Intel® Firmware Engine

Intel® Firmware Engine Application Release 3.0.0

March 31, 2017

DISCLAIMER

This release note as well as the software described in it is furnished under license and may only be used or copied in accordance with the terms of the license. The information in this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Intel Corporation. Intel Corporation assumes no responsibility or liability for any errors or inaccuracies that may appear in this document or any software that may be provided in association with this document. Except as permitted by such license, no part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without the express written consent of Intel Corporation.

INDEX

FILE LIST

"Release_Note_R3.0.0.pdf"
This File. Release note for the Intel® Firmware Engine 3.0.0 application install package.

"IntelFirmwareEngineSetup_3_0.exe"
User Interface Installer Package including support for the MinnowBoard Max Platform.

"Quickstartguide_R3.0.pdf"
(Directories: ./English, ./French, ./German, ./Simplified Chinese, ./Traditional Chinese)
      -- Quick start guide for the User Interface Application

INSTALL INSTRUCTIONS

1. If there is a previous version of the Intel® Firmware Engine prior to the release 3.0.0 version it is required to uninstall prior versions before installing this release. Under the Control Panel use the "Uninstall a program" menu to uninstall any previous versions of the Intel® Firmware Engine and keep any prior work desired.
2. Follow the Quick start guide for system requirements.
   Install the "IntelFirmwareEngineSetup_3_0.exe" file and follow the click through menus.

NEW FEATURES AND CHANGES

1. Check for a new version upon launch and prompt user to download new version
2. Microcode updates: List/add/remove microcode binaries in project
3. Free-space indicator in to reflect the total Flash image size
4. Size and type of binary Flash image components listed in report output

5. Open Intel Firmware Engine when a .BIMX file is double clicked
6. Log file provides full build output.
7. GUI supports search for firmware modules/'inventory'.
8. Instructional videos for current help
9. Sort modules to desired ordering
10. support for Multiple undo
11. Ability to annotate Restore Points
12. User is able to select a group of parts as alternates
13. Error message for non .bmp files for the Logo File
14. The User interface application provides a method for updating the SMBIOS data
15. The Tools validate connection point usage
16. Ability to configure pins that support functions
17. Rule for how a platform installer will be compatible with the Intel Firmware Engine Application
18. Enable/Validate MinnowMax Boards with different design schematics. Tested with Minnowboard MAX and Minnowboard Turbot.
19. Save File changed to XML format
20. Allow localization of restore point annotation
21. Display of used space added to Flash part properties

PLATFORM DEPENDENT

How to enable UEFI Secure Boot with the MinnowBoard Max

1. Under Project -> Properties -> Settings, enable the Question "Enable Variable Authentication Support" and "Enable Image Authentication Support".
2. Components->Firmware applications, *Drag and Drop* the "UIApp Module" Into the box for "Added applications list".
3. Click the Build button to generate the FD file.
4. Flash FD image to the MinnowBoard Max.
5. To Enable Secure Boot on MinnowBoard Max using the UiApp:
    a. Boot up to the UiApp.
    b. Use a jumper wire to connect pins 1-23 together as shown in the picture below.
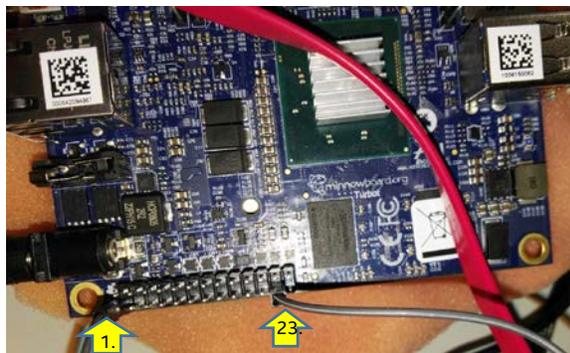
    See Pin layout:
    http://wiki.minnowboard.org/MinnowBoard_MAX#Low_Speed_Expansion_Connector_.28Top.29

    c. Enter the UiApp -> EDKII Menu -> Secure Boot configuration.
    d. To enable secure boot, follow the instructions in section 1.9.4 of the following document after booting to the UiApp interface on MinnowBoard Max: https://github.com/tianocore-docs/Docs/raw/master/User_Docs/SigningUefiImages%20-v1dot31.pdf

KOWN LIMITATIONS

Application:

1. The build is extremely slow when the Avast Virus* scanner is installed and enabled
2. For third party tools such as the DediProg* flash programmer there is no non-ascii support such that file name paths must be ascii formatted
3. The project must be saved and closed before entering the RMT GUI
4. Import bimx contains User's File will cause build failure when User's File does not exist.
5. Sighting: Error "Can't Connect to Server" error message unknown condition. Could be wrong PDO.
6. Adding Driver using "UEFI driver with metadata" results in Error message Suggest to use Add "UEFI driver from source build" instead" and remove meta data from the .inf file
7. For help GUI Tutorial videos will not play in Internet Explorer* Please use other browser such as Chrome* or FireFox*
8. When create a new repository its name contains special character"\" there is a problem in GUI.
9. Sighting: after multiple install 2.1.1 and 3.0.0 uninstall the 2.1.1 the 3.0.0 can't work well
10. When there are multiple USB hubs connected to the target platform (MAX) there may be a long delay for the UiApp module and pressing "R" to update boot targets in boot menu
11. Adding a driver using "UEFI driver from source build" results in a Build error if UDK2015 is not the base workspace directory
12. Adding a driver using "UEFI driver from source build" make sure the 3rd part source UEFI driver command line Build works in the EDK II environment first.
13. Add UEFI driver with metadata will fail when file path without space at end.
14. When installing a new Package with the Repository Maintenance Util. preferred package feature may not work correctly
15. A .Bimx file can not be opened via remote desktop
16. The Assemblelog.log file error message is NOT Created when a build error occurs.
17. The Messages for 'Check for new version' items are not localized
18. In some instances the GPIO table behavior is updating incorrectly by dragging LEDs and Buttons into the GPIO table
19. After a "cancel" from a "close" project followed by a "save" project the GUI application will close the project
20. Firmware Engine install failed under the environment of Kaspersky*

Known Issues Deferred:

1. After adding a binary .efi file with a different CPU Arch. Then clicking Undo the CPU Arch is not rolled back to its original state.
2. If the Installer has Chinese path in Chinese the OS will have error message
3. Scaling issue on Win 10 3000 X 2000 screen with Surface Book*
4. The GPIO Report is not Localized
5. There is an issue that exists when adding to the GPIO table and then setting a new repository for which the hardware that it had connected with GPIO pin were been deleted. This could result in the GUI application aborting or hanging
6. Using the add "UEFI Driver from source build" using OS Chinese(traditional) the build will fail, Chinese(simple) can work.

FAQ Information:

1. The Imported BIM file cannot be modified by any means other than the Intel Firmware Engine tool.

* Other names and brands may be claimed as the property of others.

[END OF RELEASE NOTES]