

M9036A-04A

Modification Recommended Service Note

Supersedes: M9036A-04

M9036A PXIe Embedded Controller

Serial Numbers: TW0000000-TW57280279

Intel Active Management Technology Escalation of Privilege

Parts Required:

P/N Description Qty.

NONE

ADMINISTRATIVE INFORMATION

ACTION	X ON SPECIFIED FAILURE	STANDARDS		
CATEGORY:	[[]] AGREEABLE TIME	LABOR: 0.5 Hours		
LOCATION CATEGORY:	 X CUSTOMER INSTALLABLE [[]] ON-SITE (active On-site contract required) X SERVICE CENTER [[]] CHANNEL PARTNERS 	SERVICE: [[]] RETURN USED [[]] RETURN INVENTORY: [[]] SCRAP PARTS: [[]] SCRAP X SEE TEXT X SEE TEXT		
AVAILABILITY: PRODUCT'S SUPPORT LIFE		NO CHARGE AVAILABLE UNTIL: June 1, 2018		
[[]] Calibration Required		PRODUCT LINE: BL		
X Calibration NOT Required		AUTHOR: TP		

ADDITIONAL INFORMATION:



Situation:

Intel disclosed a security vulnerability in the Intel® Active Management Technology (AMT) firmware that ships in Keysight embedded controllers with affected serial numbers listed above. The vulnerability can allow an unprivileged attacker to gain control of the manageability features provided by this technology. For more information, refer to INTEL-SA-00075.

Verify that your M9036A is not vulnerable with steps below.

- 1. Power on or reboot your M9036A controller.
- 2. Press the <Delete> key when the controller beeps. This should be concurrent with the main startup screen. The BIOS setup program loads after a short delay.
- 3. At the BIOS Main Setup screen, verify that the "ME Version" is version 6.2.61.3535 or later. Below picture shows that this controller is vulnerable.

Main Advanced Chipset	Boot Security Save & Exit
BIOS Information BIOS Vendor Core Version BIOS Version Build Date	American Megatrends 4.6.3.7 AG20 03/18/2013 15:12:38
Memory Information Total Memory	8192 MB (DDR3 1066)
ME Information ME Version	6.1.2.1051

Solution/Action:

Keysight strongly recommends taking the actions specified below for embedded controllers with affected ME firmware. There are two options you can choose from to mitigate the issue.

Option 1: Update the ME FW to version 6.2.61.3535 using Keysight ME update tool below.

 Make sure you have BIOS version AG23 or later loaded. You can see the BIOS version from the BIOS Main Setup screen as pictured below. If you need to update the BIOS, follow the instructions at M9036A. BIOS Downloads to update.

Main Advanced Chipset	Boot Security Save & Exit
BIOS Information BIOS Vendor Core Version BIOS Version Build Date	American Megatrends 4.6.3.7 AG23
Memory Information Total Memory	8192 MB (DDR3 1066)
ME Information ME Version	6.1.2.1051

- 2. At the main BIOS setup menu screen, select "Advanced" tab.
- 3. At the Advanced menu screen, select "ME Local FW Update Policy" then press <Enter> key.
- 4. At the pop up screen, select "Enabled" then press <Enter> key.
- 5. Press <F4> key and select "Yes" to save and exit the BIOS menu.
- 6. Let the controller restart.
- 7. Download and unzip the <u>ADL_ARD_ME_MB.zip</u> file to the Desktop of your embedded controller.
- 8. As Administrator, run the Desktop\ADL_ARD_ME_MB\WIN\Update.bat file.
- 9. At the Command Prompt window, do not interrupt the run.
- 10. After the Command Prompt window disappeared, restart your controller by going to Start \rightarrow Restart.
- 11. Press the <Delete> key when the controller beeps to enter the BIOS setup program again.
- 12. At the main BIOS setup menu screen, select "Advanced" tab.
- 13. At the Advanced menu screen, select "ME Local FW Update Policy" then press <Enter> key.
- 14. At the pop up screen, select "Disabled" then press <Enter> key.
- 15. Press <F4> key and select "Yes" to save and exit the BIOS menu.
- 16. Verify your embedded controller is not vulnerable with the steps above in the Situation section.

Option 2: Refer to the INTEL-SA-00075 Mitigation Guide for the steps to mitigate.

Additional Resources: CVE-2017-5689

Revision History:

Date	Service Note Revision	Author	Reason for Change
06 June 2017	01	TP	As Published
07 July 2017	02	TP	Updated version number typo