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IPMI PET to Platform Message Registry Mapping

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CONTENTS

Tables

Foreword

The *IPMI PET to Platform Message Registry Mapping* (DSP0244) was prepared by the Server Management Working Group of the DMTF.

DMTF is a not-for-profit association of industry members dedicated to promoting enterprise and systems management and interoperability.

Acknowledgments

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Introduction

The information in this specification should be sufficient for a provider or consumer of this data to unambiguously identify the mapping from IPMI PET to Platform Message Registry.

The target audience for this specification is implementers who are writing CIM-based providers or consumers of management interfaces that represent the components described in this document.

IPMI PET to Platform Message Registry Mapping

1 Scope

The *IPMI PET to Platform Message Registry Mapping* defines the mapping from IPMI PET to Platform Message Registry.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

2.1 Approved References

DMTF DSP0004, *CIM Infrastructure Specification 2.3.0,*
http://www.dmtf.org/standards/published_documents/DSP0004_2.5.0.pdf

DMTF DSP1054, *Indications Profile 1.0.0,*
http://www.dmtf.org/standards/published_documents/DSP1054_1.0.0.pdf

DMTF DSP1001, *Management Profile Specification Usage Guide,*
http://www.dmtf.org/standards/published_documents/DSP1001.pdf

DMTF DSP8007*, Platform Message Registry 1.0.0,* http://schemas.dmtf.org/wbem/messageregistry/1

2.2 Other References

ISO/IEC Directives, Part 2, *Rules for the structure and drafting of International Standards*,
http://isotc.iso.org/livelink/livelink.exe?func=ll&objId=4230456&objAction=browse&sort=subtype

3 Terms and Definitions

For the purposes of this document, the following terms and definitions apply. For the purposes of this document, the terms and definitions given in DSP1001 also apply.

3.1
can
used for statements of possibility and capability, whether material, physical, or causal

3.2
cannot
used for statements of possibility and capability, whether material, physical, or causal

3.3
conditional
indicates requirements to be followed strictly to conform to the document when the specified conditions are met

3.4
mandatory
indicates requirements to be followed strictly to conform to the document and from which no deviation is permitted

3.5
may
indicates a course of action permissible within the limits of the document

3.6
need not
indicates a course of action permissible within the limits of the document

3.7
optional
indicates a course of action permissible within the limits of the document

3.8
shall
indicates requirements to be followed strictly to conform to the document and from which no deviation is permitted

3.9
shall not
indicates requirements to be followed strictly to conform to the document and from which no deviation is permitted

3.10
should
indicates that among several possibilities, one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required

3.11
should not
indicates that a certain possibility or course of action is deprecated but not prohibited

4 Symbols and Abbreviated Terms

None.

5 IPMI PET to Platform Message Registry Mapping

This document is to capture the mapping from IPMI and ASF PETs to CIM standard messages for eventing. It is desirable to simplify migration from the existing ASF and IPMI standards prevalent in the industry to the emerging SMASH and DASH initiatives of the DMTF. Defining a normative mapping from these event contents in these existing standards to SMASH and DASH will guide implementers as they transition their products.

If a mapping entity is created, the Platform Message Registry IDs in Table 1 through Table 41 shall be used in the implementation with the prefix PLAT. For example, in Table 1 row 1, the Registry ID shall be “PLAT:4”.

Note: N/A means a Message Registry ID is not defined in the referenced version of DSP8007.

5.1 Intrusion Sensor

Sensor Type: Intrusion Sensor

Sensor Type Code: 05h

Reading Type: 6Fh

Table 1 – Intrusion Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Chassis Intrusion	Chassis Open	4
00h	Deassert	Chassis Intrusion	Chassis Closed	5
01h	Assert	Drive Bay Intrusion	Drive Bay Open	6
01h	Deassert	Drive Bay Intrusion	Drive Bay Closed	7
02h	Assert	I/O Card Area Intrusion	I/O Card Area Open	8
02h	Deassert	I/O Card Area Intrusion	I/O Card Area Closed	9
03h	Assert	Processor Area Intrusion	Processor Area Open	10
03h	Deassert	Processor Area Intrusion	Processor Area Closed	11
04h	Assert	LAN Disconnect	LAN Disconnected	12
04h	Deassert	LAN Disconnect	LAN Connected	13
05h	Assert	Unauthorized Dock	Docking Permission Deasserted	17
05h	Deassert	Unauthorized Dock	Docking Permission Asserted	16
06h	Assert	FAN Area Intrusion	Fan Area Open	18
06h	Deassert	FAN Area Intrusion	Fan Area Closed.	19

5.2 Security Violation Sensor

Sensor Type: Security Violation Sensor

Sensor Type Code: 06h

Reading Type: 6Fh

82 **Table 2 – Security Violation Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Secure Mode Violation	Secure Mode Violation	22
00h	Deassert	Secure Mode Violation		N/A
01h	Assert	Pre-boot User Password Violation	Pre-boot User password violation	24
01h	Deassert	Pre-boot User Password Violation		N/A
02h	Assert	Pre-boot Setup Password Violation	Pre-boot Setup password violation	26
02h	Deassert	Pre-boot Setup Password Violation		N/A
03h	Assert	Network Boot Password Violation	Network Boot Password Violation	28
03h	Deassert	Network Boot Password Violation		N/A
04h	Assert	Password Violation	Password Violation	30
04h	Deassert	Password Violation		N/A
05h	Assert	Out-of-band Password Violation	Out-of-band Password Violation	32
05h	Deassert	Out-of-band Password Violation		N/A

83

84 5.3 Processor Sensor

85 Sensor Type: Processor Sensor

86 Sensor Type Code: 07h

87 Reading Type: 6Fh

88 **Table 3 – Processor Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	IERR	Processor Failed - IERR	42
00h	Deassert	IERR	N/A	N/A
01h	Assert	Thermal Tripped	Over Temperature Condition Detected for Processor	N/A
01h	Deassert	Thermal Tripped	Over Temperature Condition Removed for Processor	37
02h	Assert	FRB1/BIST Failure	Processor Failed - FRB1/BIST	44
02h	Deassert	FRB1/BIST Failure	N/A	N/A
03h	Assert	FRB2/Hang in POST Failure	Processor Failed - FRB2/POST	46
03h	Deassert	FRB2/Hang in POST Failure	N/A	N/A
04h	Assert	FRB3 Initialization Failure	Processor Failed - FRB3	48
04h	Deassert	FRB3 Initialization Failure	N/A	N/A
05h	Assert	Configuration Error	Processor Configuration Mismatch	62
05h	Deassert	Configuration Error	N/A	N/A
06h	Assert	Uncorrectable CPU Complex	N/A	N/A
06h	Deassert	Uncorrectable CPU Complex	N/A	N/A
07h	Assert	Presence	Processor Added	34
07h	Deassert	Presence	Processor Removed	35
08h	Assert	Disabled	Processor Disabled	61
08h	Deassert	Disabled	Processor Enabled	60

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
09h	Assert	Terminator Presence	Processor Terminator Detected	64
09h	Deassert	Terminator Presence	N/A	N/A
0Ah	Assert	Throttled	N/A	N/A
0Ah	Deassert	Throttled	N/A	N/A

5.4 Power Supply Sensor

Sensor Type: Power Supply Sensor

Sensor Type Code: 08h

Reading Type: 6Fh

Table 4 – Power Supply Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Presence	Power Supply Added	84
00h	Deassert	Presence	Power Supply Removed	85
01h	Assert	Failure	Power Supply Failed	86
01h	Deassert	Failure	N/A	87
02h	Assert	Predictive Failure	Power Supply failure predicted	88
02h	Deassert	Predictive Failure	N/A	N/A
03h	Assert	Input Lost	Power Supply input lost	100
03h	Deassert	Input Lost	Power Supply input normal	99
04h	Assert	Input Lost or Out of Range	Power Supply input lost or out of range	98
04h	Deassert	Input Lost or Out of Range	Power Supply input normal	99
05h	Assert	Input Present but Out of Range	Power Supply input out of range	98
05h	Deassert	Input Present but Out of Range	Power Supply input normal	99
06h	Assert	Configuration Error	Power Supply Configuration Error	104

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
06h	Deassert	Configuration Error	N/A	N/A

5.5 Power Unit Sensor

Sensor Type: Power Unit Sensor

Sensor Type Code: 09h

Reading Type: 6Fh

240VA Power down Error with offset 02h Asset, Power Unit power down error is due to a safety interlock (chassis switch).

Table 5 – Power Unit Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Power Off	Power Unit Disabled	106
00h	Deassert	Power Off	Power Unit Enabled	107
01h	Assert	Power Cycle	Power Unit power cycled	108
01h	Deassert	Power Cycle	N/A	N/A
02h	Assert	240VA Power Down Error	Power Unit power down error	110
02h	Deassert	240VA Power Down Error	N/A	N/A
03h	Assert	Interlock Power Down Error	N/A	N/A
03h	Deassert	Interlock Power Down Error	N/A	N/A
04h	Assert	Power Lost Error	Power Unit power lost	112
04h	Deassert	Power Lost Error	N/A	N/A
05h	Assert	Soft Power Control Failure	Power Unit soft power control failed	114
05h	Deassert	Soft Power Control Failure	N/A	N/A
06h	Assert	Power Unit Failure	Power Unit failed	116
06h	Deassert	Power Unit Failure	N/A	N/A

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
07h	Assert	Predictive Failure	Power Unit Predictive Failure	118
07h	Deassert	Predictive Failure	N/A	N/A

5.6 Memory Sensor

Sensor Type: Memory Sensor

Sensor Type Code: 0Ch

Reading Type: 6Fh

Table 6 – Memory Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Correctable ECC	Memory Corrected Error Detected	124
00h	Deassert	Correctable ECC		N/A
01h	Assert	Uncorrectable ECC	Memory uncorrectable error detected	N/A
01h	Deassert	Uncorrectable ECC		N/A
02h	Assert	Parity Error	Memory Parity Error Detected	134
02h	Deassert	Parity Error		N/A
03h	Assert	Scrub Failed (stuck bit)	Memory Scrub Failure	136
03h	Deassert	Scrub Failed (stuck bit)		N/A
04h	Assert	Device Disabled	Memory Disabled	131
04h	Deassert	Device Disabled	Memory Enabled	130
05h	Assert	ECC Logging Limit Reached	Memory Logging Limit Reached	144
05h	Deassert	ECC Logging Limit Reached	Memory Logging Limit Removed	145
06h	Assert	Presence	Memory Added	128
06h	Deassert	Presence	Memory Removed	129
07h	Assert	Configuration	Memory DIMM	126

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
		Error	Configuration Error	
07h	Deassert	Configuration Error		N/A
08h	Assert	Spare	N/A	N/A
08h	Deassert	Spare	N/A	N/A
09h	Assert	Throttled	Memory Throttled	142
09h	Deassert	Throttled		N/A
0Ah	Assert	Critical Overtemperature	Over Temperature Condition Detected for Memory	146
0Ah	Deassert	Critical Overtemperature	Over Temperature Condition Removed for Memory	147

5.7 Drive Bay Slot Sensor

Sensor Type: Drive Bay Slot Sensor

Sensor Type Code: 0Dh

Reading Type: 6Fh

Table 7 – Drive Bay Slot Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Drive Presence	Drive Added	162
00h	Deassert	Drive Presence	Drive Removed	163
01h	Assert	Drive Fault	N/A	N/A
01h	Deassert	Drive Fault	Drive Enabled	167
02h	Assert	Predictive Failure	Failure Predicted	168
02h	Deassert	Predictive Failure		N/A
03h	Assert	Hot Spare	Hot Spare Enabled	170
03h	Deassert	Hot Spare	Hot Spare Disabled	171
04h	Assert	Consistency Check in	Consistency Check Begun	172

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
		Progress		
04h	Deassert	Consistency Check in Progress	Consistency Check Completed	173
05h	Assert	In Critical Array	Array Critical	174
05h	Deassert	In Critical Array		N/A
06h	Assert	In Failed Array	Failed Array	176
06h	Deassert	In Failed Array	Failed Array restored	177
07h	Assert	Rebuild in Progress	Rebuild in Progress	178
07h	Deassert	Rebuild in Progress	Rebuild Completed	179
08h	Assert	Rebuild Aborted	Rebuild Aborted	180
08h	Deassert	Rebuild Aborted		N/A

5.8 System Firmware Progress Sensor

Sensor Type: System Firmware Progress Sensor

Sensor Type Code: 0Fh

Reading Type: 6Fh

Table 8 – System Firmware Progress Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	POST Error	Post Error	184
00h	Deassert	POST Error		N/A
01h	Assert	System Firmware Hang	System Firmware Hang	186
01h	Deassert	System Firmware Hang		N/A
02h	Assert	System Firmware Progress	System Firmware Progress	188
02h	Deassert	System Firmware Progress		N/A

5.9 Event Logging Sensor

Sensor Type: Event Logging Disabled Sensor

Sensor Type Code: 10h

Reading Type: 6Fh

Table 9 – Event Logging Disabled Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Correctable Memory Error Logging Disabled	Memory Logging Disabled	192
00h	Deassert	Correctable Memory Error Logging Disabled	Memory Logging Enabled	193
01h	Assert	Event Logging Disabled	Event Logging Disabled	194
01h	Deassert	Event Logging Disabled	Event Logging Enabled	195
02h	Assert	Log Cleared	Log Cleared	200
02h	Deassert	Log Cleared		N/A
03h	Assert	All Event Logging Disabled	All Event Logging Disabled	196
03h	Deassert	All Event Logging Disabled	All Event Logging Enabled	198
04h	Assert	Log Full	Log Full	202
04h	Deassert	Log Full	Log no longer full	203
05h	Assert	Log Almost Full	Log Almost Full	206
05h	Deassert	Log Almost Full		N/A

5.10 System Event Sensor

Sensor Type: System Event Sensor

Sensor Type Code: 12h

Reading Type: 6Fh

Table 10 – System Event Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	System Reconfigured	System Reconfigured	210
00h	Deassert	System Reconfigured		N/A
01h	Assert	OEM System Boot Event	OEM System Boot Event	212
01h	Deassert	OEM System Boot Event		N/A
02h	Assert	Unknown System Hardware Failure	Unknown System Hardware Failure	214
02h	Deassert	Unknown System Hardware Failure		N/A
03h	Assert	Auxiliary Log Entry Event	Auxiliary Log Entry Event	216
03h	Deassert	Auxilary Log Entry Event		N/A
04h	Assert	PEF Action Executed	PEF Action Executed	218
04h	Deassert	PEF Action Executed		N/A
05h	Assert	Timestamp Clock Synch	Timestamp Clock Synch	220
05h	Deassert	Timestamp Clock Synch		N/A

5.11 Critical Interrupt Sensor

Sensor Type: Critical Interrupt Sensor

Sensor Type Code: 13h

Reading Type: 6Fh

Table 11 – Critical Interrupt Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Front Panel NMI / Diagnostic Interrupt	Front Panel NMI / Diagnostic Interrupt	222
00h	Deassert	Front Panel NMI / Diagnostic Interrupt		N/A
01h	Assert	Bus Timeout	Bus Timeout	224
01h	Deassert	Bus Timeout		N/A

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
02h	Assert	I/O Channel Check NMI	I/O Channel Check NMI	226
02h	Deassert	I/O Channel Check NMI		N/A
03h	Assert	Software NMI	Software NMI	228
03h	Deassert	Software NMI	N/A	N/A
04h	Assert	PCI PERR	PCI PERR	232
04h	Deassert	PCI PERR		
05h	Assert	PCI SERR	PCI SERR	234
05h	Deassert	PCI SERR		N/A
06h	Assert	EISA Fail Safe Timeout	EISA Fail Safe Timeout	236
06h	Deassert	EISA Fail Safe Timeout		N/A
07h	Assert	Bus Correctable Error	Bus Correctable Error	238
07h	Deassert	Bus Correctable Error		N/A
08h	Assert	Bus Uncorrectable Error	Bus Uncorrectable Error	240
08h	Deassert	Bus Uncorrectable Error		N/A
09h	Assert	Fatal NMI	Fatal NMI	242
09h	Deassert	Fatal NMI		N/A
0Ah	Assert	Bus Fatal Error	Bus Fatal Error	244
0Ah	Deassert	Bus Fatal Error		N/A
0Bh	Assert	Bus Degraded	Bus Degraded	246
0Bh	Deassert	Bus Degraded	Bus No Longer Degraded	247

5.12 Button/Switch Sensor

Sensor Type: Button/Switch Sensor

Sensor Type Code: 14h

Reading Type: 6Fh

136 **Table 12 – Button/Switch Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Power Button	Power Button Pressed	248
00h	Deassert	Power Button	Power Button Released	249
01h	Assert	Sleep Button	Sleep Button Pressed	250
01h	Deassert	Sleep Button	Sleep Button Released	251
02h	Assert	Reset Button	Reset Button Pressed	252
02h	Deassert	Reset Button	Reset Button Released	253
03h	Assert	FRU Latch	FRU Latch Opened	254
03h	Deassert	FRU Latch	FRU Latch Closed	255
04h	Assert	FRU Service Request	FRU Service Request	256
04h	Deassert	FRU Service Request	N/A	N/A

137 ## 5.13 Chip Set Sensor

138 Sensor Type: Chip Set Sensor

139 Sensor Type Code: 19h

140 Reading Type: 6Fh

141 **Table 13 – Chip Set Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Soft Power Control Failure	Soft Power Control Failure	258
00h	Deassert	Soft Power Control Failure		N/A

142 ## 5.14 Cable/Interconnect Sensor

143 Sensor Type: Cable/Interconnect Sensor

144 Sensor Type Code: 1Bh

145 Reading Type: 6Fh

146 **Table 14 – Cable/Interconnect Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Connection	Cable Connected	262
00h	Deassert	Connection	Cable Disconnected	263
01h	Assert	Configuration Error	Interconnect Configuration Error	266
01h	Deassert	Configuration Error	N/A	N/A

147 ## 5.15 System Boot Initiated Sensor

148 Sensor Type: System Boot Initiated Sensor

149 Sensor Type Code: 1Dh

150 Reading Type: 6Fh

151 **Table 15 – System Boot Initiated Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Power Up	Power On	272
00h	Deassert	Power Up		N/A
01h	Assert	Hard Reset	N/A	N/A
01h	Deassert	Hard Reset		N/A
02h	Assert	Warm Reset	N/A	N/A
02h	Deassert	Warm Reset		N/A
03h	Assert	User Requested PXE Boot	PXE Boot Requested	278
03h	Deassert	User Requested PXE Boot		N/A
04h	Assert	Automatic Boot to Diagnostic	Diagnostics Boot Requested	280
04h	Deassert	Automatic Boot to Diagnostic		N/A
05h	Assert	OS/Run-Time Software Initiated Hard Reset	N/A	N/A
05h	Deassert	OS/Run-Time Software Initiated Hard Reset		N/A

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
06h	Assert	OS/Run-Time Software Initiated Warm Reset	N/A	N/A
06h	Deassert	OS/Run-Time Software Initiated Warm Reset		N/A
07h	Assert	System Restart	System Restart Requested	282
07h	Deassert	System Restart	N/A	N/A

5.16 Boot Error Sensor

Sensor Type: Boot Error Sensor

Sensor Type Code: 1Eh

Reading Type: 6Fh

Table 16 – Boot Error Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	No Bootable Media	No Bootable Media	286
00h	Deassert	No Bootable Media		N/A
01h	Assert	Non-bootable Diskette	N/A	N/A
01h	Deassert	Non-bootable Diskette		N/A
02h	Assert	PXE Server Not Found	PXE Server Not Found	290
02h	Deassert	PXE Server Not Found		N/A
03h	Assert	Invalid Boot Sector	Non-bootable Media	288
03h	Deassert	Invalid Boot Sector		N/A
04h	Assert	Timeout Waiting for User to Select Boot Source	User-timeout on boot.	292

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
04h	Deassert	Timeout Waiting for User to Select Boot Source		N/A

157 5.17 OS Boot Sensor

158 Sensor Type: OS Boot Sensor

159 Sensor Type Code: 1Fh

160 Reading Type: 6Fh

161 **Table 17 – OS BOOT Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	A: Boot Completed	Boot from floppy	296
00h	Deassert	A: Boot Completed		N/A
01h	Assert	C: Boot Completed	Boot from local drive completed	298
01h	Deassert	C: Boot Completed		N/A
02h	Assert	PXE Boot Completed	PXE Boot completed	300
02h	Deassert	PXE Boot Completed		N/A
03h	Assert	Diagnostic Boot Completed	Diags Boot Completed	302
03h	Deassert	Diagnostic Boot Completed		N/A
04h	Assert	CD-ROM Boot Completed	CD Boot Completed	304
04h	Deassert	CD-ROM Boot Completed		N/A
05h	Assert	ROM Boot Completed	ROM Boot completed	306
05h	Deassert	ROM Boot Completed		N/A
06h	Assert	Boot Completed	Boot Completed	312
06h	Deassert	Boot Completed		N/A

5.18 OS Stop/Shutdown Sensor

Sensor Type: OS Stop/Shutdown Sensor

Sensor Type Code: 20h

Reading Type: 6Fh

Table 18 – OS Stop/Shutdown Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Critical Stop During OS Load	N/A	N/A
00h	Deassert	Critical Stop During OS Load		N/A
01h	Assert	Run-time Critical Stop	N/A	N/A
01h	Deassert	Run-time Critical Stop		N/A
02h	Assert	OS Graceful Stop	N/A	N/A
02h	Deassert	OS Graceful Stop		N/A
03h	Assert	OS Graceful Shutdown	N/A	N/A
03h	Deassert	OS Graceful Shutdown	N/A	N/A
04h	Assert	Soft Shutdown Initiated by PEF	N/A	N/A
04h	Deassert	Soft Shutdown Initiated by PEF	N/A	N/A
05h	Assert	Agent Not Responding	N/A	N/A
05h	Deassert	Agent Not Responding	N/A	N/A

5.19 Slot Sensor

Sensor Type: Slot Sensor

Sensor Type Code: 21h

Reading Type: 6Fh

171 **Table 19 – Slot Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Fault Status	Fault	330
00h	Deassert	Fault Status	Fault condition removed	331
01h	Assert	Identify Status	Identify Enabled	332
01h	Deassert	Identify Status	Identify Disabled	333
02h	Assert	Installed	Installed	334
02h	Deassert	Installed	Empty	336
03h	Assert	Ready for Installation	Ready for Installation	338
03h	Deassert	Ready for Installation		N/A
04h	Assert	Ready for Removal	Ready for Removal	340
04h	Deassert	Ready for Removal		
05h	Assert	Power is Off	Power is Off	342
05h	Deassert	Power is Off	Power is On	344
06h	Assert	Removal Requested	Removal Requested	346
06h	Deassert	Removal Requested		N/A
07h	Assert	Interlock Active	Interlock Active	348
07h	Deassert	Interlock Active	Interlock De-asserted	349
08h	Assert	Slot Disabled	Slot Disabled	350
08h	Deassert	Slot Disabled	Slot Enabled	351
09h	Assert	Slot Holds Spare Device	Slot holds spare	352
09h	Deassert	Slot Holds Spare Device	Slot no longer holds spare	353

172 ## 5.20 System ACPI Power State Sensor

173 Sensor Type: System ACPI Power State

174 Sensor Type Code: 22h

175 Reading Type: 6Fh

176 **Table 20 – System ACPI Power State Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	S0/G0	System Enabled	N/A
00h	Deassert	S0/G0		N/A
01h	Assert	S1 State	Sleep – light	N/A
01h	Deassert	S1 State		N/A
02h	Assert	S2 State	Sleep – light	N/A
02h	Deassert	S2 State		N/A
03h	Assert	S3 State	Standby	N/A
03h	Deassert	S3 State		N/A
04h	Assert	S4 State	Hibernate – off soft	N/A
04h	Deassert	S4 State		N/A
05h	Assert	S5/G2 Soft-off	Soft – off	N/A
05h	Deassert	S5/G2 Soft-off		N/A
06h	Assert	S4/S5 Soft-off	Soft – off	N/A
06h	Deassert	S4/S5 Soft-off		N/A
07h	Assert	G3/Mechanical Off	Hard – off	N/A
07h	Deassert	G3/Mechanical Off		N/A
08h	Assert	Sleeping in an S1	Sleep – light	N/A
08h	Deassert	Sleeping in an S1		N/A
09h	Assert	G1 Sleeping	Sleep – G1	N/A
09h	Deassert	G1 Sleeping		N/A
0Ah	Assert	S5 Entered by Override	Soft – off	N/A
0Ah	Deassert	S5 Entered by Override		N/A
0Bh	Assert	Legacy ON	Power On	N/A
0Bh	Deassert	Legacy ON		N/A
0Ch	Assert	Legacy OFF	Hard – off	N/A
0Ch	Deassert	Legacy OFF		N/A

177 ## 5.21 Watchdog 2 Sensor

178 Sensor Type: Watchdog 2 Sensor

179 Sensor Type Code: 23h

180 Reading Type: 6Fh

181 **Table 21 – Watchdog 2 Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Timer Expired	Watchdog Timer Expired	368
00h	Deassert	Timer Expired		N/A
01h	Assert	Reboot	Reboot by Watchdog	370
01h	Deassert	Reboot		N/A
02h	Assert	Power Off	Power off by Watchdog	372
02h	Deassert	Power Off		N/A
03h	Assert	Power Cycle	Power Cycle by Watchdog	374
03h	Deassert	Power Cycle		N/A
04h	Assert	Timer Interrupt	Watchdog Timer interrupt occurred	376
04h	Deassert	Timer Interrupt		N/A

182 ## 5.22 Platform Alert Sensor

183 Sensor Type: Platform Alert Sensor

184 Sensor Type Code: 24h

185 Reading Type: 6Fh

186 **Table 22 – Platform Alert Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Generated Page	Generated page Alert	378
00h	Deassert	Generated Page		N/A
01h	Assert	Generated LAN Alert	Generated LAN Alert	380
01h	Deassert	Generated LAN Alert		N/A
02h	Assert	Generated Event Trap	Generated Event Trap	382

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
02h	Deassert	Generated Event Trap		N/A
03h	Assert	Generated SNMP Trap	Generated SNMP Trap	384
03h	Deassert	Generated SNMP Trap		N/A

5.23 Entity Presence Sensor

Sensor Type: Entity Presence Sensor

Sensor Type Code: 25h

Reading Type: 6Fh

Table 23 – Entity Presence Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Presence	Present	390
00h	Deassert	Presence	Absent	392
01h	Assert	Absent	Absent	392
01h	Deassert	Absent	Present	390
02h	Assert	Disable	Disabled	394
02h	Deassert	Disable	Enabled	395

5.24 LAN Sensor

Sensor Type: LAN Sensor

Sensor Type Code: 27h

Reading Type: 6Fh

Table 24 – LAN Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	LAN Heartbeat Lost	LAN Heartbeat Lost	396
00h	Deassert	LAN Heartbeat Lost	LAN Heartbeat Detected	397
01h	Assert	LAN Heartbeat	LAN Heartbeat Detected	397

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
01h	Deassert	LAN Heartbeat	LAN Heartbeat Lost	396

197 5.25 Management Subsystem Health Sensor

198 Sensor Type: Management Subsystem Health Sensor

199 Sensor Type Code: 28h

200 Reading Type: 6Fh

201 **Table 25 – Management Subsystem Health Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Sensor Access Degraded/Unavailable	Sensor Unavailable or degraded	398
00h	Deassert	Sensor Access Degraded/Unavailable	Sensor returned from degraded/unavailable	399
01h	Assert	Controller Access Degraded/Unavailable	Controller unavailable or degraded	400
01h	Deassert	Controller Access Degraded/Unavailable	Controller returned from degraded/unavailable	401
02h	Assert	Management Controller Off-line	Management Controller Off-line	402
02h	Deassert	Management Controller Off-line	Management Controller Enabled	405
03h	Assert	Management Controller Unavailable	Management Controller Disabled	404
03h	Deassert	Management Controller Unavailable	Management Controller Enabled	405
04h	Assert	Sensor Failure	Sensor Failed	406
04h	Deassert	Sensor Failure	Sensor returned from degraded/unavailable /failure	399
05h	Assert	FRU Failure	FRU Failed	408
05h	Deassert	FRU Failure		N/A

202 5.26 Battery Sensor

203 Sensor Type: Battery Sensor

204 Sensor Type Code: 29h

205 Reading Type: 6Fh

206 **Table 26 – Battery Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Is Low	Battery level is critically low	N/A
00h	Deassert	Is Low	Battery level no longer critically low	N/A
01h	Assert	Failed	Battery Failed	432
01h	Deassert	Failed		
02h	Assert	Presence	Battery Added	431
02h	Deassert	Presence	Battery Removed	430

207 ## 5.27 Session Audit Sensor

208 Sensor Type: Session Audit Sensor

209 Sensor Type Code: 2Ah

210 Reading Type: 6Fh

211 **Table 27 – Session Audit Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Session Activation	Session Audit activated	N/A
00h	Deassert	Session Activation	Session Audit Deactivated	N/A
01h	Assert	Session Deactivation	Session Audit Deactivated	N/A
01h	Deassert	Session Deactivation	Session Audit activated	N/A

212 ## 5.28 Version Change Sensor

213 Sensor Type: Version Change Sensor

214 Sensor Type Code: 2Bh

215 Reading Type: 6Fh

216 **Table 28 – Version Change Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Hardware Changed	Hardware Changed	436

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Deassert	Hardware Changed		N/A
01h	Assert	Firmware or Software Changed	Firmware or Software Changed	438
01h	Deassert	Firmware or Software Changed		N/A
02h	Assert	Hardware Incompatibility	Hardware Incompatibility	440
02h	Deassert	Hardware Incompatibility		N/A
03h	Assert	Firmware or Software Incompatibility	Firmware or Software Incompatibility	442
03h	Deassert	Firmware or Software Incompatibility		N/A
04h	Assert	Invalid/Unsupported Hardware Version	Invalid/Unsupported Hardware Version	444
04h	Deassert	Invalid/Unsupported Hardware Version		N/A
05h	Assert	Invalid/Unsupported Firmware/Software Version	Invalid/Unsupported Firmware/Software Version	446
05h	Deassert	Invalid/Unsupported Firmware/Software Version		N/A
06h	Assert	Successful Hardware Change	Successful Hardware Change	448
06h	Deassert	Successful Hardware Change		N/A
07h	Assert	Successful Software or F/W Change	Successful Software or Firmware Change	450
07h	Deassert	Successful Software or F/W Change		N/A

5.29 FRU State Sensor

Sensor Type: FRU State Sensor

Sensor Type Code: 2Ch

Reading Type: 6Fh

Table 29 – FRU State Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Not Installed	FRU not installed	464
00h	Deassert	Not Installed	FRU installed	465

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
01h	Assert	Inactive (in standby or 'hot spare' state)	FRU inactive	471
01h	Deassert	Inactive (in standby or 'hot spare' state)		N/A
02h	Assert	Activation Request	FRU activation requested	466
02h	Deassert	Activation Request		N/A
03h	Assert	Activation in Progress	FRU activation in progress	468
03h	Deassert	Activation in Progress		N/A
04h	Assert	Active	FRU active	467
04h	Deassert	Active		N/A
05h	Assert	Deactivation Request	FRU deactivation requested	470
05h	Deassert	Deactivation Request		N/A
06h	Assert	Deactivation in Progress	FRU deactivation in progress	472
06h	Deassert	Deactivation in Progress		N/A
07h	Assert	Communication Lost	FRU communication lost	474
07h	Deassert	Communication Lost		N/A

5.30 Type 1 (Numeric/Threshold) Sensor

Sensor Type: Type 1 (Numeric/Threshold) Sensor

Sensor Type Code: 01h

Reading Type: 01-0Ch

Table 30 – Type 1 (Numberic/Threshold) Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Lower Non-critical – going low	Lower Non-critical sensor going low	476
00h	Deassert	Lower Non-critical – going low		N/A

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
01h	Assert	Lower Non-critical – going high	Lower Non-critical sensor going high	478
01h	Deassert	Lower Non-critical – going high		N/A
02h	Assert	Lower Critical – going low	Lower Critical sensor going low	480
02h	Deassert	Lower Critical – going low		N/A
03h	Assert	Lower Critical – going high	Lower Critical sensor going high	482
03h	Deassert	Lower Critical – going high		N/A
04h	Assert	Lower Non-recoverable – going low	Lower Non-recoverable sensor going low	484
04h	Deassert	Lower Non-recoverable – going low		N/A
05h	Assert	Lower Non-recoverable – going high	Lower Non-recoverable sensor going high	486
05h	Deassert	Lower Non-recoverable – going high		N/A
06h	Assert	Upper Non-critical – going low	Upper Non-critical sensor going low	488
06h	Deassert	Upper Non-critical – going low		N/A
07h	Assert	Upper Non-critical – going high	Upper Non-critical sensor going high	490
07h	Deassert	Upper Non-critical – going high		N/A
08h	Assert	Upper Critical – going low	Upper Critical sensor going low	492
08h	Deassert	Upper Critical – going low		N/A
09h	Assert	Upper Critical – going high	Upper Critical sensor going high	494
09h	Deassert	Upper Critical – going high		N/A

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
0Ah	Assert	Upper Non-recoverable – going low	Upper Non-recoverable sensor going low	496
0Ah	Deassert	Upper Non-recoverable – going low		N/A
0Bh	Assert	Upper Non-recoverable – going high	Upper Non-recoverable sensor going high	498
0Bh	Deassert	Upper Non-recoverable – going high		N/A

5.31 Type 2 (Discrete) Sensor

Sensor Type: Type 2 (Discrete) Sensor

Sensor Type Code: 02h

Reading Type: 01-0Ch

Table 31 – Type 2 (Discrete) Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Transition to idle	Sensor transition to idle	N/A
00h	Deassert	Transition to idle		N/A
01h	Assert	Transition to active	Sensor transition to active	N/A
01h	Deassert	Transition to active		N/A
02h	Assert	Transition to busy	Sensor transition to busy	N/A

5.32 Type 3 (Discrete) Sensor

Sensor Type: Type 3 (Discrete) Sensor

Sensor Type Code: 03h

Reading Type: 01-0Ch

238 **Table 32 – Type 3 (Discrete) Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	State deasserted	Sensor state deasserted	N/A
00h	Deassert	State deasserted		N/A
01h	Assert	State asserted	Sensor state asserted	N/A
01h	Deassert	State asserted		N/A

239 ## 5.33 Type 4 (Discrete) Sensor

240 Sensor Type: Type 4 (Discrete) Sensor

241 Sensor Type Code: 04h

242 Reading Type: 01-0Ch

243

244 **Table 33 – Type 4 (Discrete) Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Predictive failure deasserted	Sensor predictive failure deasserted	N/A
00h	Deassert	Predictive failure deasserted		N/A
01h	Assert	Predictive failure asserted	Sensor predictive failure asserted	N/A
01h	Deassert	Predictive failure asserted		N/A

245 ## 5.34 Type 5 (Discrete) Sensor

246 Sensor Type: Type 5 (Discrete) Sensor

247 Sensor Type Code: 05h

248 Reading Type: 01-0Ch

249

250 **Table 34 – Type 5 (Discrete) Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Limit not exceeded	Sensor limit not exceeded	N/A
00h	Deassert	Limit not exceeded		N/A
01h	Assert	Limit exceeded	Sensor limit exceeded	N/A
01h	Deassert	Limit exceeded		N/A

251 ## 5.35 Type 6 (Discrete) Sensor

252 Sensor Type: Type 6 (Discrete) Sensor

253 Sensor Type Code: 06h

254 Reading Type: 01-0Ch

255

256 **Table 35 – Type 6 (Discrete) Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Performance met	Sensor performance met	N/A
00h	Deassert	Performance met		N/A
01h	Assert	Performance lags	Sensor performance lags	N/A
01h	Deassert	Performance lags		N/A

257 ## 5.36 Type 7 (Discrete) Sensor

258 Sensor Type: Type 7 (Discrete) Sensor

259 Sensor Type Code: 07h

260 Reading Type: 01-0Ch

261

262 **Table 36 – Type 7 (Discrete) Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Transition to OK	Sensor transition to OK	N/A
00h	Deassert	Transition to OK		N/A
01h	Assert	Transition to non-critical from OK	Sensor transition to non-critical from OK	N/A
01h	Deassert	Transition to non-critical from OK		N/A
02h	Assert	Transition to critical from less severe	Sensor transition to critical from less severe	N/A
02h	Deassert	Transition to critical from less severe		N/A
03h	Assert	Transition to non-recoverable from less severe	Sensor transition to non-recoverable from less severe	N/A
03h	Deassert	Transition to non-recoverable from less severe		N/A
04h	Assert	Transition to non-critical from more severe	Sensor transition to non-critical from more severe	N/A
04h	Deassert	Transition to non-critical from more severe		N/A
05h	Assert	Transition to critical from Non-recoverable	Sensor transition to critical from Non-recoverable	N/A
05h	Deassert	Transition to critical from Non-recoverable		N/A
06h	Assert	Transition to non-	Sensor transition to	N/A

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
		recoverable	non-recoverable	
06h	Deassert	Transition to non-recoverable		N/A
07h	Assert	Monitor	Sensor monitor	N/A
07h	Deassert	Monitor		N/A
08h	Assert	Informational	Sensor informational	N/A
08h	Deassert	Informational		N/A

263

5.37 Type 8 (Discrete) Sensor

Sensor Type: Type 8 (Discrete) Sensor

Sensor Type Code: 08h

Reading Type: 01-0Ch

Table 37 – Type 8 (Discrete) Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Device removed	Device removed	537
00h	Deassert	Device removed		N/A
01h	Assert	Device inserted	Device inserted	536
01h	Deassert	Device inserted		N/A

5.38 Type 9 (Discrete) Sensor

Sensor Type: Type 9 (Discrete) Sensor

Sensor Type Code: 09h

Reading Type: 01-0Ch

In Table 38, the %1s in the messages shall be replaced with the value of the ElementName property of the LogicalDevice class.

Table 38 – Type 9 (Discrete) Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Device disabled	Device disabled	539
00h	Deassert	Device disabled		N/A
01h	Assert	Device enabled	Device enabled	538
01h	Deassert	Device enabled		N/A

5.39 Type A (Discrete) Sensor

Sensor Type: Type A (Discrete) Sensor

Sensor Type Code: 0Ah

Reading Type: 01-0Ch

Table 39 – Type A (Discrete) Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Transitioned to running	Sensor transitioned to running	N/A
00h	Deassert	Transitioned to running		N/A
01h	Assert	Transitioned to in-test	Sensor transitioned to in-test	N/A
01h	Deassert	Transitioned to in-test		N/A
02h	Assert	Transitioned to power off	Sensor transitioned to power off	N/A
02h	Deassert	Transitioned to power off		N/A
03h	Assert	Transitioned to on-line	Sensor transitioned to on-line	N/A
03h	Deassert	Transitioned to on-line		N/A
04h	Assert	Transitioned to off-line	Sensor transitioned to off-line	N/A
04h	Deassert	Transitioned to off-line		N/A
05h	Assert	Transitioned to off-duty	Sensor transitioned to off-duty	N/A
05h	Deassert	Transitioned to off-duty		N/A
06h	Assert	Transitioned to a degraded state	Sensor transitioned to a degraded state	N/A
06h	Deassert	Transitioned to a degraded state		N/A

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
07h	Assert	Transitioned to power save state	Sensor transitioned to power save state	N/A
07h	Deassert	Transitioned to power save state		N/A
08h	Assert	Install error	Sensor install error	N/A
08h	Deassert	Install error		N/A

5.40 Type B (Redundant) Sensor

Sensor Type: Type B (Redundant) Sensor

Sensor Type Code: 0Bh

Reading Type: 01-0Ch

Table 40 – Type B (Redundant) Sensor PET to Platform Message Registry Mapping

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	Redundancy regained	Redundancy Restored	561
00h	Deassert	Redundancy regained		N/A
01h	Assert	Redundancy lost	Redundancy Lost (insufficient)	560
01h	Deassert	Redundancy lost		N/A
02h	Assert	Redundancy degraded	Redundacy Lost (sufficient)	558
02h	Deassert	Redundancy degraded		N/A

5.41 Type C (Discrete) Sensor

Sensor Type: Type C (Discrete) Sensor

Sensor Type Code: 0Ch

Reading Type: 01-0Ch

294 **Table 41 – Type C (Discrete) Sensor PET to Platform Message Registry Mapping**

Offset	Assert/ Deassert	Event Message Label	Use Case	Platform Message Registry ID
00h	Assert	D0 power state	Sensor indicates device transitioned to D0 power state	562
00h	Deassert	D0 power state		N/A
01h	Assert	D1 power state	Sensor indicates device transitioned to D1 power state	564
01h	Deassert	D1 power state		N/A
02h	Assert	D2 power state	Sensor indicates device transitioned to D2 power state	566
02h	Deassert	D2 power state		N/A
03h	Assert	D3 power state	Sensor indicates device transitioned to D3 power state	568
03h	Deassert	D3 power state		N/A

295

296

297 # ANNEX A
298 (informative)
299
300 # Change Log

Version	Date	Description
1.0.0a	2008/05/22	Preliminary 1.0.0a version
1.0.0	2009/05/13	DMTF Standard Release

301
302