



Intel® Management Engine Firmware 11.6 Release For Kaby Lake

Corporate / Consumer Release Notes - NDA

November 2016

***Revision 11.6.1.1142 Hot Fix 1 (HF)
U/Y/S/H Series***

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Revision History

Revision Number	Description	Revision Date
11.6.0.1052	Alpha Release for Greenlow Refresh	May 2016
11.6.0.1058	ENG U/Y/S/H	June 2016
11.6.0.1062	ENG U/Y/S/H	June 2016
11.6.0.1065	ENG U/Y/S/H	June 2016
11.6.0.1069	Beta U/Y/S/H	July 2016
11.6.0.1105	Beta 2 U/Y/S/H	August 2016
11.6.0.1117	PC U/Y/S/H	September 2016
11.6.0.1121	PV U/Y/S/H	September 2016
11.6.0.1121	PC S/H	September 2016
11.6.0.1126	PC U/Y	October 2016
11.6.1.1142	HF U/Y/S/H	November 2016

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1 Introduction

1.1 Scope of Document

This document provides component level details of the downloaded kit and the contents of each folder in the kit.

1.2 Acronyms

Term	Description
BIOS	Basic Input Output System
CCM	Client Control Mode (See: HPC)
CIM	Common Information Model
FW	Firmware
GbE	Gigabit Ethernet
HBC	Host Based Configuration
HECI	Host Embedded Controller Interface. Same as Intel® MEI.
Intel® CRB	Intel® Customer Reference Board
Intel® CIRA	Intel® Client Initiated Remote Access
Intel® DAL	Intel® Dynamic Application Loader (Intel® DAL)
Intel® FIT	Intel® Flash Image Tool
Intel® ICCS	Intel® Integrated Clock Controller Service
Intel® MSS	Intel® Management and Security Status
Intel® IPT	Intel® Identity Protection Technology
Intel® MEI	Intel® Management Engine Interface (interface between the Management Engine and the Host system)
Intel® NFC	Intel® PROSet/Wireless Near Field Communications Software
Intel® PETS	Intel® Platform Enablement Test Suite
Intel® PTT	Intel® Platform Trust Technology
Intel® SBA	Intel® Small Business Advantage
ISV	Independent Software Vendor
IUP	Independently Updatable Partitions
KVM	Keyboard/Video/Mouse
LAN	Local Area Network
LMS	Local Manageability Service
MAC	Media Access Control



Term	Description
MOF	Managed Object Format
MRC	Memory Reference Code
OS	Operating System
PCH	Platform Control Hub
PKI-CH	Public Key Infrastructure with Certificate Hashing
RCFG	Remote configuration
SOL	Serial over LAN
SPI	Serial Peripheral Interface
SUT	System Under Test
SVN	Security Version Number. Used in Firmware Upgrade / Downgrade capabilities
TDT	Theft Deterrence Technology. Previous name for AT-p, which is part of the Intel® Anti-Theft Technology.
UNS	User Notification Service
VCN	Version Control Number. Used in Firmware Upgrade / Downgrade capabilities
WMI	Windows* Management Instrumentation
WSI	Web Services Interoperability Organization



2 Release Kit Summary

This document covers the following Intel® Management Engine Firmware SKUs for the Kaby Lake U/Y/S/H Series platform:

- Intel® Management Engine Firmware U/Y/S/H Platforms.
 - Corporate
 - Consumer

2.1 Release Kit Details

- * **Firmware Support** : Intel® AMT, Intel® SBA, PAVP, Intel® ICCS, Intel® IPT, Intel® NFC, Intel® Platform Protection Technology with Boot Guard (Anchor Cove), Intel® SVT
- * **Kit Release** : Kaby Lake Release – 11.6.1.1142
- * **Target Platform** : U/Y/S/H Platform
- * **Zip name** : Intel®_ME11.6_Corporate_11.6.1.1142.zip
Intel®_ME11.6_Consumer_11.6.1.1142.zip

Contents:

- Intel® Management Engine Firmware (for Kaby Lake U/Y/S/H Series Platform)
- GbE PCH SPI components
- Intel Reference System BIOS
- Intel® Management Engine BIOS Extension (Intel® MEBX) image

2.2 Kit Overview

The kit can be downloaded from VIP (<https://platformsw.intel.com/>).

Note: A username and password are required to access the website and to log in. User must have an account created for access.

1. After logging in, click on the link 'View All Kits' on the left side of the web page.
2. Click on the corresponding kit number that is to be downloaded.
3. Select and open the appropriate kit component.
4. The Supporting Documentation folder under the selected component contains the following supporting documentation:
 - Corporate FW Release Notes – This document gives an overview of the contents of the entire downloaded component. Also provides the details on closed and open Sightings and bugs with this kit release.
 - BIOS Release Notes – This document provides details of BIOS issues resolved with the kit.



- Click on the Installation Files folder under the selected component and extract the .zip kit into a folder (Example: C:\).

2.3 Contents of Downloaded Kit

Download the kit, as previously specified, into the directory (C:\). The details of the contents and directory structure are listed below:

2.3.1 Intel® SW Components

Installers	Description
ME_SW_MSI	<ul style="list-style-type: none">Intel® MEI is the interface between the host and the Intel® Management Engine firmware.Drivers and applications on the host that wish to interact with Intel® Management Engine through the host interface use the Intel® MEI host Windows* driver.Intel® MEI driver is installed by running: C:\[skuName_x.x.xxxx]\Installers\ME_SW_MSI\SetupME.exeTo view the installer options, enter the following in a Command window: setup.exe -? and the help dialog should appear.Additional information can be found in the <i>Intel(R)_ME_SW_Installation_Guide.pdf</i> document within this kit.
MEI-Only Installer MSI	<ul style="list-style-type: none">The MEI-Only Installer only installs the Intel® MEI driver.

2.3.2 Image Components

NVM Images are included in:

- Intel® ME11.6_Corporate_11.6.1.1142.zip
- Intel® ME11.6_Consumer_11.6.1.1142.zip

This folder contains the component images (BIOS image, Intel® Management Engine image, and GbE image) that are integrated to form the final flash image. The table below lists the different images and briefly describes them.



Image	Description
BIOS	<ul style="list-style-type: none"> • Contains Intel Reference System BIOS. • Supported devices: Kaby Lake U/Y/S/H Series Platform. • After flashing a new BIOS, enter BIOS setup and 'Load Default Settings'. Then 'Save and Exit' from Setup. This is a required step when updating to a new BIOS release. • BIOS image components are located in the following directory: C:\[skuName_x.x.xxxx]\Image Components\BIOS\ • For latest release information and known issues on the BIOS, please refer to the Intel® ME BIOS Specification and BIOS RC release notes.
Intel® ME	<ul style="list-style-type: none"> • The Intel® Management Engine firmware contains code and configuration data for Intel® Management Engine functions. • This is one of the regions that are integrated into the final flash image that is built using the Flash Image Tool, and is then programmed into the flash. <p>NOTES:</p> <ul style="list-style-type: none"> • For more details on building the flash image, please refer to KBL Corporate / Consumer FW Bringup Guide.pdf, included in the downloaded kit. • For more details on the firmware and related issues, please refer to Important Notes section of this document.
GbE	<ul style="list-style-type: none"> • The GbE hardware is a component embedded in the MCP. GbE region of the flash contains bits that define the configuration of the GbE hardware. • The given Gigabit Ethernet or GbE component image should be integrated with the other images (Intel® ME and BIOS) using the Flash Image Tool, to create a single binary flash image. • The GbE image will be programmed into the SPI flash as part of this integrated image using the Flash Programming Tool. • The GbE folder contains images for PHY silicon.



2.3.3 System Tools

System Tools are included in:

- Intel® ME11.6_Corporate_11.6.1.1142.zip
- Intel® ME11.6_Consumer_11.6.1.1142.zip

This folder contains system tools that are common to all the firmware components. Please refer to the **System Tools User Guide.pdf** document for details on tool usage.

Tool	Description
Intel® Flash Image Tool	<ul style="list-style-type: none">• Used to assemble the different elements of the SPI flash Descriptor, Intel Reference System BIOS, Intel® Management Engine firmware, Gigabit Ethernet (GbE) into a single binary image.• Provided as a GUI tool.• OS Support:<ul style="list-style-type: none">- Windows* 7 (64-bit)- Windows* Server 2008(R2) – 2012(R2) (32/64-bit)- Windows* 8.1 (64-bit)- Windows* 10 (64-bit)
Intel® Flash Programming Tool	<ul style="list-style-type: none">• Used to write the flash image into the SPI flash device.• DOS, EFI and Windows* command line tools provided.• OS Support:<ul style="list-style-type: none">- MS DOS 6.22 and above.- DRMK, FreeDOS.- UEFI(64bit)- Windows* PE (3.1, 4.0, 5.0, 5.1)- Windows* 7 (32/64-bit)- Windows* Server 2008(R2) – 2012(R2) (32/64-bit)- Windows* 8.1 (64-bit)- Windows* 10 (64-bit)
Intel® FWUpdate	<ul style="list-style-type: none">• Used to update the Intel® Management Engine's firmware.• DOS, EFI and Windows* command line tools provided.• OS Support:<ul style="list-style-type: none">- MS DOS 6.22 and above.- DRMK, FreeDOS.- UEFI(64bit)- Windows* PE (3.1, 4.0, 5.0, 5.1)- Windows* 7 (32/64-bit)- Windows* Server 2008(R2) – 2012(R2) (32/64-bit)- Windows* 8.1 (64-bit)- Windows* 10 (64-bit)



Tool	Description
Intel® MEInfo	<ul style="list-style-type: none"> Verifies that Intel® Management Engine (Intel® ME) firmware is alive and returns data about Intel® ME. DOS, EFI and Windows* command line tools provided. OS Support: <ul style="list-style-type: none"> MS DOS 6.22 and above. DRMK, FreeDOS. UEFI(64bit) Windows* PE (3.1, 4.0, 5.0, 5.1) Windows* 7 (32/64-bit) Windows* Server 2008(R2) – 2012(R2) (32/64-bit) Windows* 8.1 (64-bit) Windows* 10 (64-bit)
Intel® MEManuf	<ul style="list-style-type: none"> Used on the manufacturing line to validate platform is configured properly. DOS, EFI and Windows* command line tools provided. OS Support: <ul style="list-style-type: none"> MS DOS 6.22 and above. DRMK, FreeDOS. UEFI(64bit) Windows* PE (3.1, 4.0, 5.0, 5.1) Windows* 7 (32/64-bit) Windows* Server 2008(R2) – 2012(R2) (32/64-bit) Windows* 8.1 (64-bit) Windows* 10 (64-bit)

2.3.4 Intel® ICCS Tools

Tool	Description
Clock Commander Tool (CCT)	<ul style="list-style-type: none"> ICC Tool is used to get Intel® ICCS registers and settings, see <i>ICC Tools User Guide</i> for more information. DOS, EFI and Windows* command line tools provided. OS Support: <ul style="list-style-type: none"> MS DOS 6.22 and above. DRMK, FreeDOS. UEFI(64bit) Windows* PE (3.1, 4.0, 5.0, 5.1) Windows* 7 (32/64-bit) Windows* Server 2008(R2) – 2012(R2) (32/64-bit) Windows* 8.1 (64-bit) Windows* 10 (64-bit)



2.4 Release Version Numbering Information

Typical release version numbering is as follows,

11.6.y.z (for example: 11.6.0.zzzz) where:

'11' refers to the Intel® Management Engine 11.x Firmware SKU for Kaby Lake U/Y/S/H Series Platform.

'6' represents point releases where new features or changes to existing features may be added.

'y' refers to Maintenance and Hot Fix release designations.

'z' refers to firmware release revision.

2.5 Firmware Update Information

Intel® ME Firmware Update (either upgrade or downgrade) is evaluated based on the SVN value, the VCN value, or the PV values. These values work in unison and can impose restrictions at the same time.

2.5.1 Firmware Update Terminology

SVN (Security Version Number): will be incremented if there is a high or critical security fix in Intel® ME Firmware. A downgrade to a lower SVN value will be prohibited.

VCN (Version Control Number): will be incremented if there is a security fix, a significant firmware change or a new feature addition. A downgrade to lower VCN value will be prohibited.

PV (Production Version): Intel® ME Firmware will have a PV bit set. Upgrade to a non-PV firmware is not allowed. An update from non-PV version to a PV is allowed.

Update rules:

- If the system is at PV (Production Version) quality firmware that has PV bit set, update to non-PV firmware is not allowed. Only Non-PV to PV is allowed.
 - Example: 11.0.0.zzzz PV cannot upgrade to 11.6.0.zzzz Alpha
- Update to firmware that has lower SVN (Security Version Number) is not allowed.
- Update to firmware that has lower VCN (Version control number) is not allowed.
- Update across major point release is not allowed for example 10.x to 11.x.
- If firmware update setting in Intel® MEBX is password protected, Intel® MEBX password must be supplied during the update.



2.5.2 VCN Firmware Upgrade / Downgrade Table

Intel® ME FW Version	SVN #	VCN #	PV (1 or 0)
11.6.1.1142 (HF U/Y/S/H)	1	121	1
11.6.0.1126 (PC U/Y)	1	120	1
11.6.0.1126 (PC S/H)	1	120	1
11.6.0.1121 (PV U/Y/S/H)	1	118	1
11.6.0.1117 (PC U/Y/S/H)	1	118	1
11.6.0.1105 (Beta 2 U/Y/S/H)	1	118	0
11.6.0.1069 (Beta U/Y/S/H)	1	118	0
11.6.0.1065 (ENG U/Y/S/H)	1	117	0
11.6.0.1062 (ENG U/Y/S/H)	1	65	0
11.6.0.1058 (ENG U/Y/S/H)	1	65	0
11.6.0.1052 (ENG U/Y)	1	15	0



3 Features Supported

This **HF release** firmware supports Corporate/Consumer SKU platforms.

Supported = ✓ Limited Support = ⚠ Not Supported = ✗

Technology	Support
Intel® AMT	✓
Intel® Boot Guard	✓
Intel® DAL	✓
Intel® IPT	✓
Intel® Insider™	✓
Intel® NFC	✓
Intel® PTT	✓
Intel® SMB	✓
BLU-RAY* PLAYBACK	✓
Deep Sx	✓
Full Moff Power flows (PP1)	✓
Full M3 Power flows (PP2)	✓
WLAN	✓

3.1 Important Notes

In order to align with online authentication industry standards, Intel® Identity Protection Technology software (included in the Intel® Management Engine software installer for KBL) has been updated with the following:

Intel® Identity Protection Technology (Intel® IPT) is now aligned with [FIDO*](#) industry standard and supports the standard online authentication specification.

Intel® IPT doesn't require web browsers' plugins anymore (plugin free).

The updates above are required for Secured On-Line Authentication for Banking and Payments.

- The main SKU's for Kaby lake Intel® ME 11.6 will be focused towards client platforms only.
- Please see Intel® Xeon® Processor snapshot collateral for Intel® ME 11.6 workstation/server platform schedules
- IOC is only supported on Win10 64 bits.
- Compliance test for IOC can be found in IPT kit 5.0.18.0



3.2 Hardware Configurations

This release supports the following HW configurations:

- **KBL U/Y/S/H (QS)**
- **KBL U/Y/S/H (ES)**

3.3 Best Known Configuration

For the latest Client Based Kaby Lake U/Y/S/H Series Platforms Best Known Configuration (BKC), please review Document ID# **TBD according to platform communication**



4 Kit Details

Kit	Build Details	Changes since previous release (11.6.0.1126)	Reasons for changes
Firmware Version	11.6.1.1142	Yes	See FW issues highlighted below
Intel® MEBX Version	11.0.0.0010	Yes	See MEBx Release Notes
CRB BIOS Version	KBLX052_04	Yes	See BIOS Release Notes
Intel® MEI Driver Version	11.6.0.1032 Submission ID (Windows* 7): 1898161 Submission ID (Windows*8/10): 1898439	Yes	See FW issues highlighted below
SOL Driver Version	11.6.0.1009 Submission ID: 1889498	No	N/A



5 Intel® ME New Features - RCR's

RCR #	Change Info	Status
1504318880	<p>Description: Enhanced the detection abilities of Intel®vPRO capable wireless devices in Intel® MEInfo & Intel® MEManuf.</p> <p>Background: Intel® MEInfo & Intel® MEManuf recognized a non-vPro WLAN card as an Intel® vPro resulting in the failure of the WLAN functionality test</p>	Implemented
1304623258	<p>Description: Intel® MEU to support export/import of manifests signed by 3rd party with placing the Intel® MEU when signing.</p>	Implemented
1504339089	<p>Description: Updated Intel® MEManuf to accept 3rd party permission values for EC region.</p> <p>Background: Intel® MEManuf EOL checks the flash region for the access permission value for EC region was removed accepting 3rd party permission values for EC region.</p>	Implemented
1304461113	<p>Description: Secure NFC has been removed from KBL.</p> <p>Background: In the Intel® FIT tool, the default configuration for NFC has been changed to become disabled in order to allow 11.5/11.6 FW to support NFC on SKL platforms.</p>	Implemented



6 ***Issue Status Definitions***

This document provides sightings and bugs report for Intel® ME Firmware 11.6 SKU for the Kaby Lake U/Y/S/H Series Platform. At the time of a milestone release, this report will be distributed with the Intel® ME Kit and will provide information on new issues and the status of old issues (replacing the Release Notes document).

Closed Issues: This category will only display closed issues within the current Intel® ME Kit release. After each release, old issues will be dropped down to the “Archive” section and then new closed issues will take its place back up top for the next release. If an issue is posted in this section, it will indicate that the issue has been verified and fixed within the kit that is being released.

Known Issues: This category will display all Known Issues since the Alpha release and will remain in this section until fixed or noted otherwise. “Known Issues” are still under investigation and may or may not be root caused.

Archive – Fixes in Previous Kits: This category will display all closed issues that were closed in their respected kit#. This section will serve as a history of fixed issues.

Sightings listed in this document apply to the Kaby Lake U/Y/S/H SKU’s unless noted otherwise in this document or in the sightings tracking systems.



7 Closed Issues – 11.6.1.1142

Issue # Found in Kit #	Description	Details	Affected Sku's
MWG100264501 11.6.0.1113	WebUI & MDTK don't return the expected ASF message of "No system memory" in events log.	Affected Component: FW.AMT - iAMT Impact: No ASF message is seen.	Corp U/Y/S/H Series
229311 11.6.0.1121	Intel® MEInfo is failing to communicate with the Precise Touch via HECI3 under UEFI.	Affected Component: SW.Tools.MEInfo Impact: Errors in the log for Precise Touch Info were seen.	Cons/Corp U/Y/S/H Series
229361 11.6.0.1128	Touch Stops for ~4 minutes when quickly tapping with one finger.	Affected Component: FW.OS.API	Cons/Corp U/Y/S/H Series
229283 11.6.0.1124	Intel® MEInfo fails to communicate with the Precise Touch driver under Windows	Affected Component: SW.Tools.MEInfo Impact: Unable to make use of Intel® MEInfo tool for Precise Touch.	Cons/Corp U/Y/S/H Series
229313 11.6.0.1119	Updating FW from 11.0 to 11.6 cause's slow BIOS boot.	Affected Component: FW.Bringup.ICC Impact: Booting to BIOS and then to OS is very slow.	Corp U/Y/S/H Series
229335 11.6.0.1000	BSOD in Intel® MEI during S4 Stress	Affected Component: SW.HECI Driver Impact: S4 stress will show BSOD around iteration no.500.	Cons/Corp U/Y/S/H Series
229319 11.6.0.1117	Memory leak detected during long S3 stress as allocations weren't freed after stress was over.	Affected Component: SW.HECI Driver Impact: Memory was still allocate for a few hours after stress was over.	Corp U/Y/S/H Series
MWG100262796 11.6.0.1100	Getting DE authenticate after ~1 minute of closing a session in CS mode	Affected Component: FW.AMT - iAMT Impact: No connectivity during CS.	Corp U/Y/S/H Series
1604177707 11.6.0.1055	Wireless to CSME handoff is not seen when cycling between power states (S0→S3,S4,&S5 & vice versa)	Affected Component: FW.CSME Impact: Session is either disconnected or taken over by CSME.	Cons/Corp U/Y/S/H Series
228932 11.6.0.1062	After AC/DC switch in S4, Intel® AMT 'PowerState' property value is 'Off Soft' instead of 'Hibernate Off Soft'	Affected Component: FW.OS.Driver&Service.PMDriver Impact: Unable to determine system state with Intel® AMT WEbUI or WSMAN-based management tools.	Corp U/Y/S/H Series



Issue # Found in Kit #	Description	Details	Affected Sku's
229063 11.6.0.1193	Intel® ME driver can't be installed successfully with an error message seen on Windows* 8.1 & Server 2012R2	Affected Component: SW.Installer Impact: Intel® ME SW is not installed properly.	Corp U/Y/S/H Series
227917 11.6.0.1036	Intel® MEManuf generates tests that are not applicable for LBG	Affected Component: SW.Tools.MEManuf Impact: Tests irrelevant to LBG are failing.	Cons/Corp U/Y/S/H Series
229442 11.6.0.1126	Wake On Link fails to wake the system up with Intel® vPro FW.	Affected Component: FW.AMT.LinkManager	Corp U/Y/S/H Series
MWG100265381 11.6.0.1117	Failure in opening KVM, SOL, & IDER sessions in CM3 PG.	Affected Component: FW.AMT - iAMT	Corp U/Y/S/H Series
229433 11.6.0.1135	EOM update from 11.0 → 11.6 causes FW to enter recovery mode when performing clear CMOS. Intel® MEInfo return a "cannot connect to Intel® AMT" message.	Affected Component: FW.JoM.JVM Impact: Intel® ME FW won't work after performing a clear CMOS on an updated FW.	Corp U/Y/S/H Series
229437 11.6.0.1030	IMSS cannot open after installing Intel® ME driver X08 v1025	Affected Component: FW.AMT.Icon Impact: IMSS has to be loaded manually as it doesn't load automatically with OS boot.	Corp U/Y/S/H Series
229446 11.6.1.1139	Intel® MEInfo shows incorrect information about wireless HW ID as it reads 'No Intel WLAN card installed'.	Affected Component: SW.Tools.MEInfo Impact: Unable to check if Intel® WLAN module(8265) is installed via Intel® MEInfo tool	Corp U/Y/S/H Series
229252 11.6.0.1117	Intel® FPT close-MNF command is failing when using the '-verbose' flag.	Affected Component: SW.Tools.FPT	All U/Y/S/H Series
229151 11.6.1.1139	Intel® MEInfo shows incorrect information about wireless HW ID as it reads 'No Intel WLAN card installed'.	Affected Component: SW.Tools.MEInfo Impact: Unable to check if Intel® WLAN module(8265) is installed via MEInfo tool	Cons/Corp U/Y/S/H Series



Issue # Found in Kit #	Description	Details	Affected Sku's
1208892670 & 1209035270 11.6.1.1139	Intel® WiAMT connectivity is lost after entering Sx (Power Policy 2) and waiting for several minutes in idle.	Affected Component: Wireless AMT connectivity Impact: Intel® WiAMT connectivity will be lost after several minutes in idle (3-6 minutes). Connectivity is restored by reset to the system.	Corp U/Y/S/H Series
229322 11.6.0.1117	Quickly tapping the screen causes CSME to reset.	Affected Component: FW.OS.Driver&Service.iTouch Impact: Taping continuously & quickly on a touch or non-touch screen resets CSME	Cons/Corp U/Y/S/H Series



8 Known Issues – To Date

Issue # Found in Kit #	Description	Details	Affected Sku's
229472 11.6.0.1126	Event log shows an error message of 'OS lockup or power interrupt' in MESH when pressing PAUSE during POST.	Affected Component: FW.HECI Driver Impact: AMT watch dog feature will not function properly on Windows* 7 & discrepancy of AMT event log messages can be seen. Workaround: N/A Notes: Fixed in future build	Corp U/Y/S/H Series
228439 11.6.0.1110	When changing WLAN NIC from Snowfield Peak to Windstorm Peak, additional platform reset is required after system has booted for OS for the first time	Affected Component – Wireless AMT connectivity Impact: No wireless AMT connectivity after WLAN NIC change, until platform reset is performed Workaround: Notes: Fixed in future build	Corp U/Y/S/H Series
229148 11.6.0.1110	After an Intel® FWUpdLcl from 11.5 to 11.6 and upon provisioning Intel® MEBX, Intel® WebUI is inaccessible.	Affected Component – FW.AMT.WEB UI Impact: Unable to access Intel® WebUI after Intel® FWUpdate. Workaround: Notes: Fixed in future build	Corp U/Y/S/H Series



9 Archive - Fixes in Previous Kits

9.1 Kit 11.6.0.1136

Issue # Found in Kit #	Description	Details	Affected Sku's
229309 11.6.0.1117	If SUT comes up to S3 state after being in DS3 state, Intel® WebUI/Remote Control Page will misreport system is off when it is in Standby.	Affected Component – FW.Bringup.PMDriver Impact: Reported power states are incorrect which will affect ability to operate certain remote commands via Intel® AMT. Workaround: Notes:	Corporate S/H Series

9.2 Kit 11.6.0.1126

Issue # Found in Kit #	Description	Details	Affected Sku's
229249 11.6.0.1016	Windows* BSOD occurs when running long cycles of S3 stress.	Affected Component – SW.HECI Driver Impact: BSOD occurs when running S3 cycles. Workaround: Notes: Fixed in future build	Cons/Corp U/Y/S/H Series
229105 11.6.0.1016	Intel® MSS function buttons at the bottom are covered by the Windows* taskbar.	Affected Component – SW.AMT.Icon Impact: Intel® MSS buttons are covered by taskbar due to scaling issues. Workaround: Notes:	Corp U/Y/S/H Series
228792 11.6.0.1058	Intel® MEInfo fails on errors: Error 86: Communication error between application and Intel(R) ME module (FWU client) Error 81: Internal error (Could not determine FW features information)	Affected Component – FW.OS.Drivers&Service.HECI Impact: Intel® MEInfo may fail to run. Workaround: Notes:	Cons/Corp U/Y/S/H Series
229135 11.6.0.1110	Running S3 stress cycling causes the platform to hang on S3 entry after various iterations.	Affected Component – FW.AMT.Link Manager Impact: S3 hang present after many iterations. Workaround: Notes: Fixed in future build	Cons/Corp U/Y/S/H Series



Issue # Found in Kit #	Description	Details	Affected Sku's
229190 11.6.0.1110	Intel® FIT falsely call out a new XML is available.	Affected Component – SW.Tools.FlashImageTool Impact: Intel® FIT falsely displays newer XML version. Workaround: Notes:	Cons/Corp U/Y/S/H Series
229181 11.6.0.1102	"Error sending End of Post message to ME: HECI disabled, proceeding with boot!" error message after execute RCO power cycle reset when SUT is in S3.	Affected Component – FW.OS.Driver&Service.PMDriver Impact: May see unexpected BIOS error message during this flow. Workaround: Notes: Fixed in future build	Cons/Corp U/Y/S/H Series
229037 11.6.0.1102	Intel® FIT modifies FPSBA+102h bit 3 in wrong according to "eSPI Low Frequency Debug Override" configuration instead of bit 6.	Affected Component – SW.Tools.FlashProgrammingTool Impact: The eSPI Low Frequency Debug Override strap cannot be set properly and a wrong PCH strap would be set. Workaround: Notes: Fixed in upcoming release	Cons/Corp U/Y/S/H Series

9.3 Kit 11.6.0.1121

Issue # Found in Kit #	Description	Details	Affected Sku's
229184 11.6.0.1016	Intel® ME Manufacturing and Configuration Application (MCA) doesn't always check the Intel® ME file defaults content	Affected Component – MCA Impact: Some Intel® ME files may have their default value set without being properly checked by MCA. Workaround: Notes:	Corp U/Y/S/H Series

9.4 Kit 11.6.0.1117

Issue # Found in Kit #	Description	Details	Affected Sku's
229089 11.6.0.1105	When disconnecting LAN cable after S0-S3 transitions, Intel® AMT fails to obtain an IP address.	Affected Component – FW.AMT.Power Policy Manager Impact: Intel® AMT fails to obtain IP address after LAN disconnect. Workaround: Notes:	Cons/Corp U/Y/S/H Series



Issue # Found in Kit #	Description	Details	Affected Sku's
229125 11.6.0.1105	Building an image via Intel® FIT displays a "Failed To Build" error making it	Affected Component – SW.Tools.FlashImageTool Impact: Intel® FIT fails to build images. Workaround: Notes:	Cons/Corp U/Y/S/H Series
229036 11.6.0.1105	After a S5 to G3 flow, Bios indicates that the board is a DT instead of a MB.	Affected Component – FW.Bringup.SKU Impact: Bios displays a DT instead of MB. Workaround: Notes:	Cons/Corp H Series
226949 11.6.0.1105	After several iterations of S4 stress cycling, running Intel® MEInfo will display a PCI access error failure.	Affected Component – SW.Tools.MEInfo Impact: Intel® MEInfo shows PCI access error failure. Workaround: Notes:	Cons/Corp U/Y/S/H Series

9.5 Kit 11.6.0.1105

Issue # Found in Kit #	Description	Details	Affected Sku's
228857 11.6.0.1062	Loud beep may occur when running FPTW64.exe -reset with 11.6.0.1062 tool	Affected Component – SW.Tools.FlashProgramming Tool Impact: While tool and command is functional, loud beep occurs. Workaround: Disable audio Notes:	Cons/Corp U/Y/S/H Series
228870 11.6.0.1066	BIOS Guard Protection Override is missing within the Intel® FIT GUI when LP or H is selected.	Affected Component – SW.Tools.FlashImageTool Impact: BIOS Guard option may not appear in Intel® FIT. Workaround: Notes:	Cons/Corp U/Y/S/H Series
228872 11.6.0.1066	Wind Storm Peak micro code is not available within Intel® FIT.	Affected Component – SW.Tools.FlashImageTool Impact: No support for Wind Storm Peak cards within Intel® FIT. Workaround: Notes: Found to be issue in way FIT was opened and not a bug. Wind Storm Peak is available when opening FIT.	Cons/Corp U/Y/S/H Series



Issue # Found in Kit #	Description	Details	Affected Sku's
228633 11.6.0.1060	Platform may hang when running S3 stress, Intel® ME may also lose total connectivity.	Affected Component – FW.uKernel.MemoryMgr&Paging Impact: S3 stress platform hang. Workaround: Notes: Fixed between 11.6.0.1102 and 11.6.0.1105	Cons/Corp U/Y/S/H Series
228604 11.6.0.1052	Intel® MEBX password may not clear when running Un-configure Intel® ME within the BIOS.	Affected Component – FW.Apps.MCA Impact: Intel® MEBX password may not clear. Workaround: Notes: Fixed between 11.6.0.1102 and 11.6.0.1105	Cons/Corp U/Y/S/H Series
227618 11.6.0.1065	When provisioning Intel® AMT, a Cira connection may not be established when platform is down into a CM3 state, and Intel® AMT connectivity may also be lost.	Affected Component – FW.AMT.RemoteConnectivity Impact: Loss of Cira and Intel® AMT connectivity. Workaround: Notes: Fixed in 11.6.0.1105	Cons/Corp U/Y/S/H Series
228627 11.6.0.1065	Opening a USB Redirection session over WLAN with changed registers may not stay loaded when reopening a session. Next session may take a long time to open.	Affected Component – FW.Bringup.PMDriver Impact: Slow USB-R session opening. Workaround: Notes: Fixed in 11.6.0.1105	Cons/Corp U/Y/S/H Series
228851 11.6.0.1065	Running G3-S5-S0 stress will fail due to an error with Global Reset.	Affected Component – FW.Bringup.PMDriver Impact: System will fail G3 testing. Workaround: Notes: No longer able to reproduce failure after 11.6.0.1102	Cons/Corp U/Y/S/H Series
228831 11.6.0.1065	System may hang when running S0-S4 stress cycles.	Affected Component – FW.Bringup.PMDriver Impact: System hang when running S4 stress. Workaround: Notes:	Cons/Corp U/Y/S/H Series
228700 11.6.0.1061	Intel® PTT may enter a failure mode when running several S0-S3 iterations.	Affected Component – External Dependency - ACM Impact: Intel® PTT may fail upon S3 stress. Workaround: Notes: Applied only platforms supporting Intel® PTT (not POR for Workstation) Fixed in latest ACM update	Cons/Corp U/Y/S/H Series



Issue # Found in Kit #	Description	Details	Affected Sku's
228768 11.6.0.1062	Initiating a power button override (PBO) causes platform to auto wake, this is seen on H sku platforms.	Affected Component – FW.Bringup.PMDriver Impact: Platform may auto wake after PBO. Workaround: Notes: No longer able to reproduce in 11.6.0.1069 and later builds	<i>Cons/Corp H Series</i>
MWG100261102 11.6.0.1062	USBr session disconnects during warm reset.	Affected Component – FW.Bringup.PMDriver Impact: When performing warm reset with an open USBr session, session might get disconnected Workaround: Notes: Fixed in 11.6.0.1102	<i>Corp U/Y/S/H Series</i>
228439 11.6.0.1058	New WLAN NIC is recognized only after user initiated reset to the system	Affected Component – FW.AMT.FW update Impact: After replacing the WLAN NIC (e.g. Switch from Snowfield Peak to Windstrom Peak) and booting the system, additional reset is required (after the system has booted to OS) in order for the new NIC to be recognized by the OS. Until the reset is done, the new NIC will be yellow banded. Workaround: Notes: This is expected behavior; a reset is required in order to generate a manifest hash for the new NIC.	<i>Corp U/Y/S/H Series</i>

9.6 Kit 11.6.0.1069

Issue # Found in Kit #	Description	Details	Affected Sku's
228757 11.6.0.1062	Running S5 stress cycles cause platform hangs when in PP1.	Affected Component – FW.Bringup.PMDriver Impact: Platform may hang when running S5 cycles. Workaround: Notes:	<i>Cons/Corp U/Y/S/H Series</i>
228727 11.6.0.1062	When running a close manufacturing flow via Intel® FPT, running Intel® MEInfo will not have CPU read access.	Affected Component – SW.Tools.MEInfo Impact: Intel® MEInfo may not CPU read access after –closemnf. Workaround: Notes:	<i>Cons/Corp U/Y/S/H Series</i>



Issue # Found in Kit #	Description	Details	Affected Sku's
228591 11.6.0.1058	Bootguard ACM on profile 2 causes system to lock up and run continuous resets.	Affected Component – FW.OSDriver&Service.PMDriver Impact: Bootguard Profile 2 may not implement correctly. Workaround: Notes:	Cons/Corp U/Y/S/H Series
227837 11.6.0.1043	After provisioning Intel® MEBX then booting into the system OS to perform a power button override, the platform will immediately come back up into S0 and will not stay in S5.	Affected Component – FW.Bringup.PMDriver Impact: Platform may not stay in S5 when initiating a PBO. Workaround: Notes:	Cons/Corp U/Y/S/H Series
227920 11.6.0.1040	Platform hangs are present when DeepSx is enabled and then transitioning down into any Sx state. When in S0 AC/DC then going down into any Sx state upon removal of AC power, will cause the platform to be stuck in Sx.	Affected Component – FW.Bringup.PMDriver Impact: Platform hangs in Sx when DeepSx enabled. Workaround: Notes: Recovery by G3.	Cons/Corp S/H Series
MWG100254363 11.6.0.1043	After moving Sx to S0, with an open WLAN session, when Wi-Fi driver loads, Intel® ME might keep NIC ownership for more than 5 minutes. User will see empty scan list on host.	Affected Component – WLAN connectivity Impact: No WLAN connectivity to host. Workaround: None. Notes:	Cons/Corp U/Y/S/H Series
MWG100253336 11.6.0.1043	Sporadically, when trying to wake the system from Sx via WoWLAN (Wake on Wireless LAN) by opening a session to Intel® ME, the session does not open but the system is waking from Sx. After the system is in S0, WEB UI is unavailable in S0 via WLAN IP address.	Affected Component – WLAN connectivity Impact: No WLAN connectivity to Intel® ME. Workaround: Notes:	Cons/Corp U/Y/S/H Series
MWG100258269 11.6.0.1043	After opening WLAN sessions and performing SW RF-Kill On->SW RF-Kill OFF Intel® ME WebUI will lose connectivity and Intel® ME doesn't take NIC ownership in SX	Affected Component – WLAN connectivity Impact: No WLAN connectivity to host. Workaround: None. Notes:	Cons/Corp U/Y/S/H Series



9.7 Kit 11.6.0.1065

Issue # Found in Kit #	Description	Details	Affected Sku's
228643 11.6.0.1058	Intel® FPT is unable to read or write using the DOS version of the tool.	Affected Component – SW.Tools.MEManuf Impact: Intel® FPT may not read/write in DOS. Workaround: Notes:	Corp U/Y/S/H Series

9.8 Kit 11.6.0.1062

Issue # Found in Kit #	Description	Details	Affected Sku's
228601 11.6.0.1058	Intel® MEManuf may have issues running –EOL checks. Using the 32 bit application of the tool, it may cause crashes upon running EOL.	Affected Component – SW.Tools.MEManuf Impact: Intel® MEManuf may crash running EOL checks. Workaround: Notes:	Corp U/Y/S/H Series
227081 11.5.0.1011	With Intel® ME provisioned with WLAN, system will hang during multiple S3 flows.	Affected Component – FW.AMT.Link Manager Impact: Platform may hang during S3 cycling with WLAN provisioned. Workaround: Notes:	Corp U/Y/S/H Series
228506 11.6.0.1058	Running Intel® MEManuf –eol on tests that have “warnings” immediately show up as a “Failed” instead of “Pass with Warning” when ran. Applies to checking BIST, CONFIG, and VAR.	Affected Component – SW.Tools.MEManuf Impact: Intel® MEManuf –eol warning tests indicate as “Failed”. Workaround: Notes: EOL Var is fixed. EOL Config still failing	Corp U/Y/S/H Series
228573 11.6.0.1055	Changing NFC I2C values via Intel® FPT does not stick.	Affected Component – FW.NFC Impact: NFC values being changed through Intel® FPT may not work. Workaround:	Corp U/Y/S/H Series
228586 11.6.0.1062	Intel® IMSS may have inconsistencies with Chinese language.	Affected Component – SW.AMT.Icon Impact: Language inconsistencies. Workaround:	Corp U/Y/S/H Series



Issue # Found in Kit #	Description	Details	Affected Sku's
228552 11.6.0.1058	Platform may not enter PG state after a period of time. Reading the returned bits for PG shows platform does not enter the correct state.	Affected Component – FW.OSDriver&Service.PMDriver Impact: Platform may not enter PG state. Workaround: Notes:	Corp U/Y/S/H Series
228403 11.6.0.1052	Graphical errors are present when initiating a SOL session.	Affected Component – FW.AMT.Redirection Impact: Unstable SOL connectivity. Workaround: Notes: Fixed in future build	Corp U/Y Series
228296 11.6.0.1052	Running S3 stress cycles after a prolonged amount of time may lead to system hangs.	Affected Component – FW.AMT.Power Policy Manager Impact: Platform may hang during S3 flows. Workaround: Notes:	Corp U/Y Series

9.9 Kit 11.6.0.1058

Issue # Found in Kit #	Description	Details	Affected Sku's
228366 11.6.0.1052	Running Intel® FPT -f xx.bin – verbose in EFI may output an “Error367”	Affected Component – SW.Tools.MEInfo Impact: Intel® FPT may cause Error 367 in EFI shell. Workaround: Notes:	Corp U/Y Series
228455 11.6.0.1052	Pinging Intel® ME WLAN ip address takes a prolonged amount of time for a response back.	Affected Component – FW.AMT.RemoteConnectivity Impact: Long response time from Intel® ME ping. Workaround: Notes: Fixed in future build	Corp U/Y Series
228384 11.6.0.1052	When trying to update Intel® FW via Intel® FwUpdLcl in EFI shell, EFI tool fails to update FW.	Affected Component – SW.Tools.FwUpdLcl Impact: FW Update may not run on EFI. Workaround: Notes: Fixed in future build	Corp U/Y Series
100256150 11.6.0.1043	When performing restart with KVM/SOL/IDER session, the session is terminated when Host WLAN takes back the ownership from Intel® ME WLAN.	Affected Component – Redirection Impact: Redirection is lost during Host resets, when the Host WLAN incorrectly takes ownership back from Intel® ME WLAN. Workaround: Notes:	Corp U/Y/S/H Series



Issue # Found in Kit #	Description	Details	Affected Sku's
100257124 11.6.0.1043	ME_PM_27.2 (Stress test via PETS Tool) fails. Unable to connect to Intel® ME WebUI over WLAN when in S0.	Affected Component – Power stress testing Impact: Intel® ME PM27.2 fails. Workaround: Notes:	Corp U/Y/S/H Series
227795 11.6.0.1043	When dumping a config file via Intel® MEmanuf –cfggen, the xml file is missing valid WLAN power well tests.	Affected Component – FW.AMT.BIST Impact: WLAN power well tests missing from the Intel® MEmanuf cfggen xml. Workaround: Notes:	Corp U/Y/S/H Series
227789 11.6.0.1043	When using web application to start KVM session in S0, and then performing S0->Sx->S0 cycle, KVM session is lost.	Affected Component – FW.AMT.WEB UI Impact: over web application, KVM disconnects after Sx cycle. Workaround: restart KBM session in S0. Notes: Fixed in future build.	Corp U/Y/S/H Series
229140 11.6.0.1102	MEmanuf displays will report "Error 86: Communication error between application and Intel® ME module (FWU client)/Error 125:Internal error (Could not determine FW features information) ".	Affected Component – SW.Tools.MEmanuf Impact: Intel® ME is unresponsive	Cons/Corp U/Y/S/H Series

9.10 Kit 11.6.0.1052

Issue # Found in Kit #	Description	Details	Affected Sku's
228035 11.6.0.1043	When modifying the watchdog action setting reset triggering, audit logs come back with unknown record instead of displaying the reset trigger change.	Affected Component – FW.AMT.Agent.Presence Impact: Audit logs not catching history. Workaround: Notes:	Corp U/Y/S/H Series
227996 11.6.0.1040	OEM Public Key Hash data mismatch occurs when running Intel® MEmanuf –eol var –f config.xml –verbose. It fails even if the correct hash values are input into the cfggen.xml from the opened image in Intel® FIT.	Affected Component – SW.Tools.MEmanuf Impact: OEM Public Key Hash data mismatch occurs even with the correct hash value. Workaround: Notes:	Cons/Corp S/H Series



Issue # Found in Kit #	Description	Details	Affected Sku's
227993 11.6.0.1040	GuC Encryption Key data mismatch occurs when running Intel® MEmanuf -eol var -f config.xml -verbose. It fails even if the correct hash values are input into the cfggen.xml from the opened image in Intel® FIT.	Affected Component – SW.Tools.MEManuf Impact: GuC Encryption Key data mismatch occurs even with the correct hash value. Workaround: Notes:	Cons/Corp S/H Series
227663 11.6.0.1040	An Intel® ME reset occurs when recovering from a G3 flow.	Affected Component – FW.OS.Driver&Service.PMDriver Impact: Intel® ME resets from a G3 flow. Workaround: Notes:	Cons/Corp S/H Series