

# Tools Errors Codes

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Errors are reported in the following format for all tools:

<ErrorTypeNumber>\*256+<ErrorNameNumber>

## A.1 Common Error Code for FIT tool

The below table displays the error type number and the corresponding string.

Error Type Number	Corresponding String
0	No Error
1	[Action Processor]
2	[Bin Actions]
3	[Fit Converter]
4	[Csme Binary Gen]
5	[Fit Actions]
6	[Fit File I/O]
7	[Fit Utils]
8	[Framework C Lib]
9	[ME Util]
10	[Xml Processor]
11	[Fit]
12	[DNX Utils]
13	[Ifwi Actions]
14	[IMR Actions]
15	[Smip Controller]
16	[GPIO Actions]
17	[ME MFS]
18	[Nvar Actions]
19	[Manifest]
20	[Manifest Actions]
21	[Crypto Actions]
22	[CSME Actions]
23	[Elf Actions]
24	[Huffman Utils]
25	[System Resources]
26	[SysCall Actions]

The below table shows the error name number and the corresponding message.

Error Code	Error Message
0	No Error
1	Initialize Error
2	Failed to build
3	Build general error
4	Build enumeration error
5	Error building attribute
6	Error Building Resources
7	Decompose Error.
8	Failed to decompose SMIP data
9	Failed to decompose Image
10	Failed to decompose Region
11	Error Decomposing attribute
12	Error calling decomposition actions
13	Decomposition node not found
14	Error decomposing class
15	Decomposition not ready
16	Failed to detect and configure ROM Bypass partition
17	Failed to decompose boot partition
18	Failed to generate decomposed files
19	Failed to decompose boot partition entry
20	Error executing pre-build actions
21	Error executing post-build actions
22	Error generating intermediate build output
23	Invalid object alignment value
24	Unable to resolve parent for attribute
25	Buffer offset out of bounds
26	Unresolved native type
27	Data Conversion error
28	Invalid H file output path
29	Error rounding attribute
30	Error updating attribute
31	Error executing post-decomp actions
32	Missing XML attribute
33	Failed to sign SMIP data
34	MEU config file Error
35	Bad command line options

36	Invalid PCH SKU specified
37	Error setting the log file
38	File not found
39	File name with the PERIODS at the end is not supported
40	Could not find VSCC value for given JEDEC code
41	Failed to open new image
42	Failed to open with processed commands
43	Failed to parse XML
44	Failed to parse XML settings
45	Full image could not be written
46	Could not locate input region file
47	Invalid input file type
48	Failed to populate known good VSCC database in memory
49	User did not accept the license agreement
50	Failed to launch GUI as requested
51	Failed to build CSE region file
52	Failed to process layout file
53	Failed to process configuration file
54	Unable to open layout file
55	Invalid root name detected in configuration file
56	Unknown root node found in XML
57	Invalid XML tag
58	Invalid XML child tag association
59	XML tag exception
60	Missing XML tag
61	Error resolving data dependencies
62	Failed to generate dependency map for XML tag
63	Failed to load native type definitions
64	Invalid XML value attribute
65	Error overriding CSE version Major number
66	Error overriding CSE version Minor number
67	Error overriding CSE version Hotfix number
68	Error overriding CSE version Build number
69	Error overriding CSE Internal Build Version
70	Error overriding signing key
71	Error overriding MFS BinObject
72	Error overriding the active LOCL Instance Id
73	Error overriding the active WCOD Instance Id
74	Error overriding the active MDMV Instance Id

75	Error enabling partition from the command line
76	Error disabling partition from the command line
77	Error setting partition length
78	Error overriding the LOCL UPV version
79	Error overriding the WCOD UPV version
80	Error overriding the MDMV UPV version
81	Error overriding the TCB SVN number
82	Error overriding the ARB SVN number
83	Error overriding the VCN number
84	Error Overriding the Sku Attributes value
85	Error overriding the Uma size
86	Error overriding compression mode on all modules
87	Error overriding CSE region length
88	Error enabling RomBypass partition
89	Error overriding PCH version
90	Error overriding DataFormatVersion
91	No XML version was specified
92	The XML version specified is not in the proper format: x.x
93	The version of the XML file you are loading is not supported
94	The version of the XML you are loading is greater than any version this application knows about
95	Unable to open config file
96	Error overriding header files output directory
97	Error overriding the AFS SKU ID
98	Error opening file
99	Error writing to file
100	Size mismatch in file write
101	Error reading text file
102	Setting not found
103	Invalid type specified for setting
104	Unable to resolve action's target attribute
105	Unable to resolve action's source attribute
106	Failed to write data to image buffer
107	Unable to resolve attribute used in action
108	Failed to open file
109	Failed to update image buffer offset
110	Source value of length 0 must be in hex string format
111	Failed to load NVARs [Intel(R) AMT HW Status] from path
112	Detected overflow in CalcOffset operation
113	String length too long

114	Empty input string
115	Failed attribute length limit validation
116	Failed to write buffer to file
117	Invalid JSON Parameter(s)
118	Invalid region size
119	Unable to calculate hash
120	Invalid action parameters
121	Buffer overflow detected
122	Buffer overflow detected
123	Invalid Checksum Action Parameters
124	Error Calculating round to function
125	Missing data class
126	Invalid signing key
127	Failed to generate signature
128	Unable to generate intel.cfg file
129	Unable to generate intel.cfg SHA2
130	Failed to encrypt module
131	Error generating manifest independent partition
132	Error generating feature permissions extension
133	Error generating thread attributes extension
134	Error generating device attributes extension
135	Error generating mmio ranges extension
136	Error generating file producer extension
137	Failed to add group IDs to process extension
138	Error generating user info extension
139	Failed to adjust the FTUP partition length and offset
140	Found IUP partition (WCOD,MDMV,LOCL,ISH) before NFTP. This is not allowed
141	Found unexpected IUP partition. All IUP must be allocated in a contiguous block
142	Calculated FTUP partition size is smaller than FTUP size, this will break FWUpdate
143	Number of FPT entries does not fit in current FPT area supported by FTOOL
144	Unable to resolve user name
145	Unable to update partition offsets in database
146	Missing partition parameters
147	Missing partition instance
148	Unable to update partition offset
149	Error building Partial Firmware Update image
150	Failed to configure firmware runnable region

151	Unable to disable attribute
152	Invalid runnable region configuration
153	Make Module Failed
154	Get elf info failed
155	Make Module Failed
156	Parse Module metadata Failed.
157	Elf to Bin failed
158	Get Section Data failed
159	Invalid ModuleType. Module is not Process or Shared Library type
160	Failed to build shared library
161	Invalid TotalThreadStackSize value
162	Unable to get CM0HeapSize configuration parameter
163	Unable to get DefaultHeapSize configuration parameter
164	Invalid CM0Heap Value
165	Invalid DefaultHeap Value
166	Unable to find the FLREG layout entry
167	Failed to resolve region limit
168	Failed to resolve region base
169	Unable to find the Regions layout entry
170	Missing input region length configuration option
171	File Path could not be resolved
172	Invalid region size
173	Not enough flash space
174	Missing region data target
175	Unable to update region data target
176	Unable to load CSE region
177	Failed to allocate memory
178	Failed to parse CSE region
179	Not enough space to copy CSE region into image buffer
180	Unable to prepare CSE region
181	Invalid VSCC entry
182	Detected overflow in B PDT table
183	Invalid Descriptor offset
184	Invalid Descriptor size
185	Unable to parse ROM Bypass configuration
186	Unable to load ISH image
187	ISH image file size is too large
188	Failed to update ME Region
189	Invalid PKI Suffix:

190	Invalid Certificate Hash Format:
191	Invalid GUID format
192	Failed to parse GbE image
193	The file is not large enough to be a valid GbE
194	Invalid Region Order
195	Invalid settings combination
196	Unable to load Token
197	Unable to decompose Token
198	IDLM Binary is invalid or corrupt
199	Unable to decompose IDLM Binary
200	Failed to process VR profile selection
201	Failed to generate FW update image
202	String length is too large
203	Failed to generate CSE data partition
204	TBT Binary is invalid or corrupt
205	Chipset Init Binary is invalid or corrupt
206	Chipset Init Base Intel Recommendation table is invalid
207	Chipset Init Product version does not match the configured PCH SKU type
208	Failed to get image Metadata sub partition
209	Failed to load FITC binary to sub partition
210	Failed to generate Image Metadata partition
211	Failed to load FITC binary to sub partition
212	Failed to find child attribute
213	Failed to get Class Instance
214	Failed to map GPIOs
215	Invalid NVAR [Intel(R) AMT HW Status] size
216	NVAR [Intel(R) AMT HW Status] IO Error
217	Failed to set target IFWI configuration
218	Failed to load BIOS image from file
219	Failed to configure IFWI layout
220	Failed to prepare one or more IFWI components
221	Failed to load ME component
222	Detected invalid Sub-Partition
223	Detected build buffer overflow
224	Failed to update build buffer cursor offset
225	Failed to prepare ME BUP Sub-Partition
226	Failed to calculate boot partition sizes
227	Unable to update region data target
228	Failed to get ME Sub-Partitions

229	Failed to load OEM Key Manifest input file
230	Failed to add OEM Key Manifest to IFWI image
231	Failed to build SMIP data
232	Failed to load SMIP intermediate file
233	Failed to add SMIP Sub-Partition to IFWI image
234	Failed to add ROMB partition to IFWI image
235	Failed to load input file
236	Unable to determine image type
237	Detected invalid DNX image format.
238	Unable to detect number of flash components setting
239	Unable to resolve flash image size
240	Failed to validate Key Manifests
241	Failed to validate Public key hash
242	Failed to calculate BPDT Checksum
243	Failed to calculate and set required image padding
244	Invalid Manifest Extension Utility path
245	Utility to sign the SMIP data
246	Invalid signing key path
247	Invalid signing tool path
248	Failed to load data sub-partition
249	General error
250	Missing configuration attribute
251	Unable to set configuration value
252	IMR range value out of range
253	Unable to round up IMR value
254	Total IMR size exceeding maximum size
255	Invalid action parameters
256	Invalid attribute parameters
257	Missing JSON parameter in NVAR [Intel(R) AMT HW Status] Action
258	Unable to convert NVAR [Intel(R) AMT HW Status] index to U32
259	Unable to convert NVAR [Intel(R) AMT HW Status] offset to U32
260	Unable to convert NVAR [Intel(R) AMT HW Status] bitHi to U32
261	Unable to convert NVAR [Intel(R) AMT HW Status] bitLo to U32
262	Unable to convert NVAR [Intel(R) AMT HW Status] field size to U32
263	Unable to convert NVAR [Intel(R) AMT HW Status] file size to U32
264	Failed to write NVAR [Intel(R) AMT HW Status]
265	Failed to read NVAR [Intel(R) AMT HW Status]
266	Invalid action parameter
267	Invalid target name



268	Invalid bitfield length specified
269	Error updating configuration variable
270	Could not load binary file
271	Could not resize NVAR [Intel(R) AMT HW Status] for binary file
272	Specified variable size will not fit into fixed-size NVAR [Intel(R) AMT HW Status] file
273	Specified variable size will not fit into cell
274	Specified offset is larger than NVAR [Intel(R) AMT HW Status] size
275	Could not adjust NVAR [Intel(R) AMT HW Status] params
276	Could not write NVAR [Intel(R) AMT HW Status] value
277	Could not read NVAR [Intel(R) AMT HW Status] value
278	Failed to write binary file for NVAR [Intel(R) AMT HW Status]
279	Certificate NVAR [Intel(R) AMT HW Status] size mismatch
280	Certificate NVAR [Intel(R) AMT HW Status] name field size mismatch
281	Failed to save intermediate file
282	Unable to access data
283	Detected duplicate syscall id
284	Detected duplicate syscall name
285	Detected duplicate syscall group name
286	Detected loop in syscall group dependencies
287	Detected invalid syscall group name
288	Detected invalid syscall group raw value
289	Detected invalid syscall name in group definition
290	Detected invalid syscall id
291	Detected invalid syscall group id used in process module
292	Failed to generate header file definitions
293	Invalid Group Value
294	SystemResources Class has not been initialized
295	Internal error
296	Failed to get active module names
297	Unable to resolve type
298	Failed to generated system resources report
299	Failed to generate source code for bus driver
300	Detected duplicate process name
301	Detected duplicate process id
302	File write error
303	Detected duplicate user name
304	Detected duplicate special file label
305	Detected duplicate service name
306	Detected duplicate group id

307	Detected duplicate user id
308	Error opening file for read
309	Error reading file data
310	Size requested was too large
311	Error opening file for write
312	Error appending to file
313	Creating directory structure
314	Error running LZMA compression
315	Error running LZMA extraction
316	Wrong format found
317	Unknown Project
318	Invalid data pointer
319	Out of memory
320	Unable to remove file entry from FCS table
321	MFS was not initialized
322	FCS was not initialized
323	Failed to process FCS entries
324	Detected duplicate special file label
325	FileEntry already being used by another FCS table
326	Failed to create FCS handle
327	Failed to get file from FCS
328	Failed to get file attributes from FCS
329	Failed to add new file to FCS
330	Failed to delete file from FCS
331	Failed to flush FCS buffer into memory
332	Invalid FCS file
333	Failed to terminate MFS library
334	Failed to get file size from MFS
335	Failed to delete file from MFS
336	Failed to decompose CSE image
337	Failed to initialize MFS
338	Failed to load Intel.cfg table
339	Failed to load Fit.cfg table
340	Failed to create the current values table
341	Failed to generate the current values table
342	Failed to create new Fit.cfg table
343	NVAR [Intel(R) AMT HW Status] Access error
344	FW Code Generation Error
345	Invalid ME Version

346	Module Not Found
347	Action not found
348	Action failed to execute
349	Failed to process input XML
350	Invalid command line options
351	Failed to save XML
352	Invalid XML template option specified
353	Invalid Manifest Version specified on CLI
354	Unable to load tool config xml
355	Unsupported signing tool specified
356	Invalid signing tool configuration
357	Invalid decomp binary type specified
358	File is not a valid XML file
359	Invalid manifest index value
360	Error finding manifests in file
361	Path provided is not a valid directory
362	Unable to find files
363	Unable to read file
364	Failed to import manifest(s)
365	Failed to resign manifest(s)
366	Failed to generate public key hash
367	Failed to export manifest(s)
368	Buffer overflow detected
369	Buffer overflow detected
370	Failed to load file
371	Invalid value specified
372	Failed to parse Part IDs
373	Failed to save Part ID to file
374	Unable to remove directory
375	Signature verification failed
376	Failed to generated Boot Partition Manifest
377	Invalid DnxRecoveryImage configuration
378	Failed to generate DNX image
379	Invalid ME
380	Error Parsing Manifest
381	Error Parsing Missing Partition
382	Error Modifying Invalid ME
383	Error Modifying WCOD
384	Error Modifying LOCL

385	Utility to build the DNX image
386	Utility DNX configuration file
387	Invalid OEM Key Manifest path
388	Compressor unexpected exit code
389	Unable to get process uncompressed size
390	Unable to load file
391	Invalid LUT size

## A.2 Common Error Code for All Tools

If determined responses to errors do not resolve the issue & issue persists, please [Contact Intel](#).

Error Code	Error Message	Response/Recovery actions
0	Success	N/A
1	Tool common error	<a href="#">Contact Intel</a>
2	Passed with warning	N/A
3	Internal Error. Unexpected error occurred	<a href="#">Contact Intel</a>
4	Unsupported OS	Check that commands/tools are running on a supported OS
5	Memory allocation error occurred	Contact Intel
6	Error accessing the function GetSystemFirmwareTable from kernel32.dll	Restart platform. If issue persists, <a href="#">contact Intel</a>
7	The function GetSystemFirmwareTable failed with Windows Error Code: %d.	Restart platform. If issue persists, <a href="#">contact Intel</a>
8	Error accessing the kernel32.dll.	Restart platform. If issue persists, <a href="#">contact Intel</a>
9	Commit Anti Rollback SVN failed.	Run verbose to further learn failing SVN commit. If issue persists, <a href="#">contact Intel</a>
10	Error occurred while reading the file.	Check reading permissions of the file in hand. If reading is granted <a href="#">contact Intel</a>
11	Error getting current working directory path.	Restart platform. If issue persists, <a href="#">contact Intel</a>
12	Error getting current working directory permission:	Restart platform. If issue persists, <a href="#">contact Intel</a>
13	An unknown error occurred while opening the file.	Unidentified OS response. If issue persists, <a href="#">contact Intel</a>
14	An unknown error occurred while working with the file.	Unidentified OS response. If issue persists, <a href="#">contact Intel</a>
15	Error occurred while writing to the file.	Check writing permissions of the file in hand (writing is granted). If issue persists, <a href="#">contact Intel</a>
16	Service already exists	Restart platform. If issue persists, <a href="#">contact Intel</a>
17	Failed to stop iTouch driver	Manual disable of ME to override. If issue persists, <a href="#">contact Intel</a>
18	Invalid file name provided: File name cannot contain any of the following characters: \\* :~<>	Refrain from using special characters

Error Code	Error Message	Response/Recovery actions
19	Failed to write 0x%02X to IO Port 0x%04X.	Restart platform. If issue persists, <a href="#">contact Intel</a>
20	Cannot locate ME device.	HECI or ME is not in a valid state. Reinstall HECI driver or run FWSTS in MEInfo to verify validity
21	Write register failure.	Relevant to DOS only
22	Circular buffer overflow.	Relevant to DOS only
23	Communication error between application and Intel(R) ME module.	HECI or ME is not in a valid state. Reinstall HECI driver or run FWSTS in MEInfo to verify validity
24	Unsupported HECI bus message protocol version.	<a href="#">Contact Intel</a>
25	HECI Timeout.	Restart HECI driver
26	Unexpected result in command response.	<a href="#">Contact Intel</a>
27	Cannot find host client.	Restart HECI driver
28	Cannot find ME client.	HECI or ME is not in a valid state. Reinstall HECI driver or run FWSTS in MEInfo to verify validity
29	Failure occurred during ME disconnect.	<a href="#">Contact Intel</a>
30	Client already connected.	Reinstall HECI Driver
31	No free connection available.	Relevant to DOS only
32	Flow control error.	Relevant to DOS only
33	No message.	<a href="#">Contact Intel</a>
34	Buffer size is too large.	<a href="#">Contact Intel</a>
35	Buffer is too small.	<a href="#">Contact Intel</a>
36	%s is too long.	Value of the NVAR exceed allowed length
37	Invalid command line option(s).	Check command line options/arguments
38	The following Parameter is not a valid option: %s.	Check parameters in command line
39	PCH is not supported.	Check tool/s matches FW version
40	Internal Error (Safe function wrapper error: Invalid size).	<a href="#">Contact Intel</a>
41	Internal Error (Safe function wrapper error: compose string from list).	<a href="#">Contact Intel</a>
42	Internal Error (Safe function wrapper error: compose string).	<a href="#">Contact Intel</a>
43	Internal Error (Safe function wrapper error: memncpy).	<a href="#">Contact Intel</a>
44	Internal Error (Safe function wrapper error: strncpy).	<a href="#">Contact Intel</a>
45	Internal Error (Safe function wrapper error: strncat).	<a href="#">Contact Intel</a>
46	Internal Error (Safe function wrapper error: strtok).	<a href="#">Contact Intel</a>
47	Printf function failed.	<a href="#">Contact Intel</a>

Error Code	Error Message	Response/Recovery actions
48	Failed getting variable %s value.	Check NVAR called is correct. If issue persists, <a href="#">contact Intel</a>
49	The variable %s is supported on Corporate SKU only.	Check running on relevant environment
50	Unable to find matching LOCL.	<a href="#">Contact Intel</a>
51	Could not access PCI device.	<a href="#">Contact Intel</a>
52	Replay protection of UFS device not supported	Unsupported tests were enabled. Correct status and rerun tests
53	Unable to change permission.	Restart platform. If issue persists, <a href="#">contact Intel</a>
54	Unable to perform request due to permission failure.	Restart platform. If issue persists, <a href="#">contact Intel</a>
55	Cannot find requested device.	Restart HECI driver
56	Unable to perform CreateFile.	Restart HECI driver
57	The FPF compare failed.	Check compared values against FPFs
58	The CSE File Component requested, File Name is not valid for this operation.	Check compared value against file value
59	Boot Guard must be enabled with Policy 5	Boot Guard profile should be profile 5 to enable this test
60	Failed to read FPT NVARs config file.	Regenerate a new config file & check file is valid
61	Fail to read FW Status Register value.	Global Reset
62	Fail to create verbose log file.	Restart platform
63	Unknown or unsupported hardware platform.	Make sure running relevant tools
64	Failed to initialize SPI interface.	Check connectivity to SPI part
65	Could not update [%s].	Check EOM status and permissions. Check value is valid
66	Cannot update %s. Invalid data length.	Check EOM status and permissions. Check value is valid
67	Feature not found.	MEInfo feature is not relevant to the platform and setup environment
68	Feature not available.	MEInfo feature is not relevant to the platform and setup environment
69	%s actual value is - %s.	Check equaling to a correct value
70	FW status test failed.	An image configuration is not set properly. <a href="#">Contact Intel</a> for support
71	Boot Guard status test failed.	Boot Guard configuration is not set properly. <a href="#">Contact Intel</a> for support
72	Reserved	N/A
73	Reserved	N/A
74	Failed to communicate with CSME. This tool must be run from a privileged account (administrator/root).	Tools should run with Admin privileges using matching FW version & tools version
75	Master Access config file value for %s format is invalid.	Check config file values are correct, regenerate if needed.
76	Failed to retrieve feature.	<a href="#">Contact Intel</a>
77	Master Access config file value for %s exceed maximum allowed value.	Check config file values are correct, regenerate if needed.

Error Code	Error Message	Response/Recovery actions
78	Failed to retrieve Intel (R) FIT version.	<a href="#">Contact Intel</a>
79	Failed to retrieve Intel (R) Internal Build Version.	<a href="#">Contact Intel</a>
80	Ambiguous Master Access value. Master Access config file region [%s] defined more than once.	Check config file values are correct, regenerate if needed.
81	MEManuf Operation Failed.	Check previously printed errors in MEManuf log for more details
82	Invalid Access node name in Master Access configuration file.	Check config file values are correct, regenerate if needed.
83	Invalid RequiredValue node name in Master Access configuration file.	Check config file values are correct, regenerate if needed.
84	Invalid server address.	Check the value is valid
85	Intel(R) test failed to start, error 0x%X returned.	Global reset
86	Intel(R) test timeout (exceeded 30 seconds).	Global reset
87	Intel(R) ME test is currently running, try again later.	Try again. If issue persists, <a href="#">contact Intel</a>
88	MEManuf EOL & BIST config file generation failed.	<a href="#">Contact Intel</a>
89	M3 results are not available from SPI. Please run -test option to perform the BIST test.	N/A
90	Could not read M3 results from SPI.	Check access to SPI. If issue persists, <a href="#">contact Intel</a>
91	SMBus hardware is not ready.	Restart platform
92	Internal error - SMBus Read Byte PEC failure.	<a href="#">Contact Intel</a>
93	SMBus encountered time-out.	Global Reset or address is not valid
94	Signature: invalid! No more information can be displayed.	Check descriptor component is valid
95	Internal error - Failed to match.	<a href="#">Contact Intel</a>
96	Internal error - Out of memory.	<a href="#">Contact Intel</a>
97	Internal error - Unable to get current PP.	<a href="#">Contact Intel</a>
98	Failed to retrieve test result from SPI.	Global reset
99	Failed to retrieve power package setting.	Global reset
100	Failed to retrieve power rule from SPI.	Global reset
101	WLAN power well setting is set incorrectly.	Wrong configuration set in the image. Need to re-configure the WLAN Well configurations.
102	Failed to retrieve test result from SPI.	Global reset
103	Internal error - Failed to retrieve Platform Attribute.	<a href="#">Contact Intel</a>
104	Failed to retrieve PROC_MISSING NVAR setting.	<a href="#">Contact Intel</a>
105	PROC_MISSING NVAR setting is set incorrectly.	<a href="#">Contact Intel</a>
106	Failed to retrieve password from SPI.	Global reset
107	Internal error - Password length is incorrect.	Try a shorter password

Error Code	Error Message	Response/Recovery actions
108	Internal error - Modified local password.	<a href="#">Contact Intel</a>
109	Internal error - Invalid password.	Double check password value
110	Boot Guard Self Test Failed.	Caused by an OEM Hash values (stored in FPFs) having an inappropriate value or BtG profiles not set properly. User should verify set valid values for BtG and OEM hash in FIT and reflash the SPI.
111	Intel integrated LAN setting is set incorrectly.	Verify NIC configurations and connection is proper
112	Intel LAN Connected Device (PHY) physical connectivity error with ME.	Verify NIC configurations and connection is proper
113	Internal error - Illegal data length.	Verify Privacy and/or EHBC (relevant to failing BIST) settings are set properly in FIT
114	Internal error - Illegal data value.	Verify Privacy and/or EHBC (relevant to failing BIST) settings are set properly in FIT
115	EHBC State Test Failed - Error while reading data from flash.	<a href="#">Contact Intel</a>
116	EHBC State Test Failed - Contradiction with current Privacy Level.	Verify privacy level and EHBC state. If privacy level is Enhanced (2) or Extreme (3), then EHBC state needs to be disabled
117	Current WLAN does not match micro-code, please update WLAN micro-code in FW.	Case 1: Need to install latest CSME SW with micro-code suitable to NIC. Case 2: NIC is not supported with current vPro setup. No action required.
119	Length of OEM Customizable Certificate Friendly Name setting is set incorrectly.	NVAR value is invalid
120	OEM Customizable Certificate Stream setting is set incorrectly.	NVAR value is invalid
121	OEM Customizable Certificate Hash Algorithm setting is set incorrectly.	NVAR value is invalid
122	Length of OEM Customizable Certificate Stream is set incorrectly.	NVAR value is invalid
123	Internal error - Unable to compress.	<a href="#">Contact Intel</a>
124	The compressed data is incorrect.	<a href="#">Contact Intel</a>
127	Failed to retrieve power source.	<a href="#">Contact Intel</a>
128	Power source is not AC.	Check power source, must be AC
129	LAN power well setting is set incorrectly.	NVAR value is invalid
130	WLAN power well setting is set incorrectly.	NVAR value is invalid
131	System UUID actual value is all 0x00.	Check value to a unique one
132	System UUID actual value is all 0xFF.	Check value to a unique one
133	Security Descriptor Override Strap (SDO) is enabled.	SDO must be disabled
134	End-Of-Post message is not sent.	Enable BIOS settings to allow EOP messaging
135	Unable to determine Intel(R) ME Manufacturing Mode status.	Check EOM flow, if issue persists, perform a Global reset
136	Intel(R) ME is still in Manufacturing Mode.	Check EOM flow, if issue persists, perform a Global reset



Error Code	Error Message	Response/Recovery actions
137	RPMC enablement fuse is not set. RPMC manufacturing process is not complete.	Check EOM flow, if issue persists, perform a Global reset
138	%s mismatch, actual value is - %s.	Check value is matching
139	Generating file in System Folder is not allowed	User is trying to generate a file in OS System Directories. Target path needs to be changed to none OS System Folder/Directories
140	Cannot run the command since Intel(R) AMT is not available.	Check SKU is relevant
141	MFS is corrupted.	Complete G3 cycle for few minutes and then boot again, reflash SPI only if needed. If issue persists, <a href="#">contact Intel</a>
142	Using wrong PCH SKU Emulation via Intel (R) FIT vs what's the actual HW Type.	Global Reset
143	Cannot perform hibernation. Please manually reboot the system.	Reboot the system
144	MEManuf Test Failed.	Check MEManuf log file for details
145	Test is enabled by the user but is unknown by the platform - %s.	Check SKU is relevant
146	Attempting to add sibling to XML root node.	Check XML to be valid
147	File size is zero.	Check XML to be valid
148	XML parsing failed.	Check XML to be valid
149	XML parsing encountered data overflow.	Restart platform, if persists, <a href="#">contact Intel</a>
150	Invalid XML error code conversion.	<a href="#">Contact Intel</a>
151	XML parser - out of memory error.	Restart platform
152	Missing RequiredValue xml node in Master Access configuration file.	XML residing in Config file is invalid
153	Incorrect region name in Master Access configuration file.	Incorrect Region name in config file
154	Failed to retrieve list of BIST tests to run from FW.	Global Reset
155	Unexpected failure when retrieving BIST results.	Global Reset
156	Retrieving the EOL Config list of tests failed.	<a href="#">Contact Intel</a>
157	Retrieving the EOL Var list of tests failed.	<a href="#">Contact Intel</a>
158	No name attribute specified for test: %s.	Incorrect config file
159	Failed to parse configuration file provided.	Check validity of config file, if issue persists, <a href="#">contact Intel</a>
160	No output file path specified to write configuration file.	Need to specify output file path
161	No data to write to configuration file.	<a href="#">Contact Intel</a>
162	Invalid ErrAction specified	Config file has invalid error action defined
163	The 2 SPI flash devices do not have compatible command sets.	Check that SPI HW is supported by Intel, if issue persists, <a href="#">contact Intel</a>
164	Flash descriptor is not valid	Global Reset, if issue persists, <a href="#">contact Intel</a>
165	Failed to allocate memory for the flash part definition file %s.	<a href="#">Contact Intel</a>

Error Code	Error Message	Response/Recovery actions
166	Parsing file failed.	<a href="#">Contact Intel</a>
167	Protected Range Registers are currently set by BIOS, preventing flash access. Please contact the target system BIOS vendor for an option to disable Protected Range Registers.	N/A
168	ME client access denied	Reinstall HECI driver
169	The host CPU does not have read access to the target flash area. To enable read access for this operation you must modify the descriptor settings to give host access to this region.	N/A
170	An attempt was made to read beyond the end of flash memory.	Verify length of given offset
171	Feature %s is not relevant in the current environment	Verify feature is supported
172	Invalid Block Erase Size.	<a href="#">Contact Intel</a>
173	Invalid Write Granularity value.	<a href="#">Contact Intel</a>
174	Flash device does not support block erase size of 4KB.	Verify SPI HW is supported by Intel
175	The supplied zero-based index of the SPI Device is out of range.	Verify SPI HW is supported by Intel
176	Invalid descriptor region.	<a href="#">Contact Intel</a>
177	Region does not exist.	Verify pointer is pointing to the correct region
178	An attempt was made to write beyond the end of flash memory.	Verify length of given offset
179	An attempt was made to erase beyond the end of flash memory.	Verify length of given offset
180	The address 0x%08X of the block to erase is not aligned correctly.	Verify provided address is correct
181	Hardware timeout occurred in SPI device.	<a href="#">Contact Intel</a>
182	There are no supported SPI flash devices installed. Please check connectivity.	Verify SPI HW is accessible
183	Unrecognized value in the HSFSTS register.	<a href="#">Contact Intel</a>
184	AEL is not equal to zero.	Access Error Log – Verify access permissions are valid
185	FCERR is set. Hardware sequencing failed. Make sure that you have access to target flash area.	Verify SPI HW is accessible
186	Checking variable %s failed.	Verify correct SKU is in place. If issue persists, perform a Global Reset
187	On board and docked vPro NIC cannot have the same value	Verify provided values are unique
188	Invalid Manufacturing Line Configurable variable name %s.	Verify NVAR or FPF name is correct
189	File does not exist.	Verify file is valid
190	End Of Manufacturing Operation failure - Verification failure on Descriptor Lock settings.	Verify Master access permissions
191	Unable to get master base address from the descriptor.	<a href="#">Contact Intel</a>
192	Retimers cannot have the same I2C address	Verify unique I2C address is provided
193	Invalid length of Manufacturing Line Configurable value. Check configuration file for correct length.	Verify length of provided file

Error Code	Error Message	Response/Recovery actions
194	Invalid hash certificate file.	Verify value of given file
195	End Of Manufacturing Operation failure - Verification failure on ME Manufacturing Mode Done settings.	Global Reset
196	cfg_rules: the requested rule change is not supported after end of manufacturing.	N/A
197	Invalid parameter value specified by user. Use -? option to see help.	N/A
198	ME disabled.	Global Reset
199	Failed to get information about the installed flash devices.	Verify SPI HW is accessible. If issue persists, perform a Global Reset
200	An error occurred reading the flash descriptor signature.	Verify SPI HW is accessible. If issue persists, perform a Global Reset
201	Flash descriptor does not have correct signature.	Verify SPI HW is accessible. If issue persists, perform a Global Reset
202	The attempt to commit the Manufacturing Line Configurables has failed.	Check log for details about failing files
203	Access was denied opening file.	Access permissions should be verified
204	Failed to read the entire file into memory. File: %s.	Reset the platform
205	The address is outside the boundaries of the flash area.	Verify address is valid
206	Unable to write data to flash. Address 0x%x.	<a href="#">Contact Intel</a>
207	Data verify mismatch found.	Compare should be between relevant files. If issue persists, <a href="#">contact Intel</a>
208	Failed to write the entire flash contents to file.	Check log for details about failures
209	An error occurred reading the flash mapping data.	<a href="#">Contact Intel</a>
210	Password does not match the criteria	Password should be valid
211	An error occurred reading the flash components data.	<a href="#">Contact Intel</a>
212	An error occurred reading the flash region base/limit data.	<a href="#">Contact Intel</a>
213	An error occurred reading the flash master access data.	<a href="#">Contact Intel</a>
214	Flash is not blank.	Verify flash is erased
215	PAVP oem config data: invalid edp port value.	Ports defined in config file should be valid
216	Setting Global Reset Failed.	Check log for details for failures
217	ME disable not needed.	N/A
218	ME already disabled.	N/A
219	Unable to detect if the request to disable ME succeeded.	Global Reset
220	There is a problem with the GbE binary which prevents saving the data.	<a href="#">Contact Intel</a>
221	A required parameter is missing.	Verify command is valid
222	Committing the FPF is not allowed at this time.	The command is run post EOM hence not relevant
223	The FPF has already been committed.	N/A

Error Code	Error Message	Response/Recovery actions
224	PAVP oem config data: invalid lspcon port value.	Ports defined in config file should be valid
225	Committing a specific FPF is not supported. Consider committing all the FPFs.	N/A
226	Keybox file size invalid.	Verify KeyBox is valid
227	Invalid all hashes state file.	Need to assign correct value to the AMT files
228	Invalid idle timeout file.	Idle Timeout file should be a Uint16 value and not set to zero
229	Invalid provisioning state file.	Verify Provisioning state file length is valid (4bytes)
230	CEK is invalid.	Customer Encryption Key – CEK defined in FIT should be valid
231	CEK is not available.	Customer Encryption Key – CEK defined in FIT should be valid
232	Cannot provision after EOM.	N/A
233	Invalid redirection state file.	Verify Redirection state file length is valid (4 bytes)
234	Bad CRC.	Cyclic Redundancy Check – KeyBox should have valid encryption
235	Bad Magic.	KeyBox Magic number should be valid
236	Invalid EHBC state file.	Verify EHBC state file value is valid (0 or 1)
237	Keybox is not provisioned.	Verify KeyBox is provisioned using FPT
238	The host CPU does not have write access to the target flash area. To enable write access for this operation you must modify the descriptor settings to give host access to this region.	N/A
239	User selected to cancel the operation.	N/A
240	Internal error - Invalid Heci response length.	<a href="#">Contact Intel</a>
241	Error determining possible system states.	<a href="#">Contact Intel</a>
242	Cannot locate MEI driver.	Reinstall driver
243	Unexpected internal FW error occurred. Object was not found.	<a href="#">Contact Intel</a>
244	Invalid State found for test - %s.	Config file should be valid
245	ISH Internal Error.	<a href="#">Contact Intel</a>
246	IUP Not Found.	<a href="#">Contact Intel</a>
247	Cannot locate HID device.	Reinstall HECI driver
248	Incorrect Report ID received.	Reinstall HECI driver
249	MCTP SMBUS test failed.	Verify SMBus addresses configured in FIT are correct and SMBus is properly wired
250	Invalid config file. State was not found for test - %s.	Config file should be valid
251	Invalid config file. RequiredValue was not found for test - %s.	Config file should be valid
252	Invalid config file. ErrAction was not found for test - %s.	Config file should be valid

Error Code	Error Message	Response/Recovery actions
253	Unable to validate address range.	<a href="#">Contact Intel</a>
254	Memory window not set or device is not armed for operation.	<a href="#">Contact Intel</a>
255	Sensor could not be found. Either no sensor is connected, the sensor has not yet initialized, or the system is improperly configured.	N/A
256	Not enough memory/storage for requested operation.	<a href="#">Contact Intel</a>
257	Used in TOUCH_SENSOR_HID_READY_FOR_DATA_RSP to indicate sensor has been disabled or reset and must be reinitialized.	N/A
258	Used to indicate compatibility revision check between sensor and ME failed, or protocol ver between ME/HID/Kernels failed.	Verify FW is compatible with the Touch Panel version
259	Indicates sensor went through an unexpected reset.	Restart platform and retry. If issue persists, <a href="#">contact Intel</a>
260	Requested sensor reset failed to complete.	Verify sensor is properly connected and configured
261	Operation timed out.	Verify sensor is properly connected and configured
262	Test mode pattern did not match expected values.	Verify sensor is properly connected and configured
263	Indicates sensor reported fatal error during reset sequence. Further progress is not possible.	Verify sensor is properly connected and configured
264	Indicates sensor reported non-fatal error during reset sequence. HID/BIOS logs error and attempts to continue.	N/A
266	Indicates that command cannot be complete until ongoing Quiesce I/O flow has completed.	N/A
267	Cannot find the NVAR file; the system maybe in EOM.	Verify EOM state and relevancy to file at hand
268	Invalid cfg rule data.	Verify value is valid. If issue persists, perform Global Reset
269	Cannot access the NVAR file attributes.	<a href="#">Contact Intel</a>
270	Failed to hash CSE file data.	<a href="#">Contact Intel</a>
271	Operation is not allowed after EOM.	N/A
272	Used an invalid input parameter to access the NVAR file.	Verify parameter is valid
273	FPF is not written.	Closemfnf with HW binding should be run prior to this step
274	Invalid privacy level file.	Verify file
275	File is invalid.	Verify file
276	Can not provision after EOM.	N/A
277	Certificate verification failed.	RX Certificate should be valid
278	HDCP Rx is not provisioned.	Need to provision HDCP Rx
279	Invalid string value entered for the Manufacturing Line Configurable.	Verify string value is valid
280	Detected ME in recovery mode.	Reflash SPI & run FWSTS to debug
281	FW returned status: Erase token failure.	Check log for previous errors

Error Code	Error Message	Response/Recovery actions
282	Detected invalid data size.	Verify data size is valid
283	Detected invalid hex value.	Verify hex value is valid
284	Failed to retrieve 5K port setting.	Ports defined in config file should be valid
285	Failed to retrieve LSPCON Port setting.	Ports defined in config file should be valid
286	Display port settings are not correct.	Ports defined in config file should be valid
287	EC Region write access permissions don't match Intel recommended values.	Verify EC Region write access permissions are valid
288	Unexpected size found in the file %s. Expected: 0x%X. Received: 0x%X.	Verify size of the file
289	Unable to execute command in this Firmware State. Please reboot.	Reboot the system
290	GBE Region write access permissions don't match Intel recommended values.	Verify GbE Region write access permissions are valid
291	SetDam command failed	Verify value is valid. If issue persists, <a href="#">contact Intel</a>
292	ME Region write access permissions don't match Intel recommended values.	Verify ME Region write access permissions are valid
293	Mismatch on FPF file %s - UEP: %s, FPF HW: %s.	Perform HW binding with closenmf
294	FPFs are not committed to HW.	Perform HW binding with closenmf
295	BIOS Region write access permissions don't match Intel recommended values.	Verify BIOS Region write access permissions are valid
296	Failed to read FPF HW.	<a href="#">Contact Intel</a>
297	SOC Config Lock is not set.	Perform HW binding with closenmf
298	Lock bit FPF is not set on file.	<a href="#">Contact Intel</a>
299	Failed to read FPF in UEP.	<a href="#">Contact Intel</a>
300	FW Update OEM ID incorrectly set to 00 or FF.	N/A
301	Unable to determine FW Update OEM ID status.	Global Reset
302	BIOS Region read access permissions don't match Intel recommended values.	Verify values in config file are valid
303	ME Region read access permissions don't match Intel recommended values.	Verify values in config file are valid
304	GBE Region read access permissions don't match Intel recommended values.	Verify values in config file are valid
305	EC Region read access permissions don't match Intel recommended values.	Verify values in config file are valid
306	RPMC SPI device did not initialize RPMC support correctly, RPMC SPI device needs replacement/ refurbishment.	N/A
307	RPMC SPI device has not been bound to the platform yet, RPMC manufacturing process is not complete. HW Binding state is not enabled.	N/A
308	"HW Binding" state is not enabled.	Image created by FIT should enable HW Binding
309	The %s var is not updatable.	NVAR should be valid
310	The variable %s is not supported on this platform.	Verify NVAR is relevant to platform configurations

Error Code	Error Message	Response/Recovery actions
311	PCH is unlocked. Disable Delayed Authentication Mode and retry.	N/A
312	Test required value format is not valid.	Verify format of MEManuf XML
313	Invalid BootGuard configuration.	Wrong configuration was set. Need to reflash SPI with correct BtG configurations
314	Minimum ARB SVN value set on current platform does not match corresponding ARB SVN in FW image.	Verify ARB SVN in FW image isn't less than Minimum ARB value on the platform
315	Unexpected internal FW error occurred. Invalid parameter.	<a href="#">Contact Intel</a>
316	Platform name for this PCH type not found or not exists.	FW Tools should match FW versions
317	Clear option is not supported for FPFs.	N/A
318	This command cannot be processed on platforms using %s as the storage type.	Verify command is valid for the boot media
319	This command cannot be processed. Region is not supported on this platform.	Verify command is valid for the platform
320	The maximum number of updated NVARs has been reached.	<a href="#">Contact Intel</a>
321	Invalid value for this CVAR.	Verify value is valid
322	The VAR compare failed.	Verify values are matching, or NVAR hasn't been updated successfully
323	Fatal flash logs exist in NVM.	<a href="#">Contact Intel</a>
324	Request and Reply messages' size mismatch.	<a href="#">Contact Intel</a>
325	Intel (R) ME Interface : Unsupported message type.	<a href="#">Contact Intel</a>
326	Specified partition was not found in the Update Image.	Verify Update Image from proper content
327	FPT is not found in the image.	Flash Partition Table – Update image is corrupted or not relevant. Need to rebuild update image if corrupted.
328	Full FW Update using same version is not allowed. Include -allowsv in command line to allow it.	N/A
329	Restore Point Image Failure. Reboot may be required.	Reboot the system
330	Invalid Partition ID. Use a Partition ID which is possible to do Partial FW Update on.	N/A
331	The partition provided is not supported by the platform.	Provide a valid partition
332	The requested size of partition to read/write/erase exceeds the actual partition size.	Check size is valid
333	Firmware Update operation not initiated because a firmware update is already in progress.	Reset the platform. If issue persists, <a href="#">contact Intel</a>
334	Sku capabilities bits are different between the Update Image and the Flash Image.	Verify update image has valid FW capabilities
335	Major version number of Update Image is not the same as major version number of Flash Image.	Verify update image has correct Major number
336	Firmware update failed due to an internal error. The total size of the backup partitions is bigger than NFTP size.	<a href="#">Contact Intel</a>
337	Firmware update failed due to an internal error caused by a failure in event publishing.	<a href="#">Contact Intel</a>
338	FW Flash read/write/erase operation failed.	Verify if update blocking is configured

Error Code	Error Message	Response/Recovery actions
339	Update operation timed-out; cannot determine if the operation succeeded.	Perform a global Reset and try again
340	FW Update is disabled. MEBX has options to disable / enable FW Update.	N/A
341	Firmware update cannot be initiated because the OEM ID given for FW Update did not match the OEM ID in the FW.	Verify OEM ID within FWUpdate is valid
342	Display FW Version failed.	Check previously printed errors for more details
343	Update was blocked by one of the FW modules.	<a href="#">Contact Intel</a>
344	Firmware update failed due to an internal error Write file failed.	<a href="#">Contact Intel</a>
345	Sanity check in erase/write of partitions. Error might have happened when size of partition is not 4K aligned.	N/A
346	FTPR invalid.	Power-loss occurred during FWUpdate causing ME to go into recovery. Re-run FWUpdate process
347	NFTP invalid.	Power-loss occurred during FWUpdate causing ME to go into recovery. Re-run FWUpdate process
348	Host reset is required after the last FW Update operation.	N/A
349	Update to Image with lower TCB SVN is not allowed.	Verify FW image has TCB SVN equal or greater the platform's TCB SVN
350	Partial update is allowed only to the expected instance ID of an IUP. The Update Image contains IUP with instance ID that is not the currently expected one by the FW. To update LOCL, please use The Intel Management and Security Status (IMSS) tool.	N/A
351	Partial Update is not allowed, because CSE is in Recovery Mode.	Full update
352	Partial Update of an IUP was requested, but this IUP doesn't exist in the Flash Image.	Verify IUP exists on the flash or remove IUP from update image
353	Get Restore Point Image is not allowed, because FW Update is in progress. (The regular FW Update will continue).	Wait for FWUpdate process to complete
354	Update to Image with lower VCN is not allowed.	Verify VCN in update image is equal or greater than VCN on platform
355	SVN invalid: SVN is too large.	Verify SVN value is valid
356	PSVN partition is full, so cannot update to higher SVN.	Number of SVN updates has exceeded the maximum allowed number. Full image flashing is required to clear the PSVN partition.
357	Restore Point Image was requested, but it is not allowed because CSE is in Recovery Mode.	Full update
358	Display Partition Version failed.	Check previous error for details
359	Restore Point Image was requested, but there was Full/Partial FW Update before without Restart after it.	Restart the platform then retry
360	Update to incompatible PMC: The PMC instance ID is different, which may be due to H/LP SKU incompatibility.	Verify PMC instance ID is matching
361	Update to incompatible H/LP SKU image.	Verify SKU in update image is relevant to SKU on the platform
362	Update Image length is bigger than the expected size of the image according to its size in the flash. For example: Error on updating from Consumer to Corporate.	Verify length of update image



Error Code	Error Message	Response/Recovery actions
363	Manifest size in Update Image is too large.	Verify manifest size in update image
364	Firmware update failed due to an internal error 364.	<a href="#">Contact Intel</a>
365	Firmware update failed due to an internal error 365.	<a href="#">Contact Intel</a>
366	Failed to verify signature of OEM or RoT key manifests. For example: Error on update from Production to Pre-Production.	Verify signature of update image
367	Firmware update failed due to an internal error 367.	<a href="#">Contact Intel</a>
368	Firmware update failed due to an internal error 368.	<a href="#">Contact Intel</a>
369	Firmware update failed due to an internal error 369.	<a href="#">Contact Intel</a>
370	Manifest not found in partition (in Update or Flash Image).	Verify manifest exists in update image
371	Firmware update failed due to an internal error 371.	<a href="#">Contact Intel</a>
372	Loader failed to verify manifest signature of FTPR. Production vs. Pre-Production.	Verify update image matches SKU of the platform
373	Loader failed to verify manifest signature of NFTP.	Verify signature of NFTP
374	Loader failed to verify manifest signature of IDLM.	Verify signature of IDLM
375	Loader failed to verify manifest signature of RBE.	Verify signature of RBE
376	Loader failed to verify manifest signature of PMC.	Verify signature of PMC
377	Loader failed to verify manifest signature of OEM KM.	Verify signature of OEM KM
378	Loader failed to verify manifest signature of WCOD.	Verify signature of WCOD
379	Loader failed to verify manifest signature of LOCL.	Verify signature of LOCL
380	Loader failed to verify manifest signature of PCHC.	Verify signature of PCHC
381	Loader failed to verify manifest signature of IOMP.	Verify signature of IOMP
382	Loader failed to verify manifest signature of NPHY.	Verify signature of NPHY
383	Loader failed to verify manifest signature of TBTP.	Verify signature of TBTP
384	Loader failed to verify manifest signature of ISHC.	Verify signature of ISHC
385	Loader failed to verify manifest signature of IUNIT.	Verify signature of IUNIT
386	Some manifest extension is missing in FTPR.	Verify correct MEU for manifest creation is used
387	Some manifest extension is missing in NFTP.	Verify correct MEU for manifest creation is used
388	Some manifest extension is missing in IDLM.	Verify correct MEU for manifest creation is used
389	Some manifest extension is missing in RBE.	Verify correct MEU for manifest creation is used
390	Some manifest extension is missing in PMC. Wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
391	Some manifest extension is missing in OEM KM. Wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
392	Some manifest extension is missing in WCOD.	Verify correct MEU for manifest creation is used

Error Code	Error Message	Response/Recovery actions
393	Some manifest extension is missing in LOCL.	Verify correct MEU for manifest creation is used
394	Some manifest extension is missing in PCHC. Wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
395	Some manifest extension is missing in IOMP. Wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
396	Some manifest extension is missing in NPHY. Wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
397	Some manifest extension is missing in TBTP. Wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
398	Some manifest extension is missing in ISHC. Wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
399	Some manifest extension is missing in IUNIT. Wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
400	FTPR partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
401	NFTP partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
402	DLMP partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
403	RBEP partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
404	PMCP partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
405	OEMP partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
406	WCOD partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
407	LOCL partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
408	PCHC partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
409	IOMP partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
410	NPHY partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
411	TBTP partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
412	ISHC partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
413	IUNP partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	Verify correct MEU for manifest creation is used
414	Place holder. This error code will not be returned by the FW.	N/A
415	Place holder. This error code will not be returned by the FW.	N/A
416	Place holder. This error code will not be returned by the FW.	N/A

Error Code	Error Message	Response/Recovery actions
417	Place holder. This error code will not be returned by the FW.	N/A
418	PMCP must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update.	Verify used library version is relevant
419	OEMP must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update.	Verify used library version is relevant
420	WCOD must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	Verify used library version is relevant
421	LOCL must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	Verify used library version is relevant
422	PCHC must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	Verify used library version is relevant
423	IOMP must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	Verify used library version is relevant
424	NPHY must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	Verify used library version is relevant
425	TBTP must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	Verify used library version is relevant
426	ISHC must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	Verify used library version is relevant
427	IUNP must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	Verify used library version is relevant
428	The size of an Update partition is bigger than the size of the Flash partition.	Verify size of update partition is valid
429	Location of partition to backup is not inside NFTP.	<a href="#">Contact Intel</a>
430	The number of IUPs in the Update/Flash Image is bigger than MAX_IUPS.	N/A
431	Partition name inside IUPs list (in FTPR manifest extension) is not IUP.	N/A
432	Non-optional IUP (like LOCL, WCOD) inside IUPs list (in FTPR manifest extension) is not in the Update Image.	N/A
433	PMC partition is not in the Update Image.	N/A
434	It is not allowed to do Partial Update on this partition.	N/A
435	It is not allowed to do Partial Update on Type-C partitions, according to NVAR.	N/A
436	RBEP and NFTP must have the same version as FTPR, in the Update Image.	N/A
437	RBEP and NFTP must have the same SVN as FTPR, in the Update Image.	N/A
438	RBEP and NFTP must have the same VCN as FTPR, in the Update Image.	N/A
439	Non-optional IUPs (like LOCL, WCOD) must have the same major build version as FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	N/A
440	Update IUP must not have SVN smaller than SVN of Flash IUP.	N/A

Error Code	Error Message	Response/Recovery actions
441	Update Image length is not the same as Flash Image length.	N/A
442	Update IUP must not have VCN smaller than VCN of Flash IUP.	N/A
443	Update from PV bit ON to PV bit OFF is not allowed.	N/A
444	Update to PV bit OFF on Revenue platform is not allowed.	N/A
445	Update to higher SVN must be an upgrade - to higher build version.	N/A
446	Update to higher SVN must be to a higher Hot Fix number (the third number in the build version).	N/A
447	Non-optional IUP (like LOCL, WCOD) inside IUPs list (in FTFR manifest extension) is not in the Flash Image.	N/A
448	A partition that was searched in the Update Image is not in it.	N/A
449	Update between engineering build vs regular build is not allowed. Both builds have to be the same type: regular or engineering build. Engineering build is 7000 and above. Regular build is below 7000.	N/A
450	OEM KM partition is not in the Update Image, but ISHC/IUNP is in the Update Image, which is not allowed.	N/A
451	ISHC/IUNP do not exist in the same way in the Update Image and in the Flash Image.	N/A
452	OEM KM partition is not in the Flash Image, but it is in the Update Image, which is not allowed.	N/A
453	Partial FW Update: the Update Image contains IUP that is different than the one that was requested to be updated in the Partial Update command.	N/A
454	The Partial Update Image size is different than the size of the IUP in it (as it is in the manifest). This means that the Update Image contains more (or less) than the IUP partition.	N/A
455	Firmware update failed due to an internal error 455.	<a href="#">Contact Intel</a>
456	Firmware update failed due to an internal error 456.	<a href="#">Contact Intel</a>
457	Invalid FW Update enabled state.	<a href="#">Contact Intel</a>
458	Firmware update failed due to an internal error 458.	<a href="#">Contact Intel</a>
459	Firmware update failed due to an internal error 459.	<a href="#">Contact Intel</a>
460	Get Restore Point Image is not allowed, because a previous Get Restore Point operation already started. Both operations will be aborted. (Get Restore Point can be started again after this).	N/A
461	Firmware update failed due to an internal error 461.	<a href="#">Contact Intel</a>
462	Heci message length is not as expected.	<a href="#">Contact Intel</a>
463	FWU_START_MSG Heci message contains invalid value in UpdateEnvironment. Value should be FWU_ENV_MANUFACTURING. (Other possible value: FWU_ENV_IFU is obsolete).	<a href="#">Contact Intel</a>
464	FWU_DATA Heci command was sent, but the FW Update wasn't started with FWU_START Heci command before it.	<a href="#">Contact Intel</a>
465	Firmware update failed due to an internal error 465.	<a href="#">Contact Intel</a>

Error Code	Error Message	Response/Recovery actions
466	FW Update is not possible on UFS Flash after End Of Post (after the OS is running). It is possible only before the OS is running using Bios Capsule Update.	N/A
467	DPHY must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	N/A
468	DPHY partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	N/A
469	Some manifest extension is missing in DPHY. Wrong MEU Tool was used to create the partition.	N/A
470	Loader failed to verify manifest signature of DPHY.	Verify relevant MEU version is used
471	Update to higher TCB SVN must be also to higher ARB SVN.	N/A
472	Invalid Partition ID. Use a Partition ID which is on the Flash Image.	N/A
473	Display Partition Vendor ID failed.	Check previously printed errors
474	Wrong structure of Update Image.	Flash Partition Table – Update image is corrupted or not relevant. Need to rebuild update image if corrupted.
475	Flash Image content is invalid.	Image residing on the flash is corrupted. Full reflash of SPI is required.
476	Firmware update failed due to an internal error 476.	<a href="#">Contact Intel</a>
477	Firmware update failed due to an internal error 477.	<a href="#">Contact Intel</a>
478	Firmware update failed due to an internal error 478.	<a href="#">Contact Intel</a>
479	FWU_END Heci command was sent, but there was no FWU_DATA command before it.	<a href="#">Contact Intel</a>
480	FWU_DATA Heci command has invalid data length (too big).	<a href="#">Contact Intel</a>
481	FW Update process received Heci command message with unknown command type.	<a href="#">Contact Intel</a>
482	Cannot obtain ME Mode.	N/A
483	Replay protection of UFS device is in Pre-Bind status	RPMB Binding should be performed
484	BIOS does not support Trusted Device Setup boot.	Enable TDS in FIT or FPT
485	BIOS lock is not supported	Need to update BIOS to one that supports TDS, or disable TDS configuration
486	This command is not supported on Slim SKU.	N/A
487	ODM ID \ System Integrator ID \ Reserved ID: value already set.	NVARs can only be set once
488	File already exists.	Restore image has already been created
489	ME FW version mismatch, actual value is - %s.	Check value in config file
490	Intel(R) Gbe version mismatch, actual value is - %s.	Check value in config file
491	BIOS version mismatch, actual value is - %s.	Check value in config file
492	System UUID mismatch, actual value is - %s.	Check value in config file
493	Intel(R) Wired LAN MAC address mismatch, actual value is - %s.	Check value in config file

Error Code	Error Message	Response/Recovery actions
494	Intel(R) Wireless LAN MAC address mismatch, actual value is - %s.	Check value in config file
495	Wireless LAN micro-code mismatch, actual value is - %s.	Check value in config file
496	Firmware Update OEM ID mismatch, actual value is - %s.	Check value in config file
497	Touch - Vendor ID mismatch, actual value is - %s.	Check value in config file
498	Invalid PKI suffix file.	Check provided value is valid
499	Update to Image with lower ARB SVN is not allowed.	N/A
500	RBEP and NFTP must have the same unique build as FTPR, in the Update Image.	N/A
501	Firmware update failed due to an internal error 501.	<a href="#">Contact Intel</a>
502	RPMB fuse is set. Cannot commit FPFs.	N/A
503	PCHC partition is not in the Update Image.	Verify PCHC partition is in the update image
504	Mismatch between FPF UEP and HW values.	Check if closemfn was run successfully. Check status of HW binding
505	Invalid Update Image length, size is smaller than required.	N/A
506	The internal structure of the Update Image is corrupted.	<a href="#">Contact Intel</a>
507	Update Image has wrong structure for Full Update operation.	Use images built through FIT for update purposes
508	Update Image has wrong structure for Partial Update operation.	Use images built through FIT for update purposes
509	Mandatory partitions (FTPR / NFTP / RBEP) were not found in the Update Image.	N/A
510	Number of IUPs in FW exceeds allowed maximum.	N/A
511	Invalid config file. Unknown test name found - %s.	Verify config file is valid and relevant to current platform
512	Missing a required partition manifest in the Update Image.	Verify relevant MEU is used
513	Missing a required partition manifest extension in the Update Image.	Verify relevant MEU is used
514	The VAR invalid data size.	Verify data size is valid
515	Update Image size exceeds allocated buffer.	Increase buffer size or reduce image size
516	FW failed to read FWSTS register.	Reinstall HECI and perform a global Reset
517	Firmware update failed due to an internal error Read file failed.	<a href="#">Contact Intel</a>
518	Firmware update failed due to an internal error 518.	<a href="#">Contact Intel</a>
519	Full FW Update using same version is not allowed. Include /s in command line to allow it.	N/A
520	Invalid MPHY length.	N/A
521	FW failed to set ISH configuration file.	File format could be wrong or EOP has passed. If issue persists, <a href="#">contact Intel</a>
522	PCIe connectivity failure. Unable to connect to vPro NIC through designated bus.	Verify PCIe is properly connected to the NIC and FW residing on NIC is functioning properly and supporting vPro settings

Error Code	Error Message	Response/Recovery actions
523	SMBUS connectivity failure. Unable to connect to vPro NIC through designated bus.	Verify SMBUS is properly connected to the NIC and FW residing on NIC is functioning properly and supporting vPro settings. Verify SMBUS address configured in FIT is valid
524	Conflict in OEM Data: Overlapping values of LSPCON Port Config and eDP Port Config found.	Values of ports in configuration file should not overlap
525	Invalid configuration server FQDN value.	Verify FQDN has valid value
526	Invalid host FQDN file.	Verify FQDN has valid value
527	One or more GPIO pads provided in file have invalid ownership mode set.	Configuration of GPIOs within the config file should be valid
528	One or more GPIO pads provided in file have invalid pad mode set.	Configuration of GPIOs within the config file should be valid
529	Two or more GPIO pads provided in file have same feature field value set.	Configuration of GPIOs within the config file should be valid
530	One or more GPIO pads provided in file have invalid feature field value set.	Configuration of GPIOs within the config file should be valid
531	Invalid cert hash file.	Verify cert hash is valid
532	Invalid host FQDN domain name.	Verify host FQDN domain name is valid
533	Invalid host FQDN hostname.	Verify host FQDN hostname is valid
534	ODM ID \\ System Integrator ID \\ Reserved ID: invalid size.	Verify size is valid
535	ODM ID \\ System Integrator ID \\ Reserved ID: invalid value.	Verify value is valid
536	One or more GPIO pads provided in file have invalid pad address set (group / pad number).	Configuration of GPIOs within the config file should be valid
537	Two or more GPIO pads provided in file have same pad address set.	Configuration of GPIOs within the config file should be valid
538	Update this var is not supported if AMT is provisioned.	Variable is supported only in un-provisioned state
539	Unsupported combination of EHBC state and privacy level files.	EHBC privacy levels in FIT should make up a correct combination
540	CSE is in Recovery Mode but FWSTS registers report Normal Mode.	<a href="#">Contact Intel</a>
541	The Flash Image that was burned on the platform was corrupted. CSE is in Recovery Mode at first boot.	Reflash SPI or perform a full update
542	Clear option is not supported for Hashed vars.	N/A
543	Update FTPR must have the same NVM compatibility (SPI/UFS) as Flash FTPR.	N/A
544	Incorrect API version.	Verify APIs used are from matching FW version
545	Update RBEP must have the same NVM compatibility (SPI/UFS) as Flash RBEP.	N/A
546	Update NFTP must have the same NVM compatibility (SPI/UFS) as Flash NFTP.	N/A
547	Update IUP must have the same NVM compatibility (SPI/UFS) as Flash IUP.	N/A
548	Flash wear out violation.	Reflash SPI with new image
549	Flash corruption.	Reflash SPI with new image
550	Profile is not selectable in BIOS.	Verify Profiles are defined in FIT

Error Code	Error Message	Response/Recovery actions
551	Profile index is too large.	Index must be predefined in FIT
552	No such profile in flash.	Profile should be defined in FIT
553	Command is not supported after EOP.	Set pre-EOP or disable EOP
554	No such record.	Need to verify register exists
555	File not found.	<a href="#">Contact Intel</a>
556	Invalid record format.	Verify format of given record value
557	UOB record is too large.	Record should be of valid size Not used
558	Clock is not configurable	Make sure to enable configuration of Clock in FIT. The profile defined is standard.
559	Register is locked.	Verify the status of the accessed register
560	No valid PRE UOB.	Not used
561	No valid PERM UOB.	Verify permanent UOB record exists
567	No profile exists.	Verify desired profile is pre-defined in the image
568	Authentication failure.	<a href="#">Contact Intel</a>
569	Pending file.	Perform a G3 power cycle. If unsuccessful then perform a Clear CMOS. If unsuccessful reflash the SPI
570	Replay protection rebinding of UFS device is not allowed	<a href="#">Contact Intel</a>
571	Frequency is too high.	Make sure to run within the limited frequency Ranges
572	Pending to revert to default.	Global Reset
573	Pending to set profile.	Global Reset
574	Invalid profile	Check profile is defined in FIT
575	Invalid OEM data.	Clocks configurations are invalid, please verify values configured through FIT
576	Failed to read dynamic record.	Retry. If issue persists, <a href="#">contact Intel</a>
577	Replay protection of UFS device reported fatal error	<a href="#">Contact Intel</a>
578	Frequency is too low.	Verify value is not below pre-defined range
579	Replay protection disablement fuse is set	<a href="#">Contact Intel</a>
580	SSC mode change is not supported.	Check SSC configuration in FIT
581	Range Violation: SSC is too high.	Check SSC to be in range
582	Survivability sync disabled.	<a href="#">Contact Intel</a>
587	Replay protection RB fuse is not set. RPMB manufacturing process is not complete	Perform End-of-Manufacturing to commit fuses
588	Valid UOB already present.	Invalid or erase existing UOB



Error Code	Error Message	Response/Recovery actions
589	Waiting for power cycle.	Global Reset
590	Survivability table access violation.	<a href="#">Contact Intel</a>
591	Survivability table is too large.	<a href="#">Contact Intel</a>
592	EID does not exist.	<a href="#">Contact Intel</a>
594	Failure in reading PCIe Data.	Retry. If issue persists, <a href="#">contact Intel</a>
595	Failure in writing PCIe Data.	<a href="#">Contact Intel</a>
596	Invalid PCIe configuration data.	Verify configuration data is valid
597	CMD not supported before DID.	Send CMD post DID
598	FIA MUX error - max config sku mismatch.	Need a valid SKU for Mux-ing
599	FIA MUX error - no config found.	Informative error. If error persists, <a href="#">contact Intel</a>
600	FIA MUX error - getting laned limit.	Retry action. If issue persists, <a href="#">contact Intel</a>
601	FIA MUX error - reading configuration from file.	Reflash SPI
602	FIA MUX error - prompting to global reset.	Perform a manual Global Reset
603	Invalid FIA MUX configuration.	Verify configuration of FIA is valid
604	FIA MUX error - reading configuration to file.	Retry action. If issue persists, <a href="#">contact Intel</a>
605	FIA MUX error - reading configuration from straps.	Retry action, then if needed perform a G3 power cycle. If issue persists, <a href="#">contact Intel</a>
607	Specified PLL is not supported	Incorrect clock was set as target for retrieval. Verify clock is valid
608	Data item unsupported.	Check command is valid
609	Oem profile card violation.	CRDR in OEM profile is invalid
610	Replay protection rebinding is disabled. RPMB manufacturing process is not complete	Enabled Replay protection rebinding in image
611	Invalid buffer length	<a href="#">Contact Intel</a>
612	Invalid argument.	Command should be verified to be valid
613	AMT Ipv4 Interface is disabled.	Enable IPV4
614	Interface does not exists.	AMT feature to be retrieved should be enabled
615	Invalid user consent policy file.	User consent NVAR should have a valid value
616	Anti-Rollback SVN feature is disabled.	Enabled ARB SVN or remove check
617	Input file is too big.	Verify file is valid
618	PCHC FW version mismatch, actual value is - %s	Check PCHC FW version value in config file
619	Update of partition between engineering build vs regular build is not allowed.	N/A
620	Unknown hardware platform.	Make sure tool/s being used match the platform at hand

Error Code	Error Message	Response/Recovery actions
621	Unsupported hardware platform. %s	Verify platform is supported by Intel
622	Input configurable file contains cse file name duplicates.	Check config file has no duplicates
623	ISIF must have the same major API version as the version inside the list in FTPR, Partial Update.	N/A
624	ISIF partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	N/A
625	Some manifest extension is missing in ISIF. Wrong MEU Tool was used to create the partition.	N/A
626	Loader failed to verify manifest signature of ISIF.	Verify MEU used version is relevant
627	ISIC must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	N/A
628	ISIC partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	N/A
629	Some manifest extension is missing in ISIC. Wrong MEU Tool was used to create the partition.	N/A
630	Loader failed to verify manifest signature of ISIC.	Verify MEU used version is relevant
631	Update FTPR must have the same FW Type and Sub-Type as Flash FTPR	N/A
632	SAMF must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	N/A
633	SAMF partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	N/A
634	Some manifest extension is missing in SAMF. Wrong MEU Tool was used to create the partition.	N/A
635	Loader failed to verify manifest signature of SAMF.	Verify MEU used version is relevant
636	PPHY must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	N/A
637	PPHY partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition.	N/A
638	Some manifest extension is missing in PPHY. Wrong MEU Tool was used to create the partition.	N/A
639	Loader failed to verify manifest signature of PPHY.	Verify MEU used version is relevant
640	Reserved	N/A
641	Reserved	N/A
642	This command is not supported on SPS platforms	N/A
643	GBST must have the same major API version as the version inside the list in FTPR, in the Update Image for Full Update, in the Flash Image for Partial Update.	N/A
644	GBST partition hash and calculated hash are not the same. If partition hash is zero - wrong MEU Tool was used to create the partition	N/A
645	Some manifest extension is missing in GBST. Wrong MEU Tool was used to create the partition.	N/A
646	Loader failed to verify manifest signature of GBST	Verify MEU used version is relevant

Error Code	Error Message	Response/Recovery actions
647	It is not allowed to enable NVAR [Intel(R) AMT Supported] when [Intel(R) Manageability Hardware Status FPF] is set to disabled	Enabled Manageability HW FPF
648	[Intel(R) Manageability Hardware Status FPF] is set to disabled, but NVAR [Intel(R) AMT Supported] is enabled	Verify both NVAR & FPF are enabled
649	[Intel(R) Manageability Hardware Status FPF] is set to disabled, but [Intel(R) Manageability Hardware Status NVAR] is enabled	Verify both NVAR & FPF are enabled
650	PMC rejected MPHY table	<a href="#">Contact Intel</a>
651	LAN I2C protocol failure	Verify I2C is properly connected to the NIC and FW residing on NIC is functioning properly and supporting vPro settings. Verify I2C address configured in FIT is valid
652	IP Loading test is undefined	Need to debug failing IP. If issue persists, <a href="#">contact Intel</a>
653	IP Loading test memory error	Error with memory allocation. Debug CSE and <a href="#">contact Intel</a>
654	IP Loading test is disabled	Need to Enable IP testing if relevant.
655	IP Loading test generic error	Need to debug CSE and failing IP. If issue persists, <a href="#">contact Intel</a>
656	IP Loading test failed to load	Need to verify IP FW in IFWI is valid. If issue persists, <a href="#">contact Intel</a> .
657	IP Loading test verification failure	Need to verify IP FW in IFWI is valid. If issue persists, <a href="#">contact Intel</a>
658	IP Loading test reading failure	Need to verify IP FW in IFWI is valid as well as verifying NVM boot device is readable. If issue persists, <a href="#">contact Intel</a>
659	IP Loading test hardware failure	Need to debug failing IP. If issue persists, <a href="#">contact Intel</a>
660	IP Loading ISH test is undefined	Need to debug failing IP. If issue persists, <a href="#">contact Intel</a>
661	IP Loading ISH test memory error	Error with memory allocation. Debug CSE and <a href="#">contact Intel</a>
662	IP Loading ISH test is disabled	Need to Enable IP testing if relevant.
663	IP Loading ISH test generic error	Need to debug CSE and failing IP. If issue persists, <a href="#">contact Intel</a>
664	IP Loading ISH test loading failure	Need to verify IP FW in IFWI is valid. If issue persists, <a href="#">contact Intel</a>
665	IP Loading ISH test verifying failure	Need to verify IP FW in IFWI is valid. If issue persists, <a href="#">contact Intel</a>
666	IP Loading ISH test reading failure	Need to verify IP FW in IFWI is valid as well as verifying NVM boot device is readable. If issue persists, <a href="#">contact Intel</a>
667	IP Loading ISH test hardware failure	Need to debug failing IP. If issue persists, <a href="#">contact Intel</a>
668	CSE is in Unlocked Mode. FW Update is not possible.	Verify CSE is in locked mode
669	SAM and PPHY sub-partitions are not present.	Remove SAM & PPHY partitions from update image or reflash SPI
670	SAM sub-partition is not present.	Remove SAM partitions from update image or reflash SPI
671	PPHY sub-partition is not present.	Remove PPHY partitions from update image or reflash SPI

Error Code	Error Message	Response/Recovery actions
672	Attestation KeyBox NVAR is empty	Verify corresponding NVAR has a value not null
673	Attestation KeyBox file size invalid	Verify file size is valid
674	Attestation KeyBox file data is invalid	Verify NVAR value is valid
675	Attestation KeyBox is not provisioned	Provision Attestation KeyBox
676	Invalid value for Signing Policy	Verify Signing Policy has a valid value
677	Invalid value for Reseal Timeout	Verify Reseal Timeout has a valid value
678	Read PCI failed.	Global Reset & check PCI is properly connected
679	Write PCI failed.	Global Reset & check PCI is properly connected
680	Read MMIO failed.	Global Reset & check PCI is properly connected
681	Write MMIO failed.	Global Reset & check PCI is properly connected
682	Reboot failed.	Manual Restart
683	Get SPI MMIO failed.	Global Reset & check PCI is properly connected
684	Extracting driver resource failed	Global Reset & check PCI is properly connected
685	Creating temporary folder for driver installation failed.	<a href="#">Contact Intel</a>
686	Creating path for driver installation failed.	<a href="#">Contact Intel</a>
687	Handling WOW64 redirection for driver installation failed.	<a href="#">Contact Intel</a>
688	Delete file when uninstalling driver failed.	<a href="#">Contact Intel</a>
689	Creating driver failed.	<a href="#">Contact Intel</a>
690	Starting driver failed.	<a href="#">Contact Intel</a>
691	Stopping driver failed.	<a href="#">Contact Intel</a>
692	Removing driver failed.	<a href="#">Contact Intel</a>
693	Driver operation failed.	<a href="#">Contact Intel</a>
694	WDF installer failure.	<a href="#">Contact Intel</a>
695	Driver installation failed.	<a href="#">Contact Intel</a>
696	Uninstalling driver failed.	<a href="#">Contact Intel</a>
697	The given file name is a reserved name by OS.	Change name of the file not to be a reserved OS name
698	Minimum allowed ARB SVN do not match executing ARB SVN	Verify ARB being committed is greater than minimum allowed ARB
699	HW Glitch Detection is Disabled	Verify status of HW Glitch Detection
700	HW Glitch Detection is Enabled	Verify status of HW Glitch Detection
701	MRC Init Status failed	Fail due to wrong SPD or some other wrong memory configuration given as

Error Code	Error Message	Response/Recovery actions
		an input to FIT and doesn't match the specific board design
702	MAKE_STR(FW_STR) " version mismatch	<a href="#">Contact Intel</a>
703	Error in HDA initialization	Make sure the HDA codec verb table file is correct
704	Master access permissions don't match Intel recommended values	Make sure to run EOM flow
705	OPROM version mismatch	Either the OPROM version used is wrong or the input given as the expected version is wrong
706	GFX FID not reached	<a href="#">Contact Intel</a>
707	GFX Fatal error occurred	<a href="#">Contact Intel</a>
708	GFX FSP failure occurred	<a href="#">Contact Intel</a>
79	GFX CSE reset on error occurred	<a href="#">Contact Intel</a>
710	EOM config file size is incorrect	Correct EOM Config file size and retry
711	Update of Boot Partition Copy failed	Reperform FWUpdate
712	EOL VAR requires config file to be provided	NA
713	FWUpdate Data is shorter than the update image length	<a href="#">Contact Intel</a>
714	UPID HW ID is empty	Make sure UPID HW is configured properly
715	UPID feature is not supported	Enable UPID feature support in FIT tool
716	UPID Refurbish counter can be increment only 5 times	Maximum number of refurbishing has occurred
717	invalid parameter	Review and check UPID status and parameters
718	Platform is in Manufacturing Mode though NVAR Configuration State is Locked	Update of NVARs is blocked due to EOM state
719	Intel(R) " MAKE_STR(ME_STR) " is in End Of Post state	NA
720	Platform is in Manufacturing Mode though Flash Protection Mode is set to Protected	Reflash image and rerun MEmanuf testing
721	It is not allowed to disable [Intel(R) Manageability Hardware Status FPF] when NVAR [Intel(R) Manageability HW Status] is set to enabled	Manageability HW Status FPF & NVAR should be aligned with one another

**When contacting Intel, the below details must be provided within the submitted sighting:**

1. Add DCI logs
2. Add passing image
3. Add failing image
4. Detail reproduction steps
5. Indicate failure rate
6. Indicate whether reproducible on RVP
7. Indicate OS
8. Indicate SKU