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Intel(R) Firmware Support Package (Intel(R) FSP) for Intel (R) Bay Trail

Release Notes

Gold 004 Release - Release Notes

MAY 22, 2015

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1. OVERVIEW

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This package contains the binary image(s) and collaterals for the Intel(R) Firmware Support Package (Intel(R) FSP) for Intel (R) Bay Trail.

This FSP binary has been integrated and validated with a Reference Boot Loader on a Bayley Bay CRB with Bay Trail SOC.

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2. RELEASE INFORMATION

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This release supports the Intel(R) Bay Trail SOC and is compliant with FSP 1.0 External Architecture Specification. This release package contains

- FSP Binary
- Boot Setting File (BSF)
- Integration Guide
- Release Notes

3. INTEGRATION NOTES

This release of the FSP has been validated with a reference bootloader on a Bayley Bay Customer Reference Platform.

The reference bootloader with this FSP integrated can be downloaded from CDI/IBL. However the FSP can also be integrated with any other bootloader of choice and the integration requirements are documented in the Atom E3800 FSP Integration Guide - 519985_Atom_E3800_FSP_Integr_Guide-rev1-8.pdf

When secure boot feature is enabled, integration of the FSP requires additional steps in addition to the steps documented in the integration guide. Please refer to Secure Boot Readme - README.coreboot_secureboot.txt. And for more detailed information please refer to #558081_Enabling_Secure_Boot_with_Intel_FSP_and_coreboot_for_Intel_Atom_Processor_E3800_Product_Family_Implementation_Guide-Rev-1.0.pdf

4. SOC FEATURES

- Upto 4 CPU Cores
- Upto 2.2 GHz CPU Frequency
- HDMI, DP/eDP, VGA Display

- 8 GB Max Addressable Memory @ 1066/1333 MT/s
- If only 1 DIMM is used, channel 0 must be used.
- Both memory channels must be populated with DIMMs of same configuration.
- PCI Express
- SATA
- USB 3.0
- Serial Peripheral Bus Controllers

5. SUPPORTED FEATURES

- Bay Trail-I SOC B2/B3/C0/D0 steppings
- MCU update
- Memory Detection and Initialization
- Fast Boot support
- MTRR Initialization on all CPU threads
- PCI Express initialization
- SOC Internal devices initialization
- Configuration Options through Intel BCT
- Rebase to a different base address through Intel BCT
- Secure Boot
- S3 resume
- PCI mode and ACPI Mode for the LPSS devices
- USB 3.0 support

6. FSP Configuration

When integrating with a bootloader the FSP should be placed at the same base

address that it is configured to.

The default base address for this FSP is 0xFFFFC0000. The base address for the FSP can be configured to a different address using the Intel BCT.

The FSP also provides a set of configuration options for initializing the SOC and can be customized through the Intel BCT.

The latest Intel BCT can be found from the website www.intel.com/fsp.

Note: For BCT version 3.1.3, it needs run as administrator.

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7. LIMITATIONS

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None.

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8. KNOWN ISSUES

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None.

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9. CHANGE LOG

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Gold 004 Release

- Added new option to disable/enable the integrated graphics
- Synced up to the latest BIOS silicon reference code

Gold 003 Release

- C0/D0 Stepping support
- MRC version 1.0
- Added option for IgdRenderStandby
- Moved Memory down parameters to UPD section
- Added Android Support

Gold 002 Release

- Minor Update

Gold 001 Release

- B3 stepping support
- Bakersport platform support (ECC platform)

Beta 002 Release

- USB 3.0 support
- Fixed S3 issue

Beta 001 Release

- Bay Trail B0 support
- Secure Boot support