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| Note No.     | SVC-FSB-0032         |
| Release Date |                      |
| Contact      | ngceoservice@ngc.com |

## eDrive Hardware Error Codes

### Summary

This technical note displays eDrive Hardware error codes.

### Scope

This technical note applies to 2U (Nitro) and 4U eDrives.

### Error Codes

```
107
108
109
110 #define POST_AIM1_ERROR          0x0001
111 #define POST_AIM2_ERROR          0x0002
112 #define POST_AIM3_ERROR          0x0004
113 #define POST_AIM4_ERROR          0x0008
114 #define POST_RTC_ERROR           0x0010
115 #define POST_WARRANTY_TIMER_ERROR 0x0020
116 #define POST_FPGA_ERROR          0x0040
117 #define POST_UART_ERROR          0x0080
118 #define POST_ONE_WIRE_ERROR      0x0100
119 #define POST_FP_ERROR            0x0200
120 #define POST_EM_FPGA_ERROR       0x0400
121 #define POST_TEC_FAILURE         0x0800
122
123 /*****
```

For example:

```
ERROR 0046 =      POST_FPGA_ERROR          0x0040
                  POST_AIM3_ERROR          0x0004
                  POST_AIM2_ERROR          0x0002
                                      0x0046
```

The AIM3 & AIM2 errors always show up because at present, there is no 2nd or 3rd AIM. A problem with communicating with AIM1 will result in ERROR XXX6.

Error Codes are 16 bit (hexadecimal).

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## Descriptions

|     |                         |  |        |
|-----|-------------------------|--|--------|
| 110 | AIM 1 ERROR             | Array Interface Module Internal (AIM)                            | 0x0001 |
| 111 | AIM 2 ERROR             | Array Interface Module External (always for Patara)              | 0x0002 |
| 112 | AIM 3 ERROR             | Array Interface Module External (always for Patara)              | 0x0004 |
| 113 | AIM 4 ERROR             | Array Interface Module External                                  | 0x0008 |
| 114 | RTC ERROR               | Real Time Clock on System Controller (SC)                        | 0x0010 |
| 115 | WARRENTY<br>TIMER ERROR | Warranty Timer on System Controller                              | 0x0020 |
| 116 | FPGA ERROR              | Field Programmable Gate Array on System controller               | 0x0040 |
| 117 | UART ERROR              | Universal Asynchronous Receiver/Transmitter on System Controller | 0x0080 |
| 118 | ONE WIRE<br>ERROR       | TINT board error, not communicating with TINI board EPROM U9     | 0x0100 |
| 119 | FP ERROR                | Front Panel  | 0x0200 |
| 120 | EM FPGA                 | Field Programmable Gate Array on Expansion Module (EM)           | 0x0400 |
| 121 | TEC FAILURE             | SC searches for TEC. Error is TEC not present or damaged         | 0x0800 |

## Hexadecimal Base 16 Counting Note

In hexadecimal format, counting is done like this, including all 16 numbers:

0,1,2,3,4,5,6,7,8,9,A,B,C,D,E,F,10,11,12,13... again, adding a 1 before beginning the 16 number set over.

Examples of helpful “tricky” hexadecimal transitions:

...17, 18, 19, 1A, 1B...

...1E, 1F, 20, 21, 22...

...FD, FE, FF, 100, 101, 102...