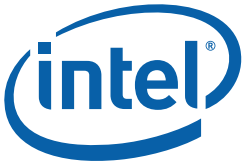

Intel® 6 Series Express Chipset - Intel® Management Engine Firmware 7.1 SKU

5MB Firmware Release Notes

7.1.13.1088 – Maintenance Release Hot Fix 3 (MRHF3)

May 2011

Intel Confidential

Contents

Revision History

Revision Number	Description	Revision Date
7.1.0.1001	• Engineering Release based off 7.0.0.1095	August 2010
7.1.0.1005	• Engineering Release based off 7.0.0.1110	September 2010
7.1.0.1008	• Engineering Release based off 7.0.0.1133	October 2010
7.1.0.1009	• Beta Release based off 7.0.0.1137	October 2010
7.1.0.1026	• Production Candidate Release (PC) based off 7.0.0.1152	November 2010
7.1.0.1028	• Production Candidate 2 Release	December 2010
7.1.0.1028	• Production Release	December 2010
7.1.1.1039	• Hot Fix Release	December 2010
7.1.2.1041	• Hot Fix 2 Release	January 2011
7.1.2.1041 v2	• Hot Fix 2 Release version 2	January 2011
7.1.3.1053	• Hot Fix 3 Release	February 2011
7.1.10.1065	• Maintenance Release	February 2011
7.1.13.1088	• Maintenance Release Hot Fix 3	May 2011

§

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 Intel® IPT Description and Support

7.1.13.1088 MR release is based on 7.1.10.1065 firmware (previous 7.1 kits) and supports Intel® IPT (restricted to Intel® Core™ CPUs).

Intel® ME 7.1 documentation is based on Intel® ME 7.0 documentation and the delta is covered in the following document: “Intel ME FW 7.1 – Bring-Up and Tools User Guide Delta”.

Intel® IPT software and collaterals are published as a separate kit in https://platformsw.intel.com (Kit #32740)

1.3 Acronyms

Term	Description
BIOS	Basic Input Output System
CRB	Intel® Customer Reference Board
FITC	Flash Image Tool
FOV	Fixed Offset Variable
FW	Firmware
GbE	Gigabit Ethernet
HBP	Host Base Provisioning
HECI	Host Embedded Controller Interface. Same as Intel® MEI.
ICC	Integrated Clock Control
Intel® AMT	Intel® Active Management Technology
Intel® AT	Intel® Anti-Theft Technology
Intel® IPT	Intel® Identity Protection Technology
Intel® MEI	Intel® Management Engine Interface (interface between the Management Engine and the Host system)
IMSS	Intel® Management and Security Status Application
LAN	Local Area Network

Term	Description
LMS	Local Manageability Service
MAC	Media Access Control
Intel® MEBx	Intel® Management Engine BIOS Extension
MRC	Memory Reference Code
OS	Operating System
BLU-RAY PLAYBACK	Bly-Ray Playback
PCH	Platform Control Hub
PKI-CH	Public Key Infrastructure with Certificate Hashing
RCFG	Remote configuration
SOL	Serial over LAN
SPI	Serial Peripheral Interface
TDT	Theft Deterrence Technology. Previous name for AT-p, which is part of the Intel® Anti-Theft Technology.
UNS	User Notification Service
WMI	Windows Management Instrumentation

2 Release Kit Summary

This document covers the following Intel® Management Engine Firmware SKUs for the Cougar Point platforms:

- Intel® Management Engine Firmware 7.1 Intel® 6 Series Express Chipset
  - Digital Office Intel® vPro™
  - Consumer

Kit release information is outlined below:

2.1 Release Kit Details

Digital Office Intel® vPro™

* **Firmware Support** : Intel® Active Management Technology
* **Release** : Intel® Management Engine Firmware 7.1 Intel® 6 Series Express Chipset Maintenance Release (MR) - 7.1.13.1088
* **Target Platform** : Sandybridge CPU & Cougar Point Chipset Family / PCH
* **.zip name** : CPT_5M_7.1.13.1088.zip

Contents:

- Intel® Management Engine Firmware (for Intel® 6 Series Express Chipset Family /PCH platform)
- GbE PCH SPI components
- Intel Reference System BIOS
- Intel® Management Engine BIOS Extension (MEBx) image
- System Tools (for creating an image and programming this image into the flash device)
- Supported drivers and applications

2.2 Kit Dashboard

Component	Description	
Intel® ME FW Kit	This kit is intended for continued (Beta level) customer validation with Intel® ME FW for Cougar Point based platforms.	
Supported Manageability Power States	☒ S0/M0 (Power Package 1/2) ☒ S3/M3 (Power Package 2) ☒ S4/M3 (Power Package 2) ☒ S5/M3 (Power Package 2) ☒ Sx/Moff (Power Package 1)	
Supported Processors	Desktop (Quad Core) ☒ Sandy Bridge LGA1155 ES2 (D0, Qxxx) ☒ Sandy Bridge LGA1155 QS (D1, Qxxx) Desktop (Dual Core) ☒ Sandy Bridge LGA1155 ES2 (D0, Qxxx) ☒ Sandy Bridge LGA1155 QS (D1, Qxxx)	Mobile (Quad Core) ☒ Sandy Bridge ES2 (J0, Qxxx) ☒ Sandy Bridge QS (J1, Qxxx) Mobile (Dual Core) ☒ Sandy Bridge ES2 (J0,Qxxx) ☒ Sandy Bridge QS (J1,Qxxx)
Supported PCHs	Desktop ☒ Cougar Point ES2 (B1, Qxxx) ☒ Cougar Point QS (B2, Qxxx)	Mobile ☒ Cougar Point ES2 (B1, Qxxx) ☒ Cougar Point QS (B2, Qxxx)
Supported Intel® LAN PHYs	☒ 82579LM (Lewisville-LM) ES2 (A2, QMWM) ☒ 82579LM (Lewisville-LM) ES2 (B0, QNAH)	
Supported Intel® Wireless LAN NICs	☒ Intel ® Centrino ® Ultimate-N 6300 AGN (Puma Peak 3x3) QS ☒ Intel ® Centrino ® Advanced-N 6250 AGN (Kilmer Peak 2x2) QS SRA ☒ Intel® Centrino® Advanced-N 6205 (Taylor Peak 2x2) ES2 ☒ Intel® Centrino® Advanced-N 6230 (Rainbow Peak 2x2) ES1	
Applications	☒ Intel® AMT ☒ Silicon Workaround Capability (SWC) ☒ Integrated Clock Control (ICC) ☒ Thermal Reporting (TR) ☒ Intel® Identity Protection Technology (IPT) ☒ KVM ☒ Configuration Feature (CF) ☒ Intel® Anti-Theft Technology ☒ Blu-Ray Playback	
Tools	☒ AMT Config Tool ☒ Clock Commander Tool (CCT) for ICC ☒ IUSManuf Tool ☒ Flash Image Tool (FITC/Wizard) ☒ Flash Programming Tool (FPT, FPTW) ☒ Intel® ME Debug Tool* ☒ Intel® ME Test Suite (METS)* ☒ Intel® Automated Power Switch (APS)* ☒ FWUpdate (FWUpdLcl) ☒ MEInfo ☒ MEManuf ☒ UpdParam Tool ☒ Intel® TXT Compliance* ☒ Intel® VT-d Firmware Toolkit*	

Note: *available in Intel® ME Compliance and Debug Kit release

2.3 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:
   a. 5MB 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.
   b. BIOS Release Notes – This document provides details of BIOS issues resolved with the kit.
5. Click on the Installation Files folder under the selected component and extract the .zip kit into a folder (Example: C:\)

2.4 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:

Drivers are included in:

- CPT_5M_7.1.13.1088

2.4.1 Intel® ME SW Components

Installers	Description
ME_SW	• 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\Setup.exe • The Intel® MEI driver can also be installed using the 'Have Disk' method in 'Device Manager', as follows: o Right click '**My Computer**' and select **Properties**. o Select the **Hardware** tab and click **Device Manager**. o Scan for hardware changes. o Update the particular device driver by pointing to the INF file: C:\[skuName_x.x.xxxx]\ME_SW\Installers\Drivers\ \MEI\HECI.inf. • Local Manageability Service (LMS) is a service required for Intel® Active Management Technology and Intel® AMT tools. • Serial Over LAN (SOL) is an Intel® AMT driver. This driver enables the remote display of a managed client's user interface on a management console and emulates serial communication over a standard network connection. • The User Notification Service (UNS) is a service that can receive notifications from the Intel® AMT firmware. Kerberos is not supported by UNS **NOTE:** ME_SW installer also installs a Microsoft* Windows* application (Intel® Management and Security Status Application (IMSS) "The Intel® Management and Security Status icon indicates whether Intel® AMT, Intel ® Standard Manageability, Level III Manageability Upgrade and Intel® Anti-Theft are running on the platform "
ME_SW_IS	• The ME_SW_IS installer will install the same components as ME_SW but using an InstallShield wrapper.
MEI-Only Installer	• The MEI-Only Installer Only installs the MEI driver.

2.4.2 Intel® AMT Tools

Intel® AMT Tools are included only in:

- CPT_5M_7.1.13.1088

This folder contains tools that support Intel® Active Management Technology.

Tool	Description
AMTConfiguration	• Configuration Server • OS Support - Server 2003, Server 2008 R2, XP, Vista and Windows 7 to set up and configure Intel® AMT systems. • Can configure Intel® AMT for local USB Configuration • Can automate Setup and Configuration process

2.4.3 Image Components

NVM Images are included in:

- CPT_5M_7.1.13.1088

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	• Contains Intel Reference System BIOS • Supported devices: Cougar Point Chipset Family PCH • After flashing a new BIOS, enter BIOS setup and 'Load Default Settings' (Press F3). Then 'Save and Exit' (Press F4) from Setup. This is a required step when updating to a new BIOS release. • For latest release information and known issues on the BIOS, please refer to the following directory: C:\ [kit]\Image Component\BIOS\

Image	Description
Firmware	• 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. **NOTES:** • For more details on building the flash image, please refer to **5MB 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	• The GbE hardware (PCH LAN) is a component embedded in the PCH. 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 (Firmware 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 A1/A2 and B0 PHY silicon. Example: NAHUM5_LEWISVILLE_DESKTOP_11.bin. This image can be used with any of the Intel® Management Engine images.
ME_BIOS_Extension	• Intel® Management Engine BIOS Extension is used to provision the system with manageability options (Intel® Active Management Technology 7.1). • Intel® Reference System BIOS has Intel® Management Engine extensions integrated. If using custom BIOS, then please use the binary file in the following folder: "\Image Component \ME_BIOS_Extension\ mebx_main_x.x.x.1020.bin" and merge with the BIOS. • For latest release information and known issues on the Intel® Management Engine BIOS Extension, please refer to the following directory: o C:\ [kit]\Image Component\ME_BIOS_Extension

2.4.4 System Tools

System Tools are included in:

- o CPT_5M_7.1.13.1088

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
Flash Image Tool – fitc.exe	• Provides both a GUI and a command line tool. • OS Support – Windows XP, Vista* (32-bit & 64-bit) and Windows 7 (32-bit & 64-bit) • 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
Flash Programming Tool – fpt.exe and fptw.exe	• Provided as DOS and Windows* command line tools • OS Support - MS Dos 6.22, DRMKDos and FreeDOS. The windows version (fptw.exe) will run in Windows* XP (Sp2), Windows PE and Windows Vista* (32-bit & 64-bit), Windows 7 (32-bit & 64-bit). • Used to write the flash image into the SPI flash device
FWUpdate – FWUpdLcl Tools	• Provided as DOS and Windows* command line tools • DOS Tool is supported on MS-DOS* 6.22, Windows 98 DOS, Free DOS and DRMK • Windows Command line tool is supported on Windows XP SP2, Windows XP x64, Windows Vista* (32-bit & 64-bit), Windows 7 (32-bit & 64-bit) • Used to update the Intel® Management Engine's firmware
MEInfo	• Provided as DOS and Windows* command line tools • OS Support - MS-DOS 6.22, Windows 98 DOS, FreeDOS, DRMK DOS. MEInfoWin is a command-line executable for Windows (Windows XP SP1/2, Server 2003, Server 2008 R2, Vista* (32-bit & 64-bit) and Windows 7 (32-bit & 64-bit) • Verifies that Intel® Management Engine (Intel® ME) firmware is alive and returns data about Intel® ME
MEManuf	• Provided as DOS and Windows* command line tools • Used on the manufacturing line to validate an Intel® Active Management Technology device
UpdParam	• Provided as a DOS command line tool • UpdateParam tool is used to change certain ME firmware parameters (both AMT and Kernel) after the global valid bit is set and descriptor region is locked.

2.5 Release Version Numbering Information

Typical release version numbering is as follows,

7.x.y.z (for example: 7.1.0.xxxx)

where

'7' refers to the Intel® Management Engine 7.1 Firmware SKU for the Cougar Point based platforms

'x' represents point releases such as 7.1 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

2.6 Firmware Update Blacklist Information

The Blacklist is evaluated during every firmware update (either upgrade or downgrade). Firmware blocks the ability to update to any firmware version that is in the Blacklist. The firmware Blacklist is used to identify versions that have known security flaws or other severe vulnerabilities.

For each current Release, the Build number listed below is in the Blacklist. The effect is that it is not possible to update to the listed Build number or earlier.

Firmware Blacklist as of builds:
7.1.13.1088
7.0.10.1203

SKU	Release	Build Number <=	Description
5MB/1.5MB	7.0.10	1203	Latest 7.0 Release Blacklisted
5MB/1.5MB	7.1.12	1086	Latest 7.1 release Blacklisted

3 Important Notes

This **Maintenance Release** firmware supports 5MB Corporate and Consumer SKU platforms.

- All Moff Power flows (PP1) – Supported
- All M3 Power flows -Supported
- Intel® AMT 7.1 – Supported
- Intel® AMT Web UI – Supported
- KVM – Supported
- SOL / IDEr – Supported
- Intel® Anti-Theft Technology – Supported
- BLU-RAY PLAYBACK - Supported
- WLAN – Supported
- MEDAL - Supported
- Intel® Identity Protection Technology - Supported

3.1 MEInfo

Please note that this HF also includes the fix to MEinfo defect # 3791497. (Due to a tool implementation issue, MEInfo tool may incorrectly report PCH Revision ID.)

This fix is planned to be added to 7.1.20 (~ww30).

3.2 MEI Installer SW Fix

Please note that issue #3522211 is a setup.exe installer fix only; there is no change to the SW drivers – No WHQL impact.

3.3 KSC Update

Users must be sure they are using latest Intel KSC (1.16) on mobile platforms and “SMLink1 Thermal Reporting Select” should be set to “true” in FITC

3.4 Intel® LAN Binary Images

Intel® ME 7.1 PC FW kit contains two GbE binaries:

NAHUM5_LEWISVILLE_DESKTOP_13.bin supports Intel® LAN PHY A2 and QS only and must be used with Cougar Point PCH B0 stepping. This image is recommended for testing power flows with connectivity. This image is for desktop platforms only.

NAHUM5_LEWISVILLE_MOBILE_13.bin supports Intel® LAN PHY A2 and QS only and must be used with Cougar Point PCH B0 stepping. This image is recommended for testing power flows with connectivity. This image is for mobile platforms only.

3.5 FITc XML Compare

Changes between the MRHF1 7.1.10.1065 newfiletmpl.xml and MRHF2 7.1.13.1088 newfiletmpl.xml	
MRHF1 7.1.10.1065 newfiletmpl.xml	**MR 7.1.13.1088 newfiletmpl.xml**
<ftoolRoot version="29">	No changes

Note:

- For information on the values that need to be entered for the setup procedure below, please refer to the **Intel® Cougar Point Chipset Family EDS** and the SPI flash's datasheet. Vendor ID, Device ID 0 and Device ID 1 are all derived from the output of the JEDEC ID command which can be found in the vendor datasheet for the specific SPI Flash part. In the Cougar Point EDS, **22.2.7.2 VSCC0—Vendor Specific Component Capabilities 0** describes the 32 bit VSCC register value.
- For access to the Intel® Cougar Point Chipset Family EDS document, please contact your Intel representative.

Open the Flash image Tool (double-click on fitc.exe) and follow the steps below:

a. Under Descriptor Region node, right-click on VSCC Table, and select 'Add Table Entry…'
b. Enter an Entry name.
c. Add values for the fields: Vendor ID, Device ID 0, Device ID 1 and VSCC register value. These fields are with respect to the 'Entry Name' entered above in step b.

Please refer to the 5MB FW Bringup Guide.pdf for more details. This document is available in the downloaded kit.

4 Intel® ME New Features

4.1 RCR Update

RCR #	Description / Background	Build
CCG0100150603	**Description:** Adds ME support for Microsoft Windows 7 SP1 **Background:** ME FW and SW tools, drivers, and SW (FITC, MEINFO, MEMANUF, FWUPDLCL, FPT, IUSMF and ICC tools) have validated support for Microsoft Windows 7 SP1.	7.1.10.1065
CCG0100087681	**Description:** Removed Workaround to 'Allow SKU/CPU Emulation using Production-Signed firmware on SuperSKU PCH on Production PCH' **Background:** Customers want to manage ONE single Flash image (BIOS/FW/GbE) for all platforms across their global validation groups. Once customers have CPT B0 (all Super SKU) and B1/B2 (all production fused) in their inventory, managing two images across all platforms would be difficult especially if PCH Stepping is not marked on platform.	7.1.2.1041
CCG0100090560	**Description:** Workaround to allow Processor Emulation on all PCH Parts built before ww42 and change FW Expiration to WW46. **Background:** Allow Processor Emulation to work on 7.1 FW running on boards using QS and PRQ PCH parts that were created before ww42 If FW is run on parts built after ww42, original rules for Processor Emulation will apply.	7.1.0.1009
CCG0100009080	**Description:** Add WLAN manageability capability to Level III upgraded HM67 SKU **Background:** Level III MNG upgrade on HM67 was implemented in ME7.x however WLAN manageability was overlooked for this SKU	7.1.10.1065

RCR #	Description / Background	Build
	configuration.	
CCG0100009042	**Description:** Security Enhancement: Amendment to Certificate Enrollment **Background:** Adds additional verifications in 7.0 ME FW during CIRA, 802.1x and when generating Signed Audit logs.	7.1.10.1065
CCG0100009036	**Description:** Security Enhancement: Partial un-provisioning to remove non-secure DNS suffix and move back to original secure mode **Background:** User can mistakenly or software running on the host could override the pre-set DNS suffix.	7.1.10.1065
CCG0100009034	**Description:** Security Enhancement: Host Based Provisioning (HBP) Client Controlled Mode (CCM) Un-provisioning should not remove secured settings **Background:** After HBP CCM provisioning, the user initiated un-provision option shall prevent removal of secured settings including custom hashes, inactive default hashes and DNS suffix.	7.1.10.1065
CCG0100097817	**Description:** PCIe to PCIe Peer sharing permanent disable. **Background:** CSpec update: PCIe Peer to Peer PCH Strap 9 bits 28 and 29 should be set to a '1' value.	7.1.10.1065
CCG0100008865	**Description:** Updating Low Power UM67 PCH & ULV/LV CPU FW Identifier based on new ULV/LV Processor Numbers **Background:** Firmware updated to appropriately support ULV/LV processors for UM67 SKU platforms.	7.1.1.1039
CCG0100087747	**Description:** MEManuf tool will introduce option for customer to ignore 3G related test ("-no3g", similar to "-nowlan" flag already existing). **Background:** OEMs want to maintain one single BIOS image with 3G enabled, but not all platforms will be	7.1.0.1009

RCR #	Description / Background	Build
	shipped with a 3G card. So when MEManuf calls self test, it is told by BIOS that the card exists, but when the test is run on platforms the tool will issue an overall failure.	
CCG0100087681	**Description:** Allow SKU Emulation on Signed FW **Background:** Customers want to manage ONE single Flash image (BIOS/FW/GbE) for all platforms across their global validation groups. Once customers have CPT B0 (all Super SKU) and B1/B2 (all production fused) in their inventory, it would be very difficult for them to manage two images across all platforms.	7.1.0.1009
CCG0100087402	**Description:** Change CPU Replacement Confirmation Handling to Lessen Impact on Manufacturing Line. **Background:** Currently MEBx will prompt if a CPU replacement is detected and present a continue prompt to the user. This behavior negatively impacts manufacturing lines and automated testing since the prompt will remain until a key is pressed.	7.1.0.1008
CCG0100008933	**Description:** When Partial ME Alt disable is configured Intel® Dynamic Application Loader (DAL) will not become permanently disabled and can be set to either enabled or disabled as required by the OEM (same as Intel® AT and PAVP). **Background:** Currently the Intel® Dynamic Application Loader cannot be enabled in the Partial ME Alt disable configuration under the OEMSKURule FOV.	7.1.0.1028
CCG0100008841	**Description:** Name change from MEDAL to Intel® Dynamic Application Loader. **Background:** This RCR is to change from the internal working name for the technology (MEDAL) to the official external name.	7.1.0.1028

RCR #	Description / Background	Build
CCG0100008807	**Description:** In AMT 7 Intel simplified the FW Update Control mechanism which included removing the override options, making the FW Update control sticky and adding a password option. **Background:** Removal of FW Update Override capability puts OEM flash update processes which update both BIOS and FW at the same time at risk of failure.	7.1.0.1014

5 Issue Status Definitions

This document provides sightings and bugs report for Intel® Management Engine Firmware 7.0 SKU, Software and Tools for Intel® AMT on the Cougar Point Family / PCH platform. Each report contains a snapshot of sightings and critical internal bugs dating to the Friday of the week in which it was released. 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).

The issues are separated into sub-groups to assist in understanding the status of the issues and what action, if any, needs to be done to address the issue. The names and definitions of the sub-groups are detailed below.

Closed Issues: Issues will not be classified as "Closed" until the fix is verified with the appropriate firmware version or disposition given below. Closed issues are separated into three different categories:

- **Closed – Fixed in Firmware Kit:** All issues detailed in this section have been fixed in the firmware version identified in the individual sighting details.
- **Closed – No Plan to Fix**: All issues detailed in this section are not planned to be fixed in any revision of the firmware.
- **Closed – Documentation Change:** All issues detailed in this section require a change to either a specification and/or a documentation change. The specific revisions to the appropriate documentation/specification are identified in the issue details.

Open Issues: New sightings and bugs will be classified as "Open" issues until the fix is verified with the appropriate firmware version. Open issues are separated into the following categories:

- **Open – Under Investigation:** All issues in this status are still under investigation. Issues may or may not be root caused.

Note: Any issues that are still open for production revisions of the components will be documented in the respective specification update documents.

Sightings listed in this document apply to ALL Cougar Point Family CRB SKU's unless otherwise noted either in this document or in the sightings tracking systems.

6 Closed Issues

6.1 Closed - Intel® AMT

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791708	If Manageability features and Intel® ME Network Service are Permanently Disabled: During S0/M0 <-> Sx/Moff power cycle testing, the system may power off (S5) when entering S3/S4	**Affected Component –** FW.AMT.PowerManagement **Impact:** If Network Service Permanently Disabled is set yes in FITc ME may behave unpredictably during S3 stress testing causing the platform to enter S5 or Hang. **Workaround:** N/A **Notes:** Reproduction Steps: 1. Run S0/M0 - S3/Moff cycle test with any tool 2. SUT goes S5 just after the SUT enters in S3/S4. **Notes:** FITC field "Intel(R) ME Network Service Permanently Disabled?" must be "true".	7.1.13.1088
500000123	Un-provisioned AMT systems get *false* AMT event 1104 sent to Windows Event Log. "Intel® ME Application: Management session was established over WLAN interface"	**Affected Component** – FW.AMT.WiAMT **Impact:** This event has been verified to be a false alarm and that Windows wireless connectivity is *not* adversely affected. The initial trigger to this false event is under investigation **Workaround:** The latest Host driver 13.5 will effectively take care of this issue by keeping Host and ME in sync at all times. **Notes:**	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791381	Local software or authenticated local malicious user with Windows Admin privilege could manipulate Intel® AMT TLS configuration to trigger permanent denial-of-service condition in the Intel® ME.	**Affected Component** – FW.AMT **Impact:** Successful exploit could cause a permanent denial-of-service condition in the Intel® ME. Intel rates this issue as Important – and Highly Recommend the application of this Maintenance Release. CVSS is Moderate: 4.6 (AV:L/AC:L/Au:S/C:N/I:N/A:C) **Workaround:** N/A **Notes:**	7.1.10.1065
3791311	AMT doesn't move to DHCP active and doesn't respond to ping if it received ARP response from GW during OS ipconfig/release	**Affected Component** – FW.AMT.NETP **Impact:** ARP response from gateway arrives with MAC and target IP of AMT but AMT decides that it shouldn't exit with DHCP Discover. **Workaround:** **Notes:** Reproduction Steps: 1. Boot to OS in DHCP mode 2. Capture arp response from OS (or from AMT) to gateway 3. Insert packet to PacketBuilder software 4. Start sending this packet into the network, 100 iterations loop with 1/10 second delay between iterations. 5. Run ipconfig /release. Expected Results: AMT becomes DHCP active after 40-50 seconds. Actual Results: AMT doesn't move to DHCP active and doesn't respond to ping.	7.1.10.1065
3791305	PET events do not contain AMT system IP address	**Affected Component** – FW.AMT.Alerting **Impact:** May affect customers that use this field for getting the AMT address, then AMT can't be accessible. (If their SW is not built like that they can use the source address). **Workaround:** none **Notes:**	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791135	AMT 7.0 Web UI doesn't display Sandy Bridge under Processor Information tab -> Upgrade method. Displays "Unknown".	**Affected Component** – FW.AMT.WEB UI **Impact:** Low. **Workaround:** none **Notes:**	7.1.10.1065
3791022	A Denial of Service condition exists when a systems is provisioned using AMT with Kerberos enabled under certain situations. When next trying to invoke AMT it loses connectivity. Un-provisioning can only be accomplished by clearing CMOS.	**Affected Component** – FW.AMT.Kerberos **Impact:** CVSS Medium: 6.8 (AV:N/AC:L/Au:S/C:N/I:N/A:C) **Workaround:** none **Notes:** Reproduction Steps:	7.1.10.1065
3791126	After pushing a binary table with spaces to DeviceID property, can't retrieve Get()operation with selectors of the CIM_PowerSupply class.	**Affected Component** – FW.AMT.HW Asset **Impact:** **Workaround:** none **Notes:** Reproduction Steps: 1.In the binary file, on DeviceID string offset, write spaces. 2.Save the file and push it to AMT. 3.Invoke Get() operation with selectors on CIM_PowerSupply class. Expected Results: CIM_PowerSupply class is retrieved, where DeviceID property contains the default value. Actual Results: Error message "DestinationUnreachable" is displayed.	7.1.10.1065
3790726	MEManuf.exe error on ZTC disabled system by UPDParam "Common Services - Provisioning: Zero-Touch configuration enabled - Failed"	**Affected Component** – FW.AMT.General **Impact:** System could be provisioned using Host Based Provisioning CCM, PSK or manual provisioning methods. **Workaround:** none **Notes:** Reproduction Steps: 1. Disable ZTC on the firmware by UPDParam or manually from MEBx-->AMT Configuration-->Remote Setup and Config-->TLS-PKI-->Remote Configuration=Disabled 2. Boot DOS. 3. Perform MEManuf.exe.	7.1.2.1041

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791229	No DHCP ACK for AMT through 2003 Relay Agent	**Affected Component** – FW.AMT.NETP **Impact:** AMT doesn't acquire an IP address in DHCP active mode **Workaround:** none **Notes:** Reproduction Steps: 1. Configure Microsoft ® 2003 DHCP Relay 2. Connect System Under Test to one side of segment 3. Verify Windows acquired an IP address 4. Disable Driver or move SUT to Sx state. Move AMT to DHCP active. Expected Results: AMT acquires an IP address Actual Results: No DHCP ACK. AMT DHCP request doesn't pass to the other side of DHCP Relay.	7.1.10.1065
3791124	When LAN driver is disabled, UNS service activity increases and the running thread overloads LMS and MEI causing UNS memory leak	**Affected Component** – FW.AMT.Services **Impact:** Potential performance issue when LAN driver is disabled. **Workaround:** none **Notes:** Reproduction Steps: 1. Enable LAN driver 2. Start UNS 3. Run xperf (Xperf –on loader+proc_thread+cswitch+interrupt+DPC) 4. Disable LAN driver 5. Run xperf (Xperf –on loader+proc_thread+cswitch+interrupt+DPC) 6. Compare results of xper traces Expected Results: After disabling LAN, UNS doesn't have performance issues. Actual Results: After disabling LAN, UNS has 5 threads, that wakes each 0.5-1 sec.	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791182	When opening a KVM session, BIOS screen is cut off on the right corner	**Affected Component** – FW.AMT.KVM **Impact:** Medium. May be difficult to view BIOS during KVM sessions. **Workaround:** none **Notes:** Reproduction Steps: 1. Provision the SUT and initiate a KVM session using VNC viewer in management station. 2. Reboot SUT to BIOS CMOS setup via VNC viewer, the VNC viewer is cut off on right side.	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3790755	Velocity Shutdown test criteria of 0.5 seconds not met by LMS.	**Affected Component** – FW.AMT.Services **Impact:** Velocity Process and Service Shutdown may not be completed within 0.5 seconds. **Workaround:** none **Notes:** Reproduction Steps: 1. Install Windows 7 Ultimate 64-bit. 2. Install the ME firmware and software stack on the SUT. 3. Install the Velocity Test Suite 2009 on the SUT. 4. Configure the name of the system to meet the test requirements. 5. When starting the Velocity application for the first time, Select Win7_Laptop criteria class. 6. In the test operation Description list, select the following: - Prepare System for Test - Shutdown Timing Trace - Shutdown Analysis CPU Trace - Shutdown Analysis IO Trace - Process Traces - Create Velocity Report 7. Click the "Run tests using Win7_Laptop Criteria Class" button. - The system will go through several automated tests and reboots before finishing. 8. Open the \Velocity_Results\reports\Velocity_Fundamentals_Report.htm 9. Select "Shutdown (seconds)" link. 10. In the next page that appears, review each of the three "Trace<x>" test results pages to see what the shutdown times were for LMS.	7.1.2.1041

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3790693	Redirection session with Kerberos ticket size larger than 10K hangs and every next try to open session over Kerberos or digest fails (1 of 2). AMT fails to power down.	**Affected Component** – FW.AMT.Redirection **Impact:** Redirection sessions with Kerberos ticket size larger than 10K may fail leaving system in a hung state. Must move to G3 to recover. **Workaround:** none **Notes:** Reproduction Steps: 1. Set AMT to work with Kerberos and enable redirection 2. Create an AD user with 10K Kerberos ticket 3. Change to TLS server 4. Open SOL/IDER session over Kerberos using larger than 10K Kerberos ticket 5. Try to open KVM/IDER/SOL session with Digest authentication 6. Perform RCO power off. All redirection sessions will fail after the first one did including non-Kerberos (Digest). The platform hangs with status 0005 on power down.	7.1.2.1041
3790457	The DNS PKI Suffix when entered in FITC for building an image will result in “none secured" suffix response when attempting to provision.	**Affected Component** – FW.AMT.Provisioning **Impact:** Connection will fail as firmware refers to PKI suffix as None secured and require that the option 15 must also mach the certificate CN. **Workaround:** none **Notes:** Reproduction Steps: 1. Use fitc to set PKI DNS Suffix to the fw (i.e. intel.com) 2. Burn the image. 3. Set DHCP option 15 to FTL.COM 4. Use Activator to start remote configuration. 5. Try to connect AMT with match certificate to intel.com suffix.	7.1.0.1023

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791134	When pushing a table without Bios Vendor, on CIM_BIOSElement class the mandatory Manufacturer property is missing.	**Affected Component** – FW.AMT.HW.Asset **Impact:** CIM_BIOSElement class is retrieved, with no Manufacturer property. **Workaround:** none **Notes:** Reproduction Steps: 1. In the SMBIOS.xml, delete the Vendor in BiosList->BiosEntry tag and save. 2. Push it to AMT. 3. On CIM_BIOSElement class, invoke Get() operation	7.1.10.1065
3791133	After pushing a binary table with spaces to DeviceID property, can't retrieve Get()operation with selectors of the CIM_PowerSupply class.	**Affected Component** – FW.AMT.HW.Asset **Impact:** The GET() operation on the CIM_PowerSupply class fails and an error is displayed. **Workaround:** none **Notes:** Reproduction Steps: 1. In the binary file, on DeviceID string offset, write spaces. 2. Save the file and push it to AMT. 3. Invoke Get() operation with selectors on CIM_PowerSupply class.	7.1.10.1065
3552132	IDEr performance is below expected performance levels when working with 1 Gigabit switch.	**Affected Component** – FW.AMT.NETP **Impact:** IDEr performance slow. **Workaround:** none **Notes:** Reproduction Steps: 1. Burn image, clear CMOS and provision AMT. 2. Enable SOL and IDER. 3. Enable listener 4. Work with 1G switch 5. Open IDER session 6. Using CD-Speed, measure IDER performance.	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3552051	When the OS is in DHCP mode - calling IpSynchEnabled (during the provisioning process or during re-configuration) will cause AMT to lose the acquired OS Host IP address causing AMT to request a new DHCP IP address.	**Affected Component** – FW.AMT.NETP **Impact:** AMT will attempt to acquire an IP address when it loses the Host IP during provisioning / re-provisioning. **Workaround:** none **Notes:** Reproduction Steps: 1. Boot to OS. AMT in DHCP passive mode 2. Call EthernetPortSettings.Put() with IpSynchEnabled = true. DHCP enabled = true IP values must be empty 3. After less than 1 minute AMT exits with DHCP request. Source IP = 0.0.0.0 Broadcast. Requested IP - IP of the OS.	7.1.0.1005
3551902	An exception occurs when firmware is trying to send a DNS request to an invalid FQDN (IPv6 enabled).	**Affected Component** – FW.AMT.NETP **Impact:** AMT looses connectivity after sending DNS requests to an invalid FDQN **Workaround:** G3 with LAN cable disconnected or by removing invalid FQDN via MEBx or local interfaces. **Notes:** Reproduction Steps 1. Burn Image 2 Enable IPv6 3. Invoke CIM_FilterCollection.Subscribe() on "AllEvents" collection with the subscriber: "http://:9000" 4. Perform link down and link up	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3551894	If the DNS doesn't have record for ProvisionServer, firmware will send hello packets to ProvisionServer [Top Level Domain] (e.g. ProvisionServer.com). This may cause the org firewall to block the host's network if this FQDN leads to malicious site.	**Affected Component** – FW.AMT.Provisioning **Impact:** Currently ProvisionServer.com leads to malicious site so connecting to it will cause the org firewall to block the host network. **Impact: Workaround:** none **Notes:** Reproduction Steps 1. Assuming your DHCP's option 15 is ftl.isdc.intel.com, verify that your DNS doesn't have records for any of Provisionserver.ftl.isdc.intel.com Provisionserver.isdc.intel.com Provisionserver.intel.com 2. Burn image 2. Perform clear CMOS and set BIOS 3. Open network by AMTHI.StartConfiguration or ZTCLocalAgent. 4. Sniff the network.	7.1.0.1005
3551853	Firmware sends a Neighbor Advertisement with wrong checksum in NS / ARP offload scenarios.	**Affected Component** – FW.AMT.NETP **Impact:** Firmware sending incorrect checksum during ARP Packet offloads. **Impact: Workaround:** none **Notes:** Reproduction Steps 1. Configure FW and OS LAN driver to support NS/Arp offload 2. Let OS aquire a number of ipv6, move to Sx 3. Send Multicast NS to one of the addresses of OS	7.1.0.1005
3551846	UNS sends event "Proxy synchronization disabled" to WMI eventing interface, when AMT moves over to the Pre or In provisioning states.	**Affected Component** – FW.AMT.NETP **Impact:** Proxy synchronization information should not be getting sent. **Impact: Workaround:** none **Notes:** Reproduction Steps 1. Move AMT machine to PRE provisioning state 2. Move AMT machine to IN provisioning state	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3551809	IDEr session is unexpectedly closed when transferring large files with CIRA.	**Affected Component** – FW.AMT.Redirection **Impact:** ME unable to transfer larger files over IDEr with CIRA connection. **Impact: Workaround:** none **Notes:** Reproduction Steps 1. Burn image, clear CMOS and provision AMT. 2. Enable SOL and IDER in MEBx. 3. Enable listener 4. Change authentication to TLS Server 5. Establish CIRA connection 6. Open IDER session with DVD which contains big files (larger than 100 MB each one) 7. Start to copy files from virtual drive to DUT.	7.1.0.1005
3551776	Sending a very high amount of NS unicast packets to the IPv6 address of OS while in Sx state can cause AMT to lose connectivity.	**Affected Component** – FW.AMT.NETP **Impact:** Loss of connectivity if NS Unicast packet traffic is excessive. **Impact: Workaround:** G3 platform **Notes:** Reproduction Steps 1. Configure OS and AMT to support Arp/NS offload 2. Give OS 2 ipv6 addresses (Link Local and Static Ipv6) 3. Change AMT to static Ipv4 (scenario 1) or Dynamic ipv4 (scenario 2) 4. Move to S4. Verify AMT answer NS unicast to Link Local of OS 5. Start the flooding of FW with NS unicasts (1 NS request every 0.1 second)	7.1.0.1005
3551693	Random Interface ID is not refreshed after un-provision the platform.	**Affected Component** – FW.AMT.NETP **Impact:** Privacy issue. **Impact: Workaround:** G3 platform **Notes:** Reproduction Steps 1.burn image and provision AMT 2. Enable IPv6 wired/wireless 3. Note the random Interface ID configured for the Link Local Address 4. Un-provision then Re-provision AMT 5. Enable IPv6 wired/wireless and check the ID configured for the Link Local Address.	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3551549	Changing environment detection settings during VPN session - target unexpectedly closes the connection.	**Affected Component** – FW.AMT.VPN **Impact:** Problems with configuring AMT through VPN **Workaround:** none **Notes:** Reproduction Steps: 1. Perform HBP in CCM 2. Enable VPN routing, Set Environment Detection to fit scope of Wireless OS (for example intel.wireles.com) Leave Wireless AMT disabled 3. Make sure that LAN scope is different from Environment Detection. for example(intel.wired.com) Thus we simulate VPN environment. Connection to FW through Wireless OS interface. 4. Call SetEnvironmentDetection with additional value (newnew.com) do not delete the old - intel.wireless.com	7.1.0.1005
3551537	IDEr performance with TLS using AES 128 cipher is lower than expected PRD level.	**Affected Component** – FW.AMT.Security.TLS **Impact:** IDEr speed not at expected levels. **Workaround:** none **Notes:** Reproduction Steps: 1. Burn image, clean CMOS and provision AMT. 2. Enable listener in AMT_RedirectionService. 3. Move AMT to TLS Mutual mode. 4. Open IDER session in TLS and enable registers. 5. Load OS and check that devices are exposed. 6. Test speed of IDER CD drive with CDSpeed.	7.1.0.1005
3543307	After being connected in Hx with 802.1x profile, ME does not get an IP address when moving back to H0. Pings on WLAN are answered pinums are not. Host has IP.	**Affected Component** – iAMT WLAN **Impact:** Unable to connect to ME after Hx -> H0 transition with 802.1x profile. **Workaround:** G3 **Notes:** Reproduction Steps: 1. Connect in Hx with 802.1x profile 2. Enable driver 3. Move system to H0 4. Try to connect to ME	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3542791	System under test crashes (reset) or freezes after a User profile is pushed using Admin credentials locally.	**Affected Component** – iAMT WLAN **Impact:** Firmware crashes or freezes when pushed locally. **Workaround:** none **Notes:** Reproduction Steps: 1. Connect to a user profile, sync to FW. 2. Restart the DUT, load OS. 3. Add a User profile from local using Admin credentials. Used WiME tool.	7.1.0.1005
3542764	Profile sync stopped working after configuration of IT profile using ITAdmin. PROset Event Log service hang in "Stopping" during service restart	**Affected Component** – iAMT WLAN **Impact:** User profile remains in firmware. **Workaround:** none **Notes:** Reproduction Steps: 1. Connect to a User profile, sync to FW. 2. Configure IT profile with ITAdmin, apply the package and connect to the IT profile. (in the test the same profile/SSID was used as the User).	7.1.0.1005
3535435	When HOST authorizes over NAP the SPI flash becomes unresponsive for a long period of time and no changes can be made to it.	**Affected Component** – FW.AMT.NETP **Impact:** Flash wear-out protection is exceeded and flash is unresponsive. **Workaround:** none **Notes:** Reproduction Steps: 1. Install HECI Drivers and Configure OS to authenticate over NAP 2. Enable EAC in AMT and verify and OS registry that OS "sees" the Posture. 3.Connect Machine to 1x/NAP port in switch and verify authentication and authorization succeeds. 4. allow machine to stay in this state for a long period (minimum of 2 days).	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3535342	Boot options are being cleared (all boot options became false) when moving from M3 -> Moff.	**Affected Component** – FW.AMT.Remote Control Operations **Impact:** Unexpected behavior. Boot option persistence is not being maintained on M3 -> Moff transitions. **Workaround:** none **Notes:** Reproduction Steps: 1. Burn image. 2. Clear Cmos. 3. Enter MEBx. 4. Enable SOL/IDER 5. Configure machine to enterprise mode with PID & PPS. 6. Wait for machine to be in Post Provision state. 7. Load to WIN7 8. Move machine to Sx 9. Invoke AMT_BootSettingData.Put with UseSOL=true 10. Wait for machine to move to Moff 11. Invoke AMT_BootSettingData.Get	7.1.0.1005
3535044	When the machine is in S5 and AMT is in M-Off trying to open KVM session will wake up the AMT but opening of the session fails.	**Affected Component** – FW.AMT.NETP **Impact:** The KVM session cannot be established. **Workaround:** none **Notes:** Reproduction Steps: 1. Make sure ME is in power package 2: "On in S0, ME wake in S3, S4-S5" 2. Turn off the AMT machine. 3. Wait until the machine get to MOff state. 4.Open KVM session.	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3522098 MWG100144238	Incorrect value returned on AMT 'EnumerateWirelessProfiles' request with Desktop systems opting to not support AMT WLAN	**Affected Component** – FW.AMT.WiAMT **Impact:** 'GetWirelessSettings' and 'GetWirelessCapabilities' are returning successful while 'EnumerateWirelessProfile' gives an error. 'GetWirelessSettings' and 'GetWirelessCapabilites' should give an error (as in AMT 6 desktops) as the AMT wireless configuration service has been opted out/disabled. **Workaround:** None **Notes:** Intel SDK and some ISV apps may expose this issue.	7.10.10.1065
3271921	System under test frequently (3/5) crashes from when moving from S0 to S5 after host driver disabled.	**Affected Component** – iAMT WLAN **Impact:** Firmware unexpectedly crashes moving from S0 -> S5 with host driver is disabled. **Workaround:** none **Notes:** Reproduction Steps: 1. Burn FW. Provision AMT (worked on Enterprise provisioning, wireless outside the org). 2. Load OS, enable WiAMT, enable profile sync, and sync a profile to FW. 3. Connect with the host driver. 4. Disable host driver. 5. Move platform from S0 to S5.	7.1.0.1005
3270299	Sporadically the SD statistic counter doesn't count and no event is sent at all.	**Affected Component** – iAMT WLAN **Impact:** SD events sporadically do not get sent. **Workaround:** none **Notes:** Reproduction Steps: 1. Create a statistical SD filter 2. Create a SD policy with this filter & activate it in the wireless interface. 3. Generate traffic matching to the filter 4. Read the counter using 'cbPolicyGetActiveStatistics' method.	7.1.0.1014

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3032326	ME wireless loosing connectivity while running a specific flow in METS - setting the machine to link policy 3, PP2 (after it was PP1), ACDC, and Sx. the ME won't answer to Wireless pings anymore.	**Affected Component** – iAMT WLAN **Impact:** ME will not answer pings through the wireless interface. **Workaround:** G3 **Notes:** Reproduction Steps: 1. Open in METS package PM_5MB_Mobile_with_wireless_G3-S5. 2. Run subtests 2.3 and 2.4 in a row. 3. Test will fail in subtest 2.4 while the machine in S3/M3 and wireless not answering to pings. * not reproducing if running subtest 2.4 without 2.3 before.	7.1.0.1005

6.2 Closed – Intel® ME Kernel

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791713	System Hangs during transition to S3 when ME is enabled	**Affected Component** – FW.Kernel.Drivers **Impact**: During the system transition to S3/Moff, ME cannot unload the LME component due to unexpected connection sharing with the FWUpdate component. The resulting hang prevents the ME from entering Moff; which prevents the system from entering S3. **Workaround**: Power button override **Notes**: Reproduction Steps: 1. Power on System, and boot to Windows OS. 2. Run S3 cycling test.	7.1.13.1088
3791710 / 3791711 / 3791712	ME FW corruption could occur if power loss occurs during ForceFullReclaim	**Affected Component** – FW.Kernel.StorageMgr **Impact**: ME FW corruption could occur when a ME Full Reclaim is performed and then there is a power loss during the reclaim of a data block (Sporadic: 1/500 – 1/3000). **Workaround**: N/A **Notes**: N/A	7.1.13.1088

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791709	ME FW may fail to initialize on boot and FW version fails to be displayed	**Affected Component** – FW.Kernel **Impact**: Timing between ME and HW init sequence may cause ME to fail on initialization and FW version fails to display. Occurrence of this issue is very low and is dependent on the combination of chipset and platform design implementations. Issue is observed at initial boot. **Workaround**: N/A **Notes**: N/A	7.1.13.1088
3791614	PM driver causes exception if it receives too many illegal BIOS write interrupts in a short time.	**Affected Component** – FW.Kernel.PowerManagement **Impact**: High number of writes to BIOSWE register will cause ME to become unresponsive. **Workaround**: N/A **Notes**: N/A	7.1.13.1088
3791316	System hang and unexpected shutdown seen on S0 -> S3 and S3 -> S0 transition during stress testing.	**Affected Component** – FW.Kernel.Drivers **Impact**: While going into S3/Moff, ME gets stuck going into Moff preventing Kernel Loader to turn off LME component. **Workaround**: N/A **Notes**: Reproduction Steps: 1. Power on system 2. Run S3 cycling tool e.g. Sleeper 3. Wait for system hang transitioning from S0->S3->S0. Windows will display "Unexpected shutdown occurred…" error message on next Windows bootup.	7.1.10.1065
3791282	Global reset (GReset) does not occur after CPU replacement after Closemnf.	**Affected Component –** FW.Kernel **Impact:** Global reset initiated by MEBx occurs on second boot if CPU is replaced with different CPUID and CPU Brand **Workaround:** none **Notes:**	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791166	PCH temperature is 0 degree	**Affected Component –** FW.Kernel.SMBusDriver **Impact:** Fixes an issue where PCH thermal data is reported as 0 incorrectly **Workaround:** none **Notes:** Reproduction Steps: Monitor SMBus traffic over a long period of time. Eventually 0 PCH temperature readings will be seen from the PCH.	7.1.10.1065
3791145	Heuristics disabled after Level 3 upgrade from STD on B65 SKU systems.	**Affected Component –** FW.Kernel **Impact:** System defense heuristics will not be functional after upgrade. **Workaround:** none **Notes:**	7.1.10.1065
3791143	ME FW shows Error code is disabled after FWUpdlcl failure.	**Affected Component –** FW.Kernel **Impact:** ME FW writes error status to the wrong FWSTS1 field. **Workaround:** none **Notes:**	7.1.10.1065
3791141	FWUpdate shows an error message after FWUpdate fails to a blacklisted FW and a reboot does not occur	**Affected Component –** FW.Kernel.FWUpdate **Impact:** The FW Update tool shows expected error while downgrade (errors 8741 and 8758) to a blacklisted FW. If an upgrade to a good FW update image is attempted without performing a reboot, FW gives unexpected error 8741("FW Update failed"), followed with "Trying to receive update status". System may hang on this status. When tried to reboot at this time, FW enters recovery mode. **Workaround:** none **Notes:**	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3790985	A buffer overflow vulnerability in the implementation of the System.arraycopy method may be exploited by an untrusted applet to escalate privileges (issue #6009). This is caused by an incorrect check on the parameters src_offset, dst_offset, and length. The implementation fails to detect when the sum src_offset+length or dst_offset+length overflow. In this case, instead of throwing an instance of ArrayIndexOutOfBoundsException, the implementation proceeds to copy the data, thus allowing the applet to access to memory outside the arrays passed in parameters.	**Affected Component –** FW.Kernel **Impact:** CVSS score is 6.8 (AV:L/AC:L/Au:S/C:C/I:C/A:C). Increased Privileges for Untrusted Applets Category: Severe All Gen1 releases are affected. The BETA-1 Gen2 release is also affected. Gen1 is used in Intel DAL (ME 7.1) **Workaround:** When the applet is reviewed before being digitally signed, the direct or indirect calls to System.arraycopy must be analyzed. If there is a risk that src_offset+length or dst_offset+length might overflow, code must be added before the call to System.arraycopy to check for this condition instead of relying on the implementation of System.arraycopy to catch the error. This must be done also when the code calls one of the following methods because they internally call System.arraycopy: •String(char[] value, int off, int len) •String.getChars(int srcBegin, int srcEnd, char[] dst, int dstBegin) •StringBuffer.append(char[] str, int offset, int len) •StringBuffer.getChars(int srcBegin, int srcEnd, char[] dst, int dstBegin) **Notes:**	7.1.10.1065
3790925	Performing a CPU swap of different steppings while in G3 (with PP2 set) or Sx/M3 (PP2) fails to initiate a global reset and causes Integrated Graphics to fail on the next boot.	**Affected Component –** FW.Kernel **Impact:** If change between different CPU steppings, ME will not initiate the expected global reset resulting in internal graphics will not function. **Workaround:** none **Notes:**	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3522079	A DPM issue related to Intel® Firmware enabled features has been observed in some customer manufacturing lines as they began ramping their consumer system manufacturing to high volume. While the systems should remain functional, under certain circumstances, one or more Intel Firmware enabled features may not work when provisioned.	**Affected Component –** FW.Kernel **Impact:** The worst case Intel Firmware enabled feature DPM is 3900. Due to the number of variables required to see this issue, including the number of Intel firmware enabled features present on the platform, customers should expect to see significantly less than worst case, possibly none. **Workaround:** none **Notes:** None	7.1.3.1053
3790829	Firmware does not properly update SPI information when changing from one processor type to another processor type.	**Affected Component –** FW.Kernel **Impact:** Medium **Workaround:** none **Notes:**	7.1.2.1041

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3790760	AT-P enabled system cannot shutdown after receiving "Poison Pill" over 3G network.	**Affected Component –** FW.Kernel.SMBusDriver **Impact:** Medium **Workaround:** none **Notes:** Reproduction Steps: 1. Boot to OS with WWAN 5550. 2. On the server, using a CMD prompt run 'isv_server ?i server_ip. 3. On the Client, using a CMD prompt run 'isv_client ?i server_ip -e, allow the SUT to enroll. 4. On the server, using a CMD prompt run 'sqlite3 tdt.db < test2.txt' and run 'sqlite3 tdt.db < timers.txt'. Observe several rendezvous's. 5. Stop the isv_client (CTRL-C). Launch the isv_client using the following format: "isv_client ?i server_ip ?g and ?t isv_server SMS phone -r 10000 -q \.\\com port" 6. Stop the isv_server. On the server, run the following commands: - "sqlite3 tdt.db" - "Update slog set state=2;" - "Select Client_id from pinfo;" -> record the client ID - ".quit" 7.On the server, run: "genoob.exe -kill -t 000-000-0000 -c client_id -a 1 -q \.\\com12" where 000-000-0000 is the ISV Client SMS Phone# and client_id is from the previous step ->(When run this command on server, the client will receive SMS message[step 8] and after few minutes the system should be shutdown). 8. Ensure server received SMS message. 9. Verify the system cannot shut down within a few minutes.(The client system should be shut down).	7.1.2.1041

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3790809	Intel® 6 Series Chipset POST hang during access to ME resources	**Affected Component –** FW.Kernel.Bring Up **Impact:** Critical. System will hang during POST with no recovery via G3 or clear CMOS **Workaround:** none **Notes:** After flashing image and booting the system for the first time, ME FW will hang during POST. For additional details please refer to Sightings Alert: Intel 6 Series Chipsets POST Hang During Access to ME Resources Sighting# 3623401 Issue may happen in following conditions: 1. On CPU replacement flow 2. DID timeout (BIOS Error flow) 3. On HMRFPO flow (manufacturing flow only) 4. Flash Descriptor Override (manufacturing flow only) 5. If 5MB FW is loaded on HW SKU only targeted to 1.5MB FW (OEM manufacturing error) 6. If we have a ULV PCH and non ULV/LV CPU (OEM manufacturing error)	7.0.2.1164
3790607	RCO commands cannot be issued multiple times in a row during POST or when in BIOS setup.	**Affected Component –** FW.MCTP **Impact:** ME will not allow RCO commands sent several times in succession. **Workaround:** none **Notes:** 1) Provision SUT 2) Reboot to BIOS using SoL. 3) Try rebooting the system via DTK/WebUI.	7.1.0.1028

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3790513	When AC power supply is removed and inserted back when the system is transitioning from S5/M3 to S0/M0 state, ME FW fails to determine the current power source as AC. PmDrvCtxt says the current power source as DC.	**Affected Component –** FW.Kernel.PowerManagement **Impact:** Under certain conditions the ME will not correct read the AC / DC transitions. **Workaround:** none **Notes:** **Mobile Only** 1) Activate Network and make sure the Power policy is 2 in MEBx 2) Boot to DOS 3) Connect WebUI and select Remote Control 4) Select command as "cycle power off and on" with Normal boot option. 5) Count for 6 or 7 second and remove AC plug 6) Reinsert the AC power supply after 2 seconds 7) make sure AC/DC detection with PmDrvCtxt. (No change -> Problem)	7.1.0.1028
3553417	The Firmware Update manifest has been changed to prevent upgrades from the Intel® Management Engine Firmware 7.0 SKU 5.0MB Production Candidate or later FW to a Pre-Production 7.1 Firmware.	**Affected Component –** FW.Kernel **Impact:** For quality and security reasons, all Pre-Production FW will not work on PRQ parts. **Workaround:** none **Notes:** This change is being made to prevent an end user from using FW Update to load 7.1 pre-production FW onto a system in the field. There is no change to the FW Update code, only the data with the upgrade/downgrade restrictions.	7.1.0.1023
3553317	Firmware Watchdog Global reset occurring during power management S0 <--> S3Mon stress testing after approximately 1100 iterations.	**Affected Component** – FW.Kernel.PowerManagement **Impact:** Firmware unexpectedly issues a global reset **Workaround:** restart **Notes:** ***This is Mobile specific*** Reproduction Steps: 1. Burn the image disable reboot standby 2. On OS run a stress S0Mon-S3Mon wake by Pwr button	7.1.0.1023

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3553117	The system shutdowns during POST when AC power is plugged in after CMOS clear	**Affected Component –** FW.Kernel.PowerManagement **Impact:** Platform will not come out of S5 state. **Workaround:** none **Notes:** Reproduction steps: 1. Set to DC power source only 2. Use a non DeepSx image and disable DeepSx in BIOS 3. Type wrong password three times to generate a Global reset. The platform does not recover.	7.1.0.1023
3551710	HM65 SKU Mgr Test fails on Pentium and Celeron CPU emulations; Wireless display is shown as enabled when it should be disabled.	**Affected Component –** FW.Kernel **Impact:** Unexpected behavior. Wireless display should not be enabled for these configurations. **Workaround:** none **Notes:** Reproduction steps: 1. Use FITc to build 4 FW images using FW kit, one each of CPU emulations vPro, Core, Pentium and Celeron 2. Flash SUT with each image, and then check the features.	7.1.0.1005
3551117	Ant MEBx error occurs when trying to enable AMT (manageability) after it has been disabled via FOV.	**Affected Component –** FW.Kernel **Impact:** Unexpected behavior. Re-enabling AMT through the MEBx should not result in an error. **Workaround:** re-flash image **Notes:** Reproduction steps: 1. Burn native image. (when Global lock bit is disabled) 2. Perform CMOS clear. 3. Edit bios setting according to the latest BKM. 4. Boot to OS. 5. Set FeatureShipmentTimeState (AMT disable/enable) to disable through FOV (id: 000B value: 00000002 (must G3 after)). 5. G3 the platform. 6. Enter MEBx and try to enable AMT back.	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3550966	Platform hangs in Deep Sx after approximately 500 iterations of S3/M3 <-> S3/Moff, ACDC<->DC Stress test cycles.	**Affected Component –** FW.Kernel.PowerManagement **Impact:** Unexpected behavior. System should not be hanging in Deep Sx. **Workaround:** **Notes:** none Reproduction steps: 1. Boot to OS. 2. Set PP2. 3. Go to Standby (S3). 4. Disconnect AC power and check SUT is in S3/Moff. 5. Connect AC power and check SUT is in S3/M3 and AMT is responsive. 6. Repeat steps 4-5.	7.1.0.1005
3550817	Setting any FOV value immediately a platform soft reset (ctrl-alt-del) will cause a global reset and firmware hang on reboot.	**Affected Component –** FW.Kernel **Impact:** Unexpected behavior. **Workaround:** Recovery G3. **Notes:** Reproduction steps: 1. Burn native image. 2. Perform CMOS clear. 3. Edit bios setting according to the latest BKM. 4. Wait for os load and make restart, (if you are on OS selection menu you can press Alt+Ctrl+delete instead). 5. Try to set any FOV value using FPT tool.	7.1.0.1005

6.3 Closed – Integrated Clock Control (ICC)

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3790913	23Hz refresh rate improved solution for higher security and fewer numbers of pop-ups. To reduce frame judder while playing back 23Hz content, currently display driver programs clock bending through CUI, ICC.dll to ICC HW. For this feature to work without being a nuisance to the end-user, UAC must be set to "never notify". As board designers would be motivated to leave UAC on due to legitimate security concerns, the 23 Hz frame judder will be high as a result.	**Affected Component:** FW.ICC, PCH HW, Graphic driver – Display clock Bending **Impact:** **Workaround:** **Resolution:** The solution is for ME FW to program SSC4 module with default settings that work for all CE modes for 23/29 and 59Hz for 24b color. When user selects any of the CE modes and 23Hz, display driver will simply program display PLL to use SSC4 output. This avoids CUI and ICC.DLL interaction. UAC settings can remain anything above "never notify" in this case. There is no dependency on it. There are no pop-up messages with this solution either.	7.1.2.1041
3552011	Boot timeout ICC recovery from extreme overclocking does not work.	**Affected Component** – FW.ICC **Impact:** Overclocking does not work properly when HT / Core disable capabilities are configured. **Workaround:** Configure image with HT / Core control disabled **Notes:** Reproduction Steps: 1. Build Overclocking config 2. Use CCDC tool to change BCLK to 120MHz for next boot 3. Reboot system	7.1.0.1005

6.4 Closed – Software / Tools

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791497	Due to a tool implementation issue, MEInfo tool may incorrectly report PCH Revision ID.	**Affected Component –** SW.Tools.MeManuf **Impact:** Previous MEInfo versions may display incorrect chipset information. **Workaround:** **Notes:** Optional MEInfo fix. N/A	7.1.13.1088
3791285	Immediately after reboot, FPT Display option "-i" (FPT –i) returns error with EFI and 64-bit versions of FPT.	**Affected Component –** SW.Tools.FlashProgrammingTool **Impact:** Fixes two errors when running FPT –i prior to other ME tools (e.g. MEinfo or MEmanuf). Operator will see "Signature: INVALID!" and "Error 400: Flash descriptor does not have correct signature." **Workaround:** Run MEinfo prior to running FPT Display option in EFI or 64-bit versions. **Notes:** Reproduction Steps: 1. Run 'ftp –i' after bootup and prior to running MEInfo or MEManuf	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3791081	When selecting an image greater than 16MB in FITC, (for example 2 SPI devices with total density > 16MB, produced image does not have correct Flash Region Register Base and Limits for any region above 16MB. The base and limit that is in the descriptor does not correspond to what's in the .map file.	**Affected Component –** SW.Tools.FlashProgrammingTool **Impact:** Regions overlap, which results in platform not able to boot or ME errors. **Workaround:** none **Notes:** **Reproduction Steps:** 1. Open FITC 2. Select Number of Flash Components = 2 3. Under Component Section, select each flash density 16MB (can also be 1=16MB. Total image size has to be greater than 16MB 4. Include ME, BIOS, and PRD region 5. Open the output.map file 6. Open output.bin (32MB) with hex editor 7. Compare base and length defined in the .bin file starting at offset 0x40 with the addresses in the .map file. 8. Notice that any region that resides at offset greater than 16MB will have incorrect limit or base or both because FITC doesn't set bits 12 or 28 which map out to be bit 24 of the base address or base ending address	7.1.10.1065
3791018	MEManuf -S5 will not work with non-vPro CPU; displays message “Error 9296: Memanuf Operation Failed (1000)”	**Affected Component –** SW.Tools.MeManuf **Impact:** Low. **Workaround:** Executing “MEMANUF –S0 –no3g” skips this test. **Notes:** **Reproduction Steps:** 1. Run command MEManuf –S5 MEManuf tool will display “Error 9296: Memanuf Operation Failed (1000)”	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3553415	Flash Programming Tool (FPTW.exe) fails to disable ME causing system to hang intermittently.	**Affected Component –** SW.Tools.FlashProgrammingTool **Impact:** When erasing the ME region in flash the ME must be disabled. This was being done for most accesses except when doing a ChipErase (FPTW.exe -c). **Workaround:** none **Notes:** **Reproduction Steps:** 1. Flash FW with current SPI image 2. Reset system (G3) 3. Boot OS as normal 4. At command prompt a. Run fpt.exe –c b. Run fpt.exe –b c. Run fpt.exe -f full_image.bin -desc d. Run fpt.exe -f full_image.bin -bios e. Run fpt.exe -f full_image.bin -me f. Run fpt.exe -f full_image.bin -gbe g. Run fpt.exe -f full_image.bin -pdr h. Run fpt.exe -verify full_image.bin 5. Reboot System/G3 power cycle 6. At command prompt run meinfo.exe to verify FW version Expected Results: 1. After each command there should be a message indicating the operation was successful. 2. At step 5. the system should restart and load OS normally. 3. The FW version number in step 6. should be the same as what is in the binary_image.bin. Actual Results: 1. From step 4.A. through 4.E. the system will intermittently lock or hang. 2. The execution of 4.A. initiates system instability.	7.1.10.1065

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3790870	MEManuf reports failure of WLAN BIST when using Condor Peak WLAN	**Affected Component –** SW.Tools.MeManuf **Impact:** MEManuf performs WLAN BIST with non-vPro systems when Condor Peak WLAN card is detected. **Workaround:** none **Notes:** **Reproduction Steps:** 5. Configure 5 MB QM67 image with WLAN Power Well Config set to 0x80 (disabled) in ME Region->Configuration->ME. 6. Flash on mobile system 7. Run MEManuf 8. MEManuf will fail on WLAN BIST	7.1.10.1065
3790750	The Intel ® DAL permanent disable value does not decompose to the correct value.	**Affected Component** – SW.Tools.FlashImageTool **Impact:** Intel ® DAL permanent disable unexpectedly set to “No” after decomposing 7.1 image despite value set to “Yes”. **Workaround:** none **Notes:** Reproduction Steps: 1. Create a flash image in FITC with “Intel ® DAL” permanent disable set to “Yes”. 2. Drag and drop the binary image into FITC to decompose it. The value of DAL will be reset back to "No" instead of "Yes".	7.1.2.1041
3790489	FW Update Tool error message is unclear when downgrading to blacklisted firmware version.	**Affected Component** – SW.Tools.FwUpdLcll **Impact: The** Unclear error message would confuse end users. **Workaround:** none **Notes:** Reproduction Steps: 3. Use FWUpdLcl.exe in either Windows or DOS, try to downgrade from PC (1014) to an older version (like 1009). 4. The Update will fail as expected, but the message provided does not clearly state WHY the downgrade failed.	7.1.0.1023

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3553383	FPT displays Intel(R) QM67 Express Chipset Revision: Unknown	**Affected Component** – SW.Tools.FlashProgrammingTool **Impact:** FPT tool cannot display CPT Revision ID if it is B2 stepping or later. **Workaround:** none **Notes:** Reproduction Steps: 1. Flash ME FW 7.1.0.1014 signed image to system 2. Boot to DOS 3. FPT -d Dump_1014.bin	7.1.0.1023
3553252	MEINFO -feat "IPv4 Address" –value Fails even when correct value is supplied	**Affected Component** – SW.Tools.MeInfo **Impact:** The IPv4 Address option using '–feat' fails when using the correct value **Workaround:** none **Notes:** Reproduction Steps: 1. Flash Image, Setup BIOS, provision AMT with known IP 192.168.1.45 2. Goto MEinfo folder and run command prompt 3. use command > Meinfowin.exe (note the IP address for IPv4) 4. use command > Meinfowin.exe –feat "IPv4 Address" (Should be 192.168.1.45) 5. use command > Meinfowin.exe –feat "IPv4 Address" -value "192.168.1.45"	7.1.0.1023
3553251	7.0 MeInfo -feat "^"OEM Tag "^"-fails even when correct value is supplied	**Affected Component** – SW.Tools.MeInfo **Impact:** The OEM Tag option using '–feat' fails when using the correct value **Workaround:** none **Notes:** Reproduction Steps: 1. Flash Image, Setup BIOS setup as normal 2. FPT -u -n "^"OEM_Tag"^" -v "^"TestValueBit31 set"^" {sets up OEM Tag} 3. FPT –commit {Commits variable to system} 4. Meinfo -feat "^"OEM Tag"^" {returns value set buy FPT} 5. Meinfo -feat "^"OEM Tag"^" -value "^" TestValueBit31 set ^"	7.1.0.1023

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3553234	Wrong LAN info in Intel AMT Management Engine | Extended System Details on XP	**Affected Component** – SW.AMT.Services **Impact:** LAN information not being accurately displayed. **Workaround:** none **Notes:** Reproduction Steps: 1. Install WinXP on Mobile CRB 2. Flash the 1120 FW 3. Install latest Etherent driver ver. 11.8.75.0 and other drivers 4. Enable AMT from MEBx Setup 5. Enter iMEBx by pressing Ctrl+P during POST and configure AMT. Save setting and reboot system. 6. Launch Intel Management & Security Status window by double clicking Intel Management & Security Status Task Tray icon. 7. Go to Advanced tab--> Extended System Details-->System Information-->Intel(R) ME-->Host Information	7.1.0.1023

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3553233	After Manufacturing mode has been disabled, running the DOS fpt -closemnf command again does not return an error as expected.	**Affected Component** – SW.Tools.FlashProgrammingTool **Impact:** The DOS FPT tool does not generate an error when the –closemnf is executed again. **Workaround:** none **Notes:** Reproduction Steps: On either Desktop or Mobile CRB. Build an image with any SKU. Under Windows 7 (32bit) or Windows Vista (32bit). 1. open command line as admin 2. run fptw -closemnf no 3. manually perform G3 4. boot to OS, run MEInfowin -fwsts and confirm manufacturing mode has been disabled 5. Run fptw -closemnf no again and recieve the below error: Error 26: 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. Unable to perform closemnf. Error 26: 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. 6. Run fpt -closemnf no under DOS will receive a pass with below message: The ME Manuf Mode Bit and the Region Access Permissions are already set. FPT Operation Passed	7.1.0.1023

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3552907	Memanuf SMBus Read Byte test fails intermittently	**Affected Component** – SW.Tools.MeManuf **Impact:** The tool fails operate as expected. **Workaround:** none **Notes:** Reproduction Steps: 1. Boot system to DOS 2. Run MEManuf -S0 -verbose 3. Check result 4. Repeat step 1,2,3 to get fail log	7.1.0.1005
3551884	The '-forcereset' command does not trigger reset on the fwUpdLclEfi tool.	**Affected Component** – SW.Tools.FwUpdLcl **Impact:** The –forcereset command does not reset the platform on the EFI tool. **Workaround:** none **Notes:** Reproduction Steps: 1. use FwUpdLclEfi to perform update using the -forcereset option	7.1.0.1005
3551843	Changing the slew rate for Flex1 on the "FITC Wizard - ICC Profile n Single Ended Clocks" page does not trigger a corresponding update to ICC Parameter values	**Affected Component** – SW.Tools.FlashImageTool **Impact:** **Workaround:** Need manually change the value using the FITC interface. **Notes:** Reproduction Steps: 1. Load valid images 2. Go the "FITC Wizard - ICC Profile n Single Ended Clocks" page 3. Change the value of Flex1 Slew Rate	7.1.0.1005
3551804	When using the blank check (-b) option in FPTEFI it is returns 'assertion' error.	**Affected Component** – SW.Tools.FlashProgrammingTool **Impact:** Tool will unexpectedly error out when using –b switch. **Workaround:** Enable Descriptor Override **Notes:** Reproduction Steps: 1. boot to bootable USB containing EFI tool files for FPTEFI 2. run 'FPTEFI -b'	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3551803	The FPT '-commit' option returns warning error with the following FOVs: 0x000E -- SetWLANPowerWell 0x2008 -- MEIdleTimeout 0x6001 -- ATFPOPHard 0x6002 -- ATFPOPSoft	**Affected Component** – SW.Tools.FlashProgrammingTool **Impact:** Unexpected behavior. Warnings being returned however values still get programmed correctly. **Workaround:** none **Notes:** Reproduction Steps: 1. use FPT to update FOVs: - SetWLANPowerWell (0x000E) - MEIdleTimeout (0x2008) - ATFPOPHard (0x6001) - ATFPOPSoft (0x6002) 2. immediately after FOV update, use the -commit option to commit changes	7.1.0.1005
3551671	IMSS: General tab "start next time"checkbox tooltip in STD Manageability mode contains AMT string in localized versions.	**Affected Component** – SW.AMT.Icon.Localization.Translation **Impact:** Legal issue. **Workaround:** **Notes:** Reproduction Steps: 1. Flash the FW with STD mgt and install IMSS driver kit 2. Open localized IMSS e.g. RUS 3. Hover over "start next time" check box	7.1.0.1005
3551653	System reboots when using FPTEFI in EFI without ME disabled. Reboot does not occur when using FPT in DOS without ME disabled.	**Affected Component** – SW.Tools.FlashProgrammingTool **Impact:** Platform unexpectedly reboots when using FPTEFI when ME is enabled. **Workaround:** Disable ME **Notes:** Reproduction Steps: 1. Boot to EFI with ME enabled in MEBx 2. fs0: 3. cd into correct folder 4. fptefi -f <nameofimage	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3551629	When shared static IP is enabled on Windows XP UNS does not validate the new OS static IP settings resulting in IP sync failure.	**Affected Component** – SW.AMT.Services **Impact:** No shared static IP sync functionality on Windows XP. **Workaround:** none **Notes:** Reproduction Steps: 1. Load to XP 2. Enable shared static IP sync in FW 3. Configure OS with valid static IP setting	7.1.0.1005
3551622 3551380	Using FPT to read the ME Variables supported is returning Error 522 for "PKI DNS Suffix" and "Remote Configuration Enabled".	**Affected Component** – SW.Tools.FlashProgrammingTool **Impact:** FPT returns an error when trying to read the PKI DNS Suffix and Remote Configuration Enabled NVARS. **Workaround:** provision platform **Notes:** Reproduction Steps: 1. flash image, setup BIOS, enter DOS 2. run FPT -r "PKI DNS Suffix" or "Remote Configuration Enabled"	7.1.0.1005
3551559	MeInfo returns and ‘Invalid Usage’ error when the ‘-fwsts’ and ‘-verbose’ commands are used together.	**Affected Component** – SW.Tools.MeInfo **Impact:** MeInfo will returns an error instead of accepting these two commands together. **Workaround:** Use fwsts and verbose command separately **Notes:** Reproduction Steps: 1. meinfo -fwsts -verbose	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3551534	Skipping the erase command when flashing the ME region will cause the platform to hang.	**Affected Component** – SW.Tools.FlashProgrammingTool **Impact:** Not erasing the ME region during and ME only region flash will cause platform hang. **Workaround:** **Notes:** Do not skip the erase command when doing ME only region flashing. Reproduction Steps: 1. HECI driver installed 2. ME disabled from MEBx Flash ME region images using "Region" and "Skip Erase" options 1. fpt.exe -erase -me 2. fpt.exe -f me_image.bin -me -e 3. Reboot System/G3 power cycle in automation.	7.1.0.1005
3528336	Uninstall process does not delete all registry entries added during the installation.	**Affected Component** – MESOL.Installer **Impact:** Reinstalling SW drivers might fail due to device name changes between alpha and Beta versions. **Workaround:** Please use the following steps to fix: 1. Uninstall the ME components (AMT SW) via the control panel. 2. Delete the following key from the registry:HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\HECIx64 (for 64 bit OS) a. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\HECI (for 32 bit OS) 3. Reboot the system. 4. Install the ME components **Notes:** Reproduction Steps: 1. Install drivers from the kit 2. Make snapshot of registry 3. Uninstall drivers via control panel 4. Make snapshot of registry 5. Compare two snapshots	7.1.0.1005

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3522211	ME driver installer stops on Win7 64bit with '-preinst' option if non-vPro CPU is used.	**Affected Component** – SW.AMT.Drivers **Impact:** On Win7 64bit OS MEI Driver will stop during install when using the '-preinst" command line switch and non-vPro CPU. **Workaround:** **Notes:** Reproduction Steps: Run ME driver Setup.exe on Win7 64bit with '-preinst' option as below. Non-vPro CPU is required. Setup.exe -noIMSS -preinst -s	7.1.13.1088
2753005	FPT tool is able to use the '-erase' and the '-address' option n same command line argument.	**Affected Component** – SW.Tools.FlashProgrammingTool **Impact:** Unexpected behavior. FPT does not return and error as expected when these two options are combined. **Workaround:** Use the –erase and –address option separately **Notes:** Reproduction Steps: 1. Flash image onto platform: Default BIOS/ MEBx settings. Load all necessary drivers. 2. With FPT the following command:FPT.exe -erase -a 0x30000000 3. FPT.exe -greset	7.1.0.1005

6.5 Closed – Intel® Anti-Theft Technology

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3551888	GpsLocationBeaconNotification messages received after ConfigureGpsLocationBeaconing(enable=false)	**Affected Component** – FW.TDT **Impact:** GPSLocationBeaconNotification messages being received. **Workaround:** none **Notes:** Steps to Reproduce: 1. Flash image on platform with Fitc to set MCTP enable=true, address=0x30. 2. Flash platform, Set BIOS default (AT enabled), boot to OS 3. Provision AT, run Basic-Setup.bat, ConfigureSMS, GetMEIK, SetClientId 4. ConfigureLocationBeaconing(Enable=true, TimeInterval=60, TxCount=6, TriggerMask=0x2), AssertStolen, call GpsLocationBeaconNotification 6 times, DeAssertStolen. 5. ConfigureLocationBeaconing(Enable=false, TimeInterval=60, TxCount=6, TriggerMask=0x2), AssertStolen 6. Call GpsLocationBeaconNotification 6 times.	7.1.0.1005
3550901	HECI failure observed after clearing CMOS while in Suspend state.	**Affected Component** – FW.TDT **Impact:** Getstate will fail to open the HECI client. **Workaround:** none **Notes:** Steps to Reproduce: 1. Flash FW, Set Default BIOS settings 2. Provision AT-p, GetPublicKey, SetPublicKey, SetCredential 3. GetState, SetSuspendModeRemote, GetState 4. Clear CMOS. Set BIOS default settings. Boot to OS 5. Query Getstate	7.1.0.1005

6.6 Closed – Intel® Upgrade Service

Issue #	Description	Affected Component / Impact / Workaround / Notes	Fixed in Kit#
3534838	ME RESET is being counted toward PCH MTP Period Boot Count.	**Affected Component** – FW.CLS **Impact:** MTP period boot count would expire earlier than expected. **Workaround:** **Notes:** Steps to Reproduce: Flow-A ========== 1. Flash PCH MTP (ExpTime=90mins, ExecTime=30mins, PeriodType=1, Period=3) 2. Boot to OS Verify MTP is in Applied state 3. Wait for the Default "7days/mins" to expire. Once expired, Period Boot Count should being counting. 4. Warm Reset (BootCount=1) 5. Verify MTP still in Applied state 6. S3 (BootCount=2) 7. S4 (BootCount=3) 8. ME Reset(Should not be counted toward Boot Count). However, this ME Reset results in GRESET and GetPermitInfo returns MTP NO LONGER in APPLIED state. Flow-B ========== 1. Issue ActivateMTP(Period=3 Boots) 2. WarmReset (BootCount=1) 3. Verify MTP is in APPLIED state 4. WarmReset (BootCount=2) 5. ME Reset (Does not result in GRESET) 6. ME Reset (Results in GRESET) MTP Permit is De-Activated after 2nd ME Reset, although ME Reset should not have been counted.	7.1.0.1005

6.7 Closed – Not Firmware Issue

Issue #	Description	Affected Component / Impact / Workaround / Notes
3584530	MEBx will present incorrectly extended ASCII text ,when vBios code page is not standard English (437)	**Affected Component** – ExternalDependency **Impact:** MEBx AMT User consent text containing letters in the range ASCII 128-255 might be displayed incorrectly. **Workaround:** Set the user consent language from localized back to English (can be done programmatically or through IMSS). Note: This could also affect the setting of sprite language in the case of switchable GFX. **Notes:** Reproduction Steps: 1. Install SUT with graphic card containing vbios without standard code page. 2. Test user consent in mebx showing message with extended ASCII incorrectly.
3551959	Firmware saves the last DHCP option 24 list, and will accept the connection even if the matching DHCP option 24 was deleted.	**Affected Component** – FW.AMT.Provisioning **Impact:** Firmware will accept connection using last saved DHCP option 24 when matching list has been deleted. **Impact: Workaround:** G3 **Notes:** Reproduction Steps 1. Burn native image: ztc-true. 2. Perform CMOS clear. 3. Edit bios setting according to the latest BKM. 4. Boot to OS. 5. Enter 5 DHCP option strings (one of them is FTL10.com). 6. Run: ZTCLocalAgent.exe -activate -ipv6 -dns FTL10.com. 7. Try to communicate(PKI) with the AMT (should be successful). 8. Delete DHCP option 24 FTL10.com value. 9. Move AMT network to link down and then up again (refresh network values). 10. Try to communicate with AMT(PKI).

Issue #	Description	Affected Component / Impact / Workaround / Notes
3551877	SMS GpsLocationBeaconingNotification fails to detect beacon messages from FW with trigger mask 0x8 (Attack Detected)	**Affected Component** – FW.TDT **Impact:** There are no Beacon messages being seen. **Workaround:** none **Notes:** Steps to Reproduce: 1. Using Fitc, modify FW to enable MTCP and set MTCP address 0x30 2. Flash platform, enter BIOS enable AT. Boot to OS, Provision AT, run Basic-Setup.bat 3. ConfigureSMS, GetMEIK, SetClientId, ConfigureGpsLocationBeaconing(BeaconEnable=Enabled, TimeInterval=60, TxCount=4, TriggerMask=0x8) enable PBAM after EOP. 4. Clear CMOS, boot to OS, GetState(State=Stolen, Theft Trigger=Attack Detected) 5. call SmsGpsLocationBeaconingNotification

Issue #	Description	Affected Component / Impact / Workaround / Notes
3551367	After performing SOL & IDER boot then trying again to reboot the AMT machine with SOL only results in a boot failure "Boot disk missing, please insert boot disk and press enter". If you perform SOL boot and IDER session is open it will reboot to the IDER device.	**Affected Component** – FW.AMT.Remote Control Operations **Impact:** Booting to SOL only session immediately after a SOL/IDER session will result in boot failure. **Workaround:** none **Notes:** Reproduction Steps: 1. Burn the machine. 2. Clear CMOS. 3. Provision the machine. 4. Load the AMT machine OS. 5. Verify AMT is functional. 6. Perform IDER boot. 7. Close IDER session. 8. Open SOL session and perform SOL boot. How To RC WS-MAN Power Management 1. CIM_ComputerSystem - copy the EPR of ManagedSystem instance 2. CIM_PowerManagementService -> ReauestPowerStateChange : - pate the EPR of ManagedSystem value to the Cim_ManagedElement - 10-Reset , 8-Off , 5-Power Cycle , 2-On (optional: 7-Hibernate , 4-Stand By) SetBootOption: 1. AMT_BootSettingData -> Put : - insert fields (SOL , IDER =TRUE/False and IDER boot Device) 2. CIM_BootConfigSetting: copy the EPR of CIM_BootConfigSetting 3. CIM_BootService -> SetConfigRole : - paste the EPR for CIM_BootConfigSetting - Role = 1 (always)

Issue #	Description	Affected Component / Impact / Workaround / Notes
3551265	Trying to send the BitLocker password over SOL fails 3 out of 5 times.	**Affected Component** – FW.AMT.Redirection **Impact:** Trying to unlock the computer from remote using SOL fails. **Workaround:** none **Notes:** Reproduction Steps: 1. Burn the machine. 2. Clear CMOS. 3. Provision the machine. 4. Take a console machine with WIN vista or WIN 7. 5. Using the BitLocker mechanism - encrypt the HD attached Document TPM_BitLockerEnable.doc 6. Save the PassCode in a *.txt file. 7. Perform SOL boot attached document How To RC WS_.doc. 8. Verify you are in the PassCode screen. 9. Send the *.txt file (the pass code through SOL), to do so just copy the PassCode to the buffer & the paste it to the SOL Putty window.
3550806	Host wake on Magic Packet not waking platform after a G3 exit to S5. It does work with S0 -> S5 power flow.	**Affected Component** – ExternalDependency **Impact:** Platform will not respond to Magic Packet. **Workaround:** none **Notes:** Reproduction Steps: 1. Setup BIOS, set it to S5 after g3 save and exit 2. Boot up to windows S0/M0 3. Graceful shutdown 4. G3 Turn power off 5. AC Turn power back on 6. Send a magic packet to bring the SUT back to S0/M0
3535026	A global reset is occurring after 30-165 iteration of S3/M3 (5MB FW) or S3/Moff (1.5MB FW) with DeepSx disabled.	**Affected Component** – ExternalDependency **Impact:** Platform will unexpectedly global reset after multiple pass S3 cycle testing. **Workaround:** none **Notes:** Reproduction Steps: 1. Flash No DeepSx Image (4 or 8M) 2. Setup BIOS, save and exit 3. Enter MEBx and setup as usual (8M only) 4. Boot up to OS 5. Start S3 cycle testing

Issue #	Description	Affected Component / Impact / Workaround / Notes
3272116	SOL session is closed when working with IDEr with ME preference.	**Affected Component** – iAMT WLAN **Impact:** SOL session closes unexpectedly. **Workaround:** **Notes:** Reproduction Steps: 1. Burn image and clear CMOS 2. Enable SOL and IDER in MEBx. 3. Enable wireless interface and add profile. 4. Enable listener 5. Open SOL and IDER session with ME preference. 6. Restart the AMT 7. Start to copy CD files from IDER drive 8. Start to send text via SOL session from DUT to management console.
3032265	In Hx and Sx after disabling and enabling WiAMT in WebUI, WiAMT does not try to connect to the profile with the highest priority.	**Affected Component** – iAMT WLAN **Impact:** WiAMT remains connected to the previous profile instead of the profile with the highest priority. **Workaround:** none **Notes:** Reproduction Steps: 1. System under test in connected in Hx (or Sx) to profile with highest priority 2. Disable WiAMT in WebUI 3. Set the priority of the profile that it connect before to low 4. Add valid profile with high prority 5. Enable WiAMT in WebUI

6.8 Closed – No Plan to Fix

Issue #	Description	Affected Component / Impact / Workaround / Notes
3552172	Waking ME with Neighbour Solicit from M-off - ME doesn't answer NS packet until reconfiguration of the IPv6 addresses.	**Affected Component** – FW.AMT.NETP **Impact:** ME drops the TCP connection over IPv6. **Workaround:** none **Notes:** **Deferred to future project** Reproduction Steps: 1. Configure AMT to support ipv6 , so it will aquire DHCPv6 2. Set to PP2. Change IdleTimeOut to 1. Move to Sx 3. Wait until AMT moved to M-off. 4. Open sniffer. 5. Clean neighbourhoud family in Management Console command in netsch: netsch-> interface ipv6 -> delete neigh 6. Send ping to DHCPv6 address
3552145	Setting static IPv6 while in "in provision" causes IPv6 connection to disconnect for some time. If the provisioning is over IPv6 the provisioning server will fail when trying to continue.	**Affected Component** – FW.AMT.NETP **Impact:** Provisioning will fail if static IPv6 address in set while AMT is being provisioned over IPv6. **Workaround:** Do not set Static IPv6 address while in the provisioning process. **Notes:** ***Deferred to future project*** Reproduction Steps: 1. Burn image 2. Perform clear CMOS and set BIOS 3. Verify that there is a DHCP that assigns IPv6 addresses in your network. 4. Open network by: `BIOS_SIM StartConfigurationEx ipv6enabled=true` 5. Verify IPv6 is enabled (you can call the relevant CIM_ElementSettingData class) 6. Set static IPv6 address (by IPS_IPv6PortSettings.Put())
3552104	If one of the interfaces has only LinkLocal IPv6 - CIRA cannot be opened through the other interface.	**Affected Component** – FW.AMT.NETP **Impact:** No CIRA connectivity. **Workaround:** none **Notes:** ***Not a current requirement*** Reproduction Steps: 1. Provision with full CIRA settings, Enable Wireless AMT and ipv6 on AMT. 2. Connect LAN cable to scope which is OUT of Env Detection 3. Connect Wireless OS to scope which doesn't distribute any global ipv6 address - OS and AMT will aquire only link local ipv6 4. Call bios_Sim GetRemoteConnectionStatus 5. Returned Status - Direct

Issue #	Description	Affected Component / Impact / Workaround / Notes
3552050	No DHCP ACK for AMT through 2003 Relay Agent, impact - AMT does not acquire IP in DHCP active mode	**Affected Component** – FW.AMT.NETP **Impact:** AMT will not receive an IP address. **Workaround:** none **Notes:** ***Deferred to future project*** Reproduction Steps: 1. Confiure 2003 DHCP Relay - if need help refer to bug submitter. 2. Connect DUT (OS) to one side of segment - verify OS aquired IP 3. Disable Driver (or move to Sx) - move AMT to DHCP active
3551778	AuditLog does not get updated with new record when a firmware update failure occurs.	**Affected Component –** FW.Kernel.FWUpdate **Impact:** If firmware update fails there will be no corresponding event record to indicate this. **Workaround:** none **Notes:** ***Deferred to future project*** Reproduction steps: 1. Make provisioning in ACM mode, set the default.config.xml to enable the audit log. 2. Set “Firmware Update failed” event to be enabled by the AMT_AuditPolicyRule.SetAudiyPolicy method. Enable – 1 AuditAppID – 19 EventId – 1 Flag – 0 3. Perform Firmware Update, use an invalid image Use FW update windows tool from: \Tools\System Tools\FWUpdate\Local-Win, and run locally: "fwupdlcl -f [image name] -generic " image is located on the kit in: Image Components\ME. FW update proccess should fail. 4. Read Audit log's records.

Issue #	Description	Affected Component / Impact / Workaround / Notes
3551045	Setting End of Manufacture using FITC causes more boots on Mobile platform than it does on Desktop platforms.	**Affected Component** – FW.CLS **Impact:** Permit attribute of MTP is not active as expected. **Workaround:** none **Notes:** ***Deferred to future project*** Steps to Reproduce: 1. Use FSTApp to generate PCH MTP binaries with periodtype=1, period=3, Execution time=5 minutes, Expiration time=30 minutes. 2. Use FITc to build PCH MTP image with resolution set to Minutes and Globallock set. 3. Flash via Dediprog/FPT > G3(unplug power) > Reapply Power > Boot to BIOS > Set following Parameters: 3a. Set SATA Mode = IDE [ADV > CONFIG > SATA CONFIG] 3b. F4 to Save and Exit 4. Boot to OS 5. Check the permit attributes of PCH MTP.
3550521	Firmware attempts to send DNS updates when OUT of EnvDetection in DHCP passive mode, Dedicated FQDN,	**Affected Component** – FW.AMT.NETP **Impact:** Firmware opens UDP ports when out of Enterprise **Workaround:** none **Notes:** ***Deferred to future project*** Reproduction Steps: 1. Provision and give FW - Dedicated FQDN: HostName, DomainName. 2. Set EnvironmentDetection 3. Boot to OS, FW in DHCP passive. 4. Connect to the scope which is OUT of ENV detection 5. From local interface - Enable DDNS
3534547	Trying to run 4 simultaneous instances of 'General Info' over LMS will result in only 2 of them succeeding.	**Affected Component** – SW.AMT.Services **Impact:** Unexpected behavior. Functionality does not match previous generation. **Workaround:** none **Notes:** ***Deferred to future project*** Reproduction Steps: 1. Provision to Enterprise, install kit 2. Run 4 instances of same command over LMS (i.e. GeneralInfo) 3. Check how many instances succeeded.

Issue #	Description	Affected Component / Impact / Workaround / Notes
3534374	When performing stress of start-stop SOL UNS has a memory leak. After stress of 1050 events, the UNS process memory allocation (RAM) jumps from ~5MB to more than 10MB.	**Affected Component** – SW.AMT.Services **Impact:** Memory leak could cause OS resource issues. **Workaround:** none **Notes:** ***Deferred to future project*** Reproduction Steps: 1. Burn mobile image and perform clear CMOS. 2. Complete BIOS settings. 3. Boot to OS and install kit SW (run Drivers\MEI_SOLInstaller\setup.exe). 4. Use external application to register for UNS events through WMI and COM interfaces. 5. Run script that performs endless cycles of start and then stop SOL (wait few seconds between the calls).
3271953	RF stays in the "Wireless On" state after changing the option from 'On' to 'Off' using NCPA on Windows XP.	**Affected Component** – iAMT WLAN **Impact:** Wireless stays in the 'On' state even when the option to turn it 'Off' has been selected. **Workaround:** Update or reinstall drivers. **Notes:** **No plans to fix** Reproduction Steps: 1. Ensure WiAMT connection in S0\ME preference 2. Set SW RF to "wireless Off" using NCPA 3. Verify WiAMT disconnect 4. Set SW RF to "wireless On"using NCPA
3271140	Sporadically while WiAMT is connected in Hx state and there is no traffic running, there are no consecutive Null Data packets.	**Affected Component** – iAMT WLAN **Impact:** No consecutive Null Data is being sent while in Hx. **Workaround:** none **Notes:** **No plans to fix** Reproduction Steps: 1. Connected WiAMT in Hx state. 2. Don't running any traffic. 3. Capturing packets with RF sniffer.
3018098	Mobility center freezes while doing SW RF kill In ME preference.	**Affected Component** – iAMT WLAN **Impact:** Mobility center freezes when doing SW RF Kill. **Workaround:** none **Notes:** **No plans to fix** Reproduction Steps: 1. Host in S0/H0. 2. Move to ME preference. 3. Using Mobility center do SW RF kill

6.9 Closed – Documentation Change

Issue #	Description	Affected Component / Impact / Workaround / Notes
3551772	DDNS - Missing feature description and use case in Network Administration Section.	**Affected Component** – SW.AMT.SDK.DOCS **Impact:** Documentation missing information. **Workaround:** none **Notes:** N/A
3534716 3534717 3535281	Executing FPT with the '-c' command line parameter results in 'error 27' being returned.	**Affected Component** – Documentation.SystemToolsUserGuide4MB **Impact:** FPT returns an error 27 Host CPU does not have erase access to target flash area. **Workaround:** Either limit the area to the area available using the -length command *or* create a 2 SPI component image. You know it will error out when you receive the message in FPT: "Warning: There are some addresses that are not defined in any regions. Read/Write/Erase operations are not possible on those addresses" **Notes:** Reproduction Steps: 1. From dos command line in FPT-Win...FPT.exe -c
3534221	The IMSS user guide that located inside IMSS folder in the kit is not up-to-date to current IMSS version.	**Affected Component** – SW.AMT.Docs **Impact:** Documentation is not up to date with current IMSS version. **Workaround:** none **Notes:** N/A
3534217	IMSS readme file is not relevant to current IMSS version and can be removed since there is another IMSS user guide in the kit.	**Affected Component** – SW.AMT.Docs **Impact:** Documentation is not up to date. **Workaround:** none **Notes:** N/A

7 Known Issues

7.1 Open – Intel® AMT

Issue #	Description	Affected Component / Impact / Workaround / Notes
3553280	AMT WSEventing subscriber cannot Authenticate with a password longer than 16 characters.	**Affected Component** – FW.AMT.WS-Eventing **Impact:** AMT fails to complete authentication process and sends a packet with empty username field. **Workaround:** Keep password length below 16 characters in length. **Notes:** Reproduction Steps: 1. Invoke CIM_FiltterCollection.subscribe() With the the following fields: Authentication - Digest User : admin (or any user in active directory) Password: Admin!12312345678 (or any string longer then 16) Delivery Address - the address and port of the listener server I.E 10.0.118.3:1234 2.Open HTTP listener server on the subscription port. You can use the localEventListner from AMT tester->WSEventing 3.Generate an event - can be done by plugging and unplugging LAN.
3553112	After performing an OS restart stress for 45 minutes with SOL + IDER sessions open over WLAN, both sessions disconnect.	**Affected Component** – FW.AMT.Redirection **Impact:** The SOL / IDEr session unexpectedly closes. **Workaround:** none **Notes:** Reproduction Steps: 1. Burn image, clear CMOS and provision AMT. 2. Enable listener in AMT_RedirectionService. 3. Add Wireless profile in WebUI and enable Wireless. 4. Open SOL+IDER sessions using IMRGUI over Wireless interface, using Legacy-ME mode. 5. Run script to perform OS restarts.

Issue #	Description	Affected Component / Impact / Workaround / Notes
3553102	KVM session disconnected after several OS resets over Wireless.	**Affected Component** – FW.AMT.Redirection **Impact:** The KVM session unexpectedly closes during multiple resets. **Workaround:** none **Notes:** Reproduction Steps: 1. Enable wireless on webUI 2. Connect amt via wireless network 3. Set link preferance to ME with a long timeout 4. Open KVM session 5. Run script on DUT OS startup to reset system 6. Wait several resets
3552823	KVM: session over wireless is closed after approximately 45 minutes	**Affected Component** – FW.AMT.KVM **Impact:** KVM session unexpectedly closes **Workaround:** none **Notes:** Reproduction Steps: 1. Burn image, clean CMOS and provision AMT. 2. Provision to Admin mode. 3. Enable listener in AMT_RedirectionService. 4. Open KVM session on wireless interface 5. Move the wireless preference to ME. 6. play a movie on the DUT
3542746	The platform under test gets 23 Exception Resets after 394 iterations of S0 Mon-> S5Mon (RCO power up).	**Affected Component** – iAMT WLAN **Impact:** Unexpected behavior. **Workaround:** none **Notes:** Reproduction Steps: 1. Burn 7.0.0.1057 image. 2. Go OS set PP2. 3. Check host and ME connectivity via LAN and WLAN. 4. Move to S5/Mon. 5. 3. Check ME connectivity via LAN and WLAN. 6. Send RCO power up. 7. Go to step #3.

Issue #	Description	Affected Component / Impact / Workaround / Notes
3552577	SOL / IDER sessions are closed during DVD OS installation with TLS over CIRA over wireless	**Affected Component** – FW.AMT.NETP **Impact:** The SOL / IDEr session unexpectedly close over CIRA / TLS session. **Workaround:** none **Notes:** Reproduction Steps: 1. Burn image, clear CMOS and provision AMT 2. Enable listener 3. Enable wireless interface and add profile 4. Change to TLS Server 5. Open IDER and SOL sessions over CIRA over wireless 6. perform boot to DVD 7. perform OS installation from remote
3272128	Frequently WiAMT does not connect in Sx state, with unique rate of 18MBps data rates and up.	**Affected Component** – iAMT WLAN **Impact:** WiAMT does not connect as expected **Workaround:** **Notes:** Reproduction Steps: 1. Sset the AP to unique rate from 18MBps and on 2. In Hx state, try to connect to WiAMT
3272115	WiAMT not sending a scan to all IT profiles.	**Affected Component** – iAMT WLAN **Impact:** WiAMT cannot connect since there is no associated profile. **Workaround:** **Notes:** Reproduction Steps: 1. Add few IT profiles to WiAMT 2. Move system under test to Sx 3. Observe wireless sniffer
3271735	After Sx/Host Pref -> Sx/ME Pref -> S0/Host Pref transition - ME still holds Link control.	**Affected Component** – iAMT WLAN **Impact:** ME is not returning control back to the host. **Workaround:** restart **Notes:** Reproduction Steps: 1. In S0/H0/'Host Pref' - move system under test to Sx 2. Change 'Link Pref' to ME 3. Wake system 4. Move 'Link Pref' to host

Issue #	Description	Affected Component / Impact / Workaround / Notes
3269520	Power consumption is high while in Tx: 40-200 mWatt higher than POR.	**Affected Component** – iAMT WLAN **Impact:** WLAN power draw in in Tx higher than expected. **Workaround:** none **Notes:** 6300 - Puma Peak Reproduction Steps: 1.ensure WiAMT connection in Hx 2.send ping to the wireless IP(Rx) 3.measure the reply(Tx)
3269463	WLAN not moving to “Power Save Mode” in Sx / Moff while there is traffic on the network.	**Affected Component** – iAMT WLAN **Impact:** WLAN power draw in Sx / Moff state higher than expected. **Workaround:** none **Notes:** Reproduction Steps: 1.Add a WiAMT profile that match to any AP 2.Set PP and LP enable in Sx 3.Move to Sx 4.Wait for ME to enter Moff. 5.Send traffic to any clint.
3033186	Sporadically (2/15 tries) While in So/Hx (Operational - WiAMT functional), WiMax fails to turn ON (WiAMT funtionality stops). After 1-2 min WiAMT connects in the mean time - no WiAMT or WiMax functionality available.	**Affected Component** – iAMT WLAN **Impact:** Unexpected behavior. **Workaround:** none **Notes:** Reproduction Steps: 6250 – Kilmer Peak 1. WiAMT functional in S0, WiMax Radio OFF. 2. Disable Wireless driver - move to Operational (WiAMT functional) 3. Try to Turn WiMAX Radio ON (Mostly works, sporadically fails) 4. Note that while WiMax Radio failed to turn OFF, WiAMT functionality stopped (renewed after about 1-2 minutes) Expected Results: WiMax Radio turns ON & functional, WiAMT functionality stops. Actual Results: See above (Include what steps must be taken to bring the system/product back to a usable status?)

Issue #	Description	Affected Component / Impact / Workaround / Notes
3033185	Sometimes WiMax unexpectedly manages to turn ON when moving to ME control in Hx (XP).	**Affected Component** – iAMT WLAN **Impact:** Unexpected behavior. **Workaround:** none **Notes:** Reproduction Steps: 6250 – Kilmer Peak 1. So/Hx, WiAMT operational in Oerational. 2. Move t ME Preference. 3. Move to ME control/Open redirection session over wireless. 4.Immediately after stage 3, try turning WiMax Radio On. 5. If WiMax Radio turns on, try connecting to WiMax network 6. Note No WiAMT functionality (ping, Web UI) 7. Wait up to 2 minutes. WiAMT will connect and regain functionality, WiMax radio will turn OFF.
3032834	IDER performance over WLAN is less than expected PRD numbers in WAN environments.	**Affected Component** – iAMT WLAN **Impact:** WLAN / IDEr performance lower than expected. **Workaround:** none **Notes:** Reproduction Steps: 1 Enable IDER in MEBx menu. 2 Enable IDER listener. 3 ON MC, open IDER session (using IMRGUI, start IDER, Immediate=enable). 4 Reboot the DUT. 5 On the DUT, open cdspeed.exe tool, set its priority to high. 6 Choose the right CD, and press start. 7 Results (xCD): speed – Average.
3031884	WiAMT AT7.0 RP: power consumption is high in WOWME (250-400mW above POR).	**Affected Component** – iAMT WLAN **Impact:** WLAN power draw higher than expected. **Workaround:** none **Notes:** 6230 - Rainbow Peak 2 Reproduction Steps: N/A
3031882	Power consumption is high while in Tx (50-200mW above POR).	**Affected Component** – iAMT WLAN **Impact:** WLAN power draw higher than expected. **Workaround:** none **Notes:** 6230 - Rainbow Peak 2 Reproduction Steps: N/A

Issue #	Description	Affected Component / Impact / Workaround / Notes
3031872	Power consumption is high than expected in WOWME (50- 150mW higher than POR).	**Affected Component** – iAMT WLAN **Impact:** WLAN power draw higher than expected. **Workaround:** none **Notes:** 6205 - Taylor Peak Reproduction Steps: N/A

7.2 Open – Intel® ME Kernel

Issue #	Description	Affected Component / Impact / Workaround / Notes

7.3 Open – Integrated Clock Control (ICC)

Issue #	Description	Affected Component / Impact / Workaround / Notes
BUP000001	27-MHz FLEX Clock (for switchable graphics) has unexpected output value, unless Display PLL ownership is transferred to Intel® ME. Symptom: Upon boot or SX resume, on-board graphics down devices will not function as expected. Note: No official support for switchable graphics is currently provided with 27-MHz from Cougar Point PCH.	**Affected Component:** FW.ICC **Impact:** **Workaround:** The following bits need to edited as specified to utilize on-board graphics down devices that use 27-MHz FLEX clock from Cougar Point: • PLLEN bit 9 = 1b (Enable ME Ownership) • DPLLBC bit 30 = 1b (Enable DPLLB) Optional steps 3 and 4 If 27-MHz SSC clock is needed from CPT: • DPLLAC bit 30 = 1b (Enable DPLLA) • DPLLAC bits 26:24 = 011b (Enable 27M spread on DPLLA) This editing can be done in one of two ways: • Invoke Flash Image Tool with a commandline option **fitc.exe /iccext**, and edit the parameters directly in the FITC GUI. This option causes all ICC Registers to appear as dword values only, so raw dword values must be edited - there are no GUI bit-by-bit enhancements available as is when FITC is invoked without the **/iccext** commandline option. • Edit the parameters in the SPI Flash Image binary configuration XML file used by FITC. Note that this XML file is not the ICC Configuration XML, which has been deprecated and is no longer used by FITC. You must edit these parameters in the XML file and save the XML before starting FITC. The recommended method of doing so is making a copy of newfiletmpl.xml and editing the copy. Note that IccProfile1 corresponds to Profile 0 in SPI Flash, IccProfile2 to Profile 1, and so on. Note that 27-MHz Flex Clocks are available in both versions of the FITC GUI, with and without **/iccext** and no workarounds specified in previous kits are necessary.

7.4 Open – Software / Tools

Issue #	Description	Affected Component / Workaround / Notes
3551432	When installing the MEI-Only Installer the 'Readme File Information' windows shown to the user is empty.	**Affected Component** – Build **Impact:** Readme information section blank in installer. **Workaround:** none **Notes:** Reproduction Steps: 1. Open the Installers folder start MEI-Only installation

7.5 Open – Intel® Anti-Theft Technology

Issue #	Description	Affected Component / Impact / Workaround / Notes

7.6 Open – Intel® Identity Protection Technology

Issue #	Description	Affected Component / Impact / Workaround / Notes

7.7 Open – Intel® Upgrade Service

Issue #	Description	Affected Component / Impact / Workaround / Notes

7.8 Open – Not Firmware Issue

Issue #	Description	Affected Component / Impact / Workaround / Notes

7.9 Open - Documentation Change

Issue #	Description	Affected Component / Impact / Workaround / Notes

§