thermal Control Heater Relay in Annealing Mode

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1552 | AnnealConfShroud | V   | n/a  | 2   | 0   | 16 |    |         |         |         |          |          |

Configuration of the Secondary Shroud Heater Relay in Annealing Mode

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |



# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|
| K1553 | AnnealConfAnneal | V | n/a | 2 | 0 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|

Configuration of the Annealing Heater Relay in Annealing Mode

**RAW VALUE**      **MEANING**

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |      |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|------|---|---|---|--|--|--|--|--|--|
| K1554 | UppMonTempLimits | V | degC | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|------|---|---|---|--|--|--|--|--|--|

Upper Monitoring Temperature Limit in normal operating temperature control

**CALIBRATION CURVE**    Eng. Value [°C] = (Binary Value \* 0.357) - 159

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |      |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|------|---|---|---|--|--|--|--|--|--|
| K1555 | LowMonTempLimits | V | degC | 3 | 4 | 8 |  |  |  |  |  |  |
|-------|------------------|---|------|---|---|---|--|--|--|--|--|--|

Lower Monitoring Temperature Limit in normal operating temperature control

**CALIBRATION CURVE**    Eng. Value [°C] = (Binary Value \* 0.357) - 159

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1556 | HBR2 Bright P.N. | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1557 | HBR3 Bright P.N. | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1558 | HBR4 Bright P.N. | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1559 | HBR5 Bright P.N. | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1560 | HBR6 Bright P.N. | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |    |    |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1561 | IC Valid Events | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|----|----|--|--|--|--|--|--|

Valid Events collected during the Imaging Counting mode

**CALIBRATION CURVE**

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1562 | ICRejEventsLowTh | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

Events Rejected because below the Low Threshold during the Imaging Counting mode

**CALIBRATION CURVE**

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1563 | ICRejEventsUppTh | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

Events Rejected because over the Upper Threshold during the Imaging Counting mode

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1564 | ICRejectedFrames | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

Rejected Frames during the Imaging Counting mode

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|
| K1565 | ICountModeStartT | V | n/a | 9 | 5 | 48 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|

Imaging Counting Mode Start Time

RAW VALUE      MEANING

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |    |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|----|--|--|--|--|--|--|
| K1566 | ICountModeStopT | V | n/a | 9 | 5 | 48 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|----|--|--|--|--|--|--|

Imaging Counting Mode Stop Time

RAW VALUE      MEANING

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |    |    |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1567 | TC Valid Events | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|----|----|--|--|--|--|--|--|

Valid Events collected during the Timing Counting mode

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1568 | TCRejEventsLowTh | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

Events Rejected because below the Lower Threshold during the Timing Counting mode

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1569 | TCRejEventsUppTh | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

Events Rejected because over the Upper Threshold during the Timing Counting mode

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |    |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|
| K1570 | TCRejectedFrames | V | n/a | 3 | 12 | 16 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|----|----|--|--|--|--|--|--|

Frames Rejected during the Timing Counting mode

## CALIBRATION CURVE

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |    |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|
| K1571 | TCountModeStartT | V | n/a | 9 | 5 | 48 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|----|--|--|--|--|--|--|

Timing Counting Mode Start Time

RAW VALUE      MEANING

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |    |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|----|--|--|--|--|--|--|
| K1572 | TCountModeStopT | V | n/a | 9 | 5 | 48 |  |  |  |  |  |  |
|-------|-----------------|---|-----|---|---|----|--|--|--|--|--|--|

Timing Counting Mode Stop Time

RAW VALUE      MEANING

# EMCS TM PARAMETER DETAILED LIST

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1573 | C Cou OBT Res Ti | V   | sec  | 9   | 5   | 48 |    |         |         |         |          |          |

This parameter reports the EMDH On Board Time sampled when the last reset of the Course EMCR On Board Time occurred

**RAW VALUE      MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1574 | D Cmode Start Ti | V   | sec  | 9   | 5   | 48 |    |         |         |         |          |          |

EMDH Counting Mode Start Time

**RAW VALUE      MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|----|---------|---------|---------|----------|----------|
| K1575 | D Cmode Stop Tim | V   | sec  | 9   | 5   | 48 |    |         |         |         |          |          |

EMDH Counting Mode Stop Time

**RAW VALUE      MEANING**

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1586 | AAnCh1/2DataBySe | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates if the Low or the High Byte of the addressed word data is shown in parameter AAnCh1/2LoadData (E1125).

**RAW VALUE      MEANING**

|   |      |
|---|------|
| 0 | Low  |
| 1 | High |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1587 | AAnCh3/4DataBySe | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates if the Low or the High Byte of the addressed word data is shown in parameter AAnCh3/4LoadData (E1208).

**RAW VALUE      MEANING**

|   |      |
|---|------|
| 0 | Low  |
| 1 | High |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1588 | AAnCh5/6DataBySe | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates if the Low or the High Byte of the addressed word data is shown in parameter AAnCh5/6LoadData (E1251).

**RAW VALUE      MEANING**

|   |      |
|---|------|
| 0 | Low  |
| 1 | High |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1589 | AAnCh7/8DataBySe | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates if the Low or the High Byte of the addressed word data is shown in parameter AAnCh7/8LoadData (E1309).

**RAW VALUE      MEANING**

|   |      |
|---|------|
| 0 | Low  |
| 1 | High |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1590 | A SeqFW DataBySe | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

This parameter indicates if the Low or the High Byte of the addressed word data is shown in parameter ASeqFWLoadData (E1129).

**RAW VALUE      MEANING**

|   |      |
|---|------|
| 0 | Low  |
| 1 | High |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1592 | C AnCh3/4 SeqRam | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

EMCR programmed status of the Analogue Chain 3/4 Sequencer Ram (Load/Run). This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

**RAW VALUE      MEANING**

|   |      |
|---|------|
| 0 | Load |
| 1 | Run  |

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1593 | CAnCh3/4InbCtrlC | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 3/4 Port Inhibit On/Off Control C. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1594 | CAnCh3/4InbCtrlB | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 3/4 Port Inhibit On/Off Control B. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1595 | CAnCh3/4InbCtrlA | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 3/4 Port Inhibit On/Off Control A. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1596 | CAnCh3/4IntSimul | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports if the Analogue Chain 3/4 or the Internal Simulator has been programmed in the EMCR as Chain Input. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |              |
|---|--------------|
| 0 | ChainNorNod0 |
| 1 | ChainNorNod1 |
| 2 | Chain/10Nod0 |
| 3 | Chain/10Nod1 |
| 4 | SimulatorMax |
| 5 | Simulator_/2 |
| 6 | Simulator_/4 |
| 7 | Simulator_/8 |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1599 | C AnCh1/2 SeqRam | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 1/2 Sequencer Ram (Load/Run). This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |      |
|---|------|
| 0 | Load |
| 1 | Run  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1600 | CAnCh1/2InbCtrlC | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 1/2 Port Inhibit On/Off Control C. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1601 | CAnCh1/2InbCtrlB | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 1/2 Port Inhibit On/Off Control B. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1602 | CAnCh1/2InbCtrlA | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 1/2 Port Inhibit On/Off Control A. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1603 | CAnCh1/2IntSimul | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

This parameter reports if the Analogue Chain 1/2 or the Internal Simulator has been programmed in the EMCR as Chain Input. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | ChainNorNod0 |
| 1         | ChainNorNod1 |
| 2         | Chain/10Nod0 |
| 3         | Chain/10Nod1 |
| 4         | SimulatorMax |
| 5         | Simulator_/2 |
| 6         | Simulator_/4 |
| 7         | Simulator_/8 |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1606 | C AnCh7/8 SeqRam | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

EMCR programmed status of the Analogue Chain 7/8 Sequencer Ram Load/Run. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | Load    |
| 1         | Run     |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1607 | CAnCh7/8InbCtrlC | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

EMCR programmed status of the Analogue Chain 7/8 Port Inhibit On/Off Control C. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1608 | CAnCh7/8InbCtrlB | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

EMCR programmed status of the Analogue Chain 7/8 Port Inhibit On/Off Control B. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1609 | CAnCh7/8InbCtrlA | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

EMCR programmed status of the Analogue Chain 7/8 Port Inhibit On/Off Control A. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OFF     |
| 1         | ON      |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1610 | CAnCh7/8IntSimul | V   | n/a  | 2   | 3   | 3 |    |         |         |         |          |          |

This parameter reports if the Analogue Chain 7/8 or the Internal Simulator has been programmed in the EMCR as Chain Input. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | ChainNorNod0 |
| 1         | ChainNorNod1 |
| 2         | Chain/10Nod0 |
| 3         | Chain/10Nod1 |
| 4         | SimulatorMax |
| 5         | Simulator_/2 |
| 6         | Simulator_/4 |
| 7         | Simulator_/8 |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
| K1613 | C AnCh5/6 SeqRam | V   | n/a  | 2   | 1   | 1 |    |         |         |         |          |          |

EMCR programmed status of the Analogue Chain 5/6 Sequencer Ram (Load/Run). This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | Load    |
| 1         | Run     |

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1614 | CAnCh5/6InbCtrlC | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 5/6 Port Inhibit On/Off Control C. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1615 | CAnCh5/6InbCtrlB | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 5/6 Port Inhibit On/Off Control B. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1616 | CAnCh5/6InbCtrlA | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

EMCR programmed status of the Analogue Chain 5/6 Port Inhibit On/Off Control A. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |     |
|---|-----|
| 0 | OFF |
| 1 | ON  |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1617 | CAnCh5/6IntSimul | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports if the Analogue Chain 5/6 or the Internal Simulator has been programmed in the EMCR as Chain Input. This parameter reports the MUX/Chain setting loaded in the EMCR by TC K0080 Set EMAE MUX position

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |              |
|---|--------------|
| 0 | ChainNorNod0 |
| 1 | ChainNorNod1 |
| 2 | Chain/10Nod0 |
| 3 | Chain/10Nod1 |
| 4 | SimulatorMax |
| 5 | Simulator_/2 |
| 6 | Simulator_/4 |
| 7 | Simulator_/8 |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1624 | CFWExAbsPosition | V | n/a | 2 | 3 | 3 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This parameter reports the EMCR expected value of the Filter Wheel absolute position. The value of this parameter depends on TCs K0084-85.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |              |
|---|--------------|
| 0 | Open         |
| 1 | Filter D     |
| 2 | Filter C     |
| 3 | Filter B     |
| 4 | Filter A     |
| 5 | Closed       |
| 6 | IllegalValue |
| 7 | Not Valid CS |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1625 | CFWExpRedStopSen | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|------------------|---|-----|---|---|---|--|--|--|--|--|--|

This field contains the EMCR expected value of the Filter Wheel redundant Stop Sensor.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |              |
|---|--------------|
| 0 | In Position  |
| 1 | Out Position |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |   |   |  |  |  |  |  |  |
|-------|----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1626 | C Group 2 EITF | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|---|---|--|--|--|--|--|--|

Occurrence of Extended Integration Time situation in the EMAE sequencers 2.

| RAW VALUE | MEANING |
|-----------|---------|
|-----------|---------|

|   |             |
|---|-------------|
| 0 | Not Occured |
| 1 | Occured     |

# EMCS TM PARAMETER DETAILED LIST

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |   |   |  |  |  |  |  |  |
|-------|----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1627 | C Group 3 EITF | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|---|---|--|--|--|--|--|--|

Occurrence of Extended Integration Time situation in the EMAE sequencers 3.

**RAW VALUE            MEANING**

|   |             |
|---|-------------|
| 0 | Not Occured |
| 1 | Occured     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                |   |     |   |   |   |  |  |  |  |  |  |
|-------|----------------|---|-----|---|---|---|--|--|--|--|--|--|
| K1628 | C Group 4 EITF | V | n/a | 2 | 1 | 1 |  |  |  |  |  |  |
|-------|----------------|---|-----|---|---|---|--|--|--|--|--|--|

Occurrence of Extended Integration Time situation in the EMAE sequencers 4.

**RAW VALUE            MEANING**

|   |             |
|---|-------------|
| 0 | Not Occured |
| 1 | Occured     |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |    |      |  |  |  |      |      |
|-------|-----------------|---|-----|---|---|----|------|--|--|--|------|------|
| K1633 | FirstLBRfailure | V | n/a | 2 | 0 | 16 | none |  |  |  | none | none |
|-------|-----------------|---|-----|---|---|----|------|--|--|--|------|------|

Reason of the first attempt failure on LBR

**RAW VALUE            MEANING**

|     |              |
|-----|--------------|
| 17  | WrongChecks. |
| 34  | OVflowLCleng |
| 51  | Time-outErr. |
| 68  | LC running   |
| 250 | busyLBR      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |    |      |  |  |  |      |      |
|-------|------------------|---|-----|---|---|----|------|--|--|--|------|------|
| K1634 | SecondLBRfailure | V | n/a | 2 | 0 | 16 | none |  |  |  | none | none |
|-------|------------------|---|-----|---|---|----|------|--|--|--|------|------|

Reason of the second attempt failure on LBR

**RAW VALUE            MEANING**

|     |              |
|-----|--------------|
| 17  | WrongChecks. |
| 34  | OVflowLCleng |
| 51  | Time-outErr. |
| 68  | LC running   |
| 250 | busyLBR      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                 |   |     |   |   |    |      |  |  |  |      |      |
|-------|-----------------|---|-----|---|---|----|------|--|--|--|------|------|
| K1635 | ThirdLBRfailure | V | n/a | 2 | 0 | 16 | none |  |  |  | none | none |
|-------|-----------------|---|-----|---|---|----|------|--|--|--|------|------|

Reason of the third attempt failure on LBR

**RAW VALUE            MEANING**

|     |              |
|-----|--------------|
| 17  | WrongChecks. |
| 34  | OVflowLCleng |
| 51  | Time-outErr. |
| 68  | LC running   |
| 250 | busyLBR      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |    |      |  |  |  |      |      |
|-------|------------------|---|-----|---|---|----|------|--|--|--|------|------|
| K1636 | FourthLBRfailure | V | n/a | 2 | 0 | 16 | none |  |  |  | none | none |
|-------|------------------|---|-----|---|---|----|------|--|--|--|------|------|

Reason of the fourth attempt failure on LBR

**RAW VALUE            MEANING**

|     |              |
|-----|--------------|
| 17  | WrongChecks. |
| 34  | OVflowLCleng |
| 51  | Time-outErr. |
| 68  | LC running   |
| 250 | busyLBR      |

| PREF | NAME | F/V | UNIT | PTC | PFC | W | TC | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|
|------|------|-----|------|-----|-----|---|----|---------|---------|---------|----------|----------|

|       |                  |   |     |   |   |   |      |  |  |  |      |      |
|-------|------------------|---|-----|---|---|---|------|--|--|--|------|------|
| K1637 | LBRProtocolError | V | n/a | 2 | 8 | 8 | none |  |  |  | none | none |
|-------|------------------|---|-----|---|---|---|------|--|--|--|------|------|

This parameter describes the type of the LBR protocol error on the TC unsuccessful execution

**RAW VALUE            MEANING**

|     |              |
|-----|--------------|
| 51  | 4FailedAttem |
| 68  | LCBootPrgDis |
| 85  | LC           |
| 102 | IllegLC code |
| 119 | LCcurrCTRdis |
| 136 | LCparaOutRan |

# EMCS TM PARAMETER DETAILED LIST

153 LCexecFailed  
 170 OtherLC/Leng  
 250 NoEMCRrespo  
 251 Other Errors

| PREF  | NAME           | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|----------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1638 | Refusal Reason | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Reason of the Mode transition refusal

**RAW VALUE      MEANING**

1      AutTransRun  
 2      NotAllowTra

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1639 | LoadInitprocIdle | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic initproc\_idle process into APEX table

**RAW VALUE      MEANING**

0      OK  
 1      Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1640 | UnloadInitprIdle | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic initproc\_idle process from APEX table

**RAW VALUE      MEANING**

0      OK  
 1      Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1641 | LoadExitPrimeFas | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic exit\_primefast process into APEX table

**RAW VALUE      MEANING**

0      OK  
 1      Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1642 | UnloadExPrimeFas | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic exit\_primefast process from APEX table

**RAW VALUE      MEANING**

0      OK  
 1      Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1643 | UnloadPrimeFasPr | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic primefast\_proc process from APEX table

**RAW VALUE      MEANING**

0      OK  
 1      Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1644 | UnloadUpdateHKpr | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic update\_hk\_count\_proc process from APEX table

**RAW VALUE      MEANING**

0      OK  
 1      Not OK

| PREF  | NAME         | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|--------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1645 | Cmd Stop OBS | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

**RAW VALUE      MEANING**

0      OK  
 1      Not OK



# EMCS TM PARAMETER DETAILED LIST

| PREF  | NAME             | F/V            | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|---|------------------|----------------|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1646   | LoadExitDiagProc | V              | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |
| Loading of periodic exit_diag process into APEX table     |                  |                |      |     |     |    |      |         |         |         |          |          |
| <b>RAW VALUE</b>  |                  | <b>MEANING</b> |      |     |     |    |      |         |         |         |          |          |
| 0   |                  | OK             |      |     |     |    |      |         |         |         |          |          |
| 1   |                  | Not OK         |      |     |     |    |      |         |         |         |          |          |
| PREF  | NAME             | F/V            | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
| K1647   | UnloadExitDiagPr | V              | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |
| Unloading of periodic exit_diag process from APEX table   |                  |                |      |     |     |    |      |         |         |         |          |          |
| <b>RAW VALUE</b>  |                  | <b>MEANING</b> |      |     |     |    |      |         |         |         |          |          |
| 0   |                  | OK             |      |     |     |    |      |         |         |         |          |          |
| 1   |                  | Not OK         |      |     |     |    |      |         |         |         |          |          |
| PREF  | NAME             | F/V            | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
| K1648   | UnloadDiagProc   | V              | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |
| Unloading of periodic diag_proc process from APEX table   |                  |                |      |     |     |    |      |         |         |         |          |          |
| <b>RAW VALUE</b>  |                  | <b>MEANING</b> |      |     |     |    |      |         |         |         |          |          |
| 0   |                  | OK             |      |     |     |    |      |         |         |         |          |          |
| 1   |                  | Not OK         |      |     |     |    |      |         |         |         |          |          |
| PREF  | NAME             | F/V            | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
| K1649   | LoadExitOVproces | V              | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |
| Loading of periodic exit_ov process into APEX table       |                  |                |      |     |     |    |      |         |         |         |          |          |
| <b>RAW VALUE</b>  |                  | <b>MEANING</b> |      |     |     |    |      |         |         |         |          |          |
| 0   |                  | OK             |      |     |     |    |      |         |         |         |          |          |
| 1   |                  | Not OK         |      |     |     |    |      |         |         |         |          |          |
| PREF  | NAME             | F/V            | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
| K1650   | UnloadExitOVproc | V              | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |
| Unloading of periodic exit_ov process from APEX table     |                  |                |      |     |     |    |      |         |         |         |          |          |
| <b>RAW VALUE</b>  |                  | <b>MEANING</b> |      |     |     |    |      |         |         |         |          |          |
| 0   |                  | OK             |      |     |     |    |      |         |         |         |          |          |
| 1   |                  | Not OK         |      |     |     |    |      |         |         |         |          |          |
| PREF  | NAME             | F/V            | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
| K1651   | Unload OV proces | V              | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |
| Unloading of periodic ov_proc process from APEX table     |                  |                |      |     |     |    |      |         |         |         |          |          |
| <b>RAW VALUE</b>  |                  | <b>MEANING</b> |      |     |     |    |      |         |         |         |          |          |
| 0   |                  | OK             |      |     |     |    |      |         |         |         |          |          |
| 1   |                  | Not OK         |      |     |     |    |      |         |         |         |          |          |
| PREF  | NAME             | F/V            | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
| K1652   | LoadExitExtrhPro | V              | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |
| Loading of periodic exit_extrah process into APEX table   |                  |                |      |     |     |    |      |         |         |         |          |          |
| <b>RAW VALUE</b>  |                  | <b>MEANING</b> |      |     |     |    |      |         |         |         |          |          |
| 0   |                  | OK             |      |     |     |    |      |         |         |         |          |          |
| 1   |                  | Not OK         |      |     |     |    |      |         |         |         |          |          |
| PREF  | NAME             | F/V            | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
| K1653   | UnloadExitExtrah | V              | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |
| Unloading of periodic exit_extrah process from APEX table |                  |                |      |     |     |    |      |         |         |         |          |          |
| <b>RAW VALUE</b>  |                  | <b>MEANING</b> |      |     |     |    |      |         |         |         |          |          |
| 0   |                  | OK             |      |     |     |    |      |         |         |         |          |          |
| 1   |                  | Not OK         |      |     |     |    |      |         |         |         |          |          |
| PREF  | NAME             | F/V            | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
| K1654   | CmdStopEMCRTemC  | V              | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |
| Command stop_EMCR_temp_control                            |                  |                |      |     |     |    |      |         |         |         |          |          |
| <b>RAW VALUE</b>  |                  | <b>MEANING</b> |      |     |     |    |      |         |         |         |          |          |
| 0   |                  | OK             |      |     |     |    |      |         |         |         |          |          |
| 1   |                  | Not OK         |      |     |     |    |      |         |         |         |          |          |
| 2   |                  | Not required   |      |     |     |    |      |         |         |         |          |          |

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1655 | CmdSetEMAEctrlOn | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Command Set EMAE Control ON

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1656 | LoadExitIftProc | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic exit\_ift process into APEX table

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1657 | UnloadExitIftPro | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic exit\_ift process from APEX table

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1658 | IFT Submode | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

## RAW VALUE MEANING

1 ift\_emdh  
2 ift\_emcs

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1659 | LoadInitProcSafe | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic initproc\_safe process into APEX table

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1660 | UnloadInitPrSafe | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic initproc\_safe process from APEX table

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1661 | CmdSetFPmainCtrl | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Command Set Focal Plane Main Control

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1662 | FWpositionClosed | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

This parameter reports if the Filter Wheel is in closed position or in a wrong/unknown position

## RAW VALUE MEANING

0 Closed  
1 NotClosed/Un

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1663 | UnlockSafeEmerge | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unlocking of periodic safe\_emergency process

## RAW VALUE MEANING

0 OK  
1 Not OK

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1664 | LockSafeEmergenc | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Locking of periodic safe\_emergency process

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1665 | OutcomingSWmode | V   | n/a  | 3   | 12  | 16 | none |         |         |         | none     | none     |

## CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1666 | EMDHSWinSafeMode | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

This parameter reports if the EMDH SW is already in Safe mode or it is already entering in Safe mode

## RAW VALUE MEANING

0 False  
1 True

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1667 | Transition Abort | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Abort of the running mode transition

## RAW VALUE MEANING

0 OK  
1 Not OK  
2 Not required

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1668 | UnloadScientProc | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic scientific process (Observation, Diagnostic, OV) from APEX table (if required)

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1669 | UnloadUpdateHKpr | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic update\_hk\_count\_proc process from APEX table (if required)

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1670 | LoadInitprPriFas | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic initproc\_primefast process into APEX table

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1671 | UnloadInitPriFas | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic initproc\_primefast process from APEX table

## RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1672 | LoadPrimeFastPro | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic primefast\_proc process into APEX table

## RAW VALUE MEANING

0 OK  
1 Not OK

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1673 | LoadUpdateHKcoun | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic update\_hk\_count\_proc process into APEX table

**RAW VALUE      MEANING**

0            OK  
1            Not OK

| PREF  | NAME          | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|---------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1674 | Cmd Start OBS | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

**RAW VALUE      MEANING**

0            OK  
1            Not OK

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1675 | LoadDiagProcess | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic diag\_proc process into APEX table

**RAW VALUE      MEANING**

0            OK  
1            Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1676 | ExpectedPixelNum | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Error in the number of expected pixels

**RAW VALUE      MEANING**

0            OK  
1            Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1677 | HBR Config Error | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Error on HBR channel configuration

**RAW VALUE      MEANING**

0            OK  
1            Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1678 | ReturnToIdleErro | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Error on return to IDLE mode

**RAW VALUE      MEANING**

0            False  
1            True

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1679 | LoadInitDiagProc | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic initprog\_diag process into APEX table

**RAW VALUE      MEANING**

0            OK  
1            Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1680 | UnloadIniDiagPro | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic initproc\_diag process from APEX table

**RAW VALUE      MEANING**

0            OK  
1            Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1681 | LoadOffVarProces | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic ov\_proc process into APEX table

**RAW VALUE      MEANING**

0            OK  
1            Not OK

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1682 | LoadInitprocOfVa | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic initproc\_ov process into APEX table

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OK      |
| 1         | Not OK  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1683 | UnloadInitprocOV | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic initproc\_ov process from APEX table

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OK      |
| 1         | Not OK  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1684 | Door Open Status | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Error parameter on the Door status

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | True    |
| 1         | False   |

| PREF  | NAME        | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1685 | CCDs in off | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

This error parameter reports if the CCDs are off

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | True    |
| 1         | False   |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1686 | FPTempBelowSafTh | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

This error parameter reports if the Focal Plane Temperature is below the Safety Threshold

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | False   |
| 1         | True    |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1687 | CmdEMAE Ctrl Off | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Command EMAE control off

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | OK           |
| 1         | Not OK       |
| 2         | Not required |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1688 | CmdStartEMCRtemp | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Error parameter on Command Start EMCR Temperature Control

| RAW VALUE | MEANING      |
|-----------|--------------|
| 0         | OK           |
| 1         | Not OK       |
| 2         | Not required |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1689 | FW position Open | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

This error parameter reports if the Filter Wheel is in Open position or in a different/unknown position

| RAW VALUE | MEANING    |
|-----------|------------|
| 0         | Open       |
| 1         | NotOpen/Un |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1690 | LoadInitprExtrah | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic initproc\_extrah process into APEX table

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OK      |
| 1         | Not OK  |

26/10/98

EPIC SYSTEM TEAM

Page 76 of 79

# EMCS TM PARAMETER DETAILED LIST

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1691 | UnloadInitprExtr | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic initproc\_extrah process from APEX table

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OK      |
| 1         | Not OK  |

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1692 | LoadInitprocIFT | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of periodic initproc\_ift process into APEX table

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OK      |
| 1         | Not OK  |

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1693 | UnloadInitprIFT | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unloading of periodic initproc\_ift process from APEX table

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OK      |
| 1         | Not OK  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|------|---------|---------|---------|----------|----------|
| K1694 | MasInReEDACcheck | V   | n/a  | 2   | 1   | 1 | none |         |         |         | none     | none     |

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OK      |
| 1         | Not OK  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|------|---------|---------|---------|----------|----------|
| K1695 | MasterInitRepBIT | V   | n/a  | 2   | 1   | 1 | none |         |         |         | none     | none     |

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OK      |
| 1         | Not OK  |

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1696 | MasInRepSPROMCR | V   | n/a  | 3   | 12  | 16 | none |         |         |         | none     | none     |

Master Initialization Report sPROM crc

### CALIBRATION CURVE

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1697 | MasIniRepPROCrc | V   | n/a  | 3   | 12  | 16 | none |         |         |         | none     | none     |

Master Initialization Report PROC crc

### CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1698 | MasIniRepRAMrslt | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Master Initialization Report RAM result

| RAW VALUE | MEANING |
|-----------|---------|
| 0         | OK      |
| 1         | Not OK  |

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1699 | MasInReFaultPGnm | V   | n/a  | 3   | 12  | 16 | none |         |         |         | none     | none     |

Master Initialization Report Fault PGnm

### CALIBRATION CURVE

# EMCS TM PARAMETER DETAILED LIST

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1700 | MasInReFaultPGof | V   | n/a  | 3   | 12  | 16 | none |         |         |         | none     | none     |

Master Initialization Report Fault Pgf

### CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1701 | MasInitRepRAMcrc | V   | n/a  | 3   | 12  | 16 | none |         |         |         | none     | none     |

Master Initialization Report RAM crc

### CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|------|---------|---------|---------|----------|----------|
| K1702 | SciInReEDACcheck | V   | n/a  | 2   | 1   | 1 | none |         |         |         | none     | none     |

Scientific Initialization Report EDAC check

### RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|------|---------|---------|---------|----------|----------|
| K1703 | SciInitReportBIT | V   | n/a  | 2   | 1   | 1 | none |         |         |         | none     | none     |

Scientific Initialization Report BIT

### RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME            | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|-----------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1704 | SciInitRepSPROM | V   | n/a  | 3   | 12  | 16 | none |         |         |         | none     | none     |

Scientific Initialization Report sPROM

### CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1705 | SciInitRepRAMerc | V   | n/a  | 3   | 12  | 16 | none |         |         |         | none     | none     |

Scientific Initialization Report RAM crc

### CALIBRATION CURVE

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1706 | LoadResidPerProc | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Loading of resident periodic process into APEX table

### RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1707 | ThermControlFlag | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

This thermal control flag is set to 1 if HK data from EMCR are not available or one LC is failed

### RAW VALUE MEANING

0 OK  
1 Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1708 | UnloadInitpr1ssb | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Unload of periodic initproc\_firstssb process from APEX table

### RAW VALUE MEANING

0 OK  
1 Not OK

# EMCS TM PARAMETER DETAILED LIST

EPIC-EST-TN-008 I.2

Appendix F

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1709 | AutomTransReason | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

Reason of the automatic transition

**RAW VALUE      MEANING**

- 1      OBDH loss
- 2      ErrDiagnProc
- 3      EndDiagnProc
- 4      ErrorO/Vproc
- 5      End O/V Proc

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1710 | EMCR HK DataFlag | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

**RAW VALUE      MEANING**

- 0      OK
- 1      Not OK

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W  | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|----|------|---------|---------|---------|----------|----------|
| K1711 | SwitchIdentifier | V   | n/a  | 2   | 0   | 16 | none |         |         |         | none     | none     |

**RAW VALUE      MEANING**

- 2560      Door
- 2816      VentingValve
- 3072      Annealing
- 3328      SecondShroud
- 3584      FW Coil 1
- 3840      FW Coil 2

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|------|---------|---------|---------|----------|----------|
| K1712 | AnnealSwitchStat | V   | n/a  | 2   | 8   | 8 | none |         |         |         | none     | none     |

Status of the EMDH Annealing switch

**RAW VALUE      MEANING**

- 0      Open
- 1      Closed

| PREF  | NAME             | F/V | UNIT | PTC | PFC | W | TC   | DEFAULT | MINIMUM | MAXIMUM | ALT_PARA | RED_PARA |
|-------|------------------|-----|------|-----|-----|---|------|---------|---------|---------|----------|----------|
| K1713 | SecondShroudStat | V   | n/a  | 2   | 8   | 8 | none |         |         |         | none     | none     |

Status of the EMDH Secondary Shroud switch

**RAW VALUE      MEANING**

- 0      Open
- 1      Closed