Release Notes for Intel(R) Firmware Support Package (Intel[®] FSP) for the 5th Generation Intel[®] Core[™] Processors (Codenamed Broadwell) and Chipsets

Release name: BROADWELL_FSP_GOLD_001_20150601

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1. OVERVIEW

This package contains required binary image(s) and collateral for the Intel(R) Firmware Support Package (Intel[®] FSP) supporting the 5th Generation Intel[®] Core[™] Processors, formerly known as Broadwell processor family.

This FSP binary has been validated on the following customer reference boards:

- Whitetip Mountain 1 CRB with Broadwell processor and Wildcat Point-LP PCH
- Lava Canyon 2 CRB with Broadwell processor and Lynx Point PCH
- Lava Canyon CRB with Haswell processor and Lynx Point PCH

2. RELEASE INFORMATION

This release package contains the following:

- 1. FSP Binary
- 2. Boot Setting File (BSF)

3. Integration Guide

- 4. Release Notes
- 5. FSP Sample Code

3. INTEGRATION NOTES

This release of the FSP has been validated on Lava Canyon 2 CRB with ME firmware version 10.0.45.1016.

This FSP can be integrated with any bootloader of choice and the integration guide document in this package describes the requirements and details on calling FSP APIs to initialize processors, memory and chipsets.

4. SUPPORTED FEATURES

- Broadwell D0 stepping with Wildcat Point-LP PCH
- Broadwell DO stepping with Lynx Point PCH
- Haswell CO stepping Lynx Point PCH
- Memory Detection and Initialization
- Supported memory types: DDR3L 1333/1600, LPDDR3 1333/1600
- Maximum memory size: 16 GB
- MTRR Initialization on all processors
- PCI Express initialization
- SATA port initialization
- EHCI and XHCI controller initialization
- Configure platform options using Intel BCT tool
- Rebase FSP binary to a new base address using Intel BCT tool

5. FSP CONFIGURATION

When integrating FSP with a bootloader, the FSP image should be placed at the same address as the base address configured in the FSP image.

The default FSP base address is 0xFFF30000. This address can be changed to a different address using Intel BCT tool.

The FSP also includes configuration options to initialize the processor and the chipset. These options are documented in the integration guide and can be changed using Intel BCT tool.

The latest Intel BCT tool can be downloaded at http://www.intel.com/fsp

Intel BCT version 3.1.3 has been tested with this FSP release.

6. LIMITATIONS

7. KNOWN ISSUES

8. CHANGE LOG

Release BROADWELL_FSP_ALPHA_001_20140625: (June 25, 2014)

- Initial Evaluation Release
- Broadwell D0 stepping support

Release BROADWELL_FSP_BETA_001_20141015: (October 15, 2014)

- Fastboot is enabled and supported
- Add LPDDR memory support with UPD options
- Fix bug in UPD option for MMIO size

Release BROADWELL_FSP_GOLD_001_20150601: (June 1, 2015)

- Support 4th Generation Intel[®] Core[™] Processors (Codenamed Haswell) and
- Chipsets (formerly known as Sharkbay platform)
- Include the latest Memory Reference Code version 2.9.0