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Intel(R) Firmware Support Package (Intel® FSP) for 4th Generation Intel®
Core™ Processors with Mobile Intel® QM87 and HM86 Chipsets Release Notes

Release name: SHARKBAY_FSP_GOLD_001_16-DEC-2013
December 16, 2013

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1. OVERVIEW

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This package contains required binary image(s) and collateral for the
Intel(R) Firmware Support Package (Intel® FSP) for 4th Generation Intel® Core™
Processors with Mobile Intel® QM87 and HM86 Chipsets.

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2. RELEASE INFORMATION

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This Gold release has been integrated into a coreboot Proof of Concept (POC)
bootloader and verified on the Lava Canyon Customer Reference Board (CRB).

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3. INTEGRATION NOTES

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Several header and source files are provided in the package to assist with
integrating the FSP with the bootloader.

Please consult the Intel® FSP Integration Guide for further information.

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4. SUPPORTED FEATURES

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- 4th Generation Intel® Core™ Processors B0 and C0 stepping
- Mobile Intel® QM87 and HM86 Chipsets B0 stepping
- Memory Detection and Initialization
- Fast Boot support
- 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.
- MTRR Initialization on all CPU threads
- PCI Express initialization
- SATA
- HD Audio
- USB 2.0 and 3.0 ports
- Configuration options through Intel BCT
- Rebase to a different base address through Intel BCT
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5. FSP CONFIGURATION
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When integrating with a bootloader the FSP should be placed at the same base address that it is configured to.

A Binary Configuration Tool for Intel® FSP is available as a companion tool and is intended to be used to:

- Change configuration options based on provided BSF and FSP.
- Rebase the FSP to a different Base Address.

Please refer the Binary Configuration Tool User's Guide for the usage instructions.

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6. LIMITATIONS
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7. KNOWN ISSUES
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8. CHANGE LOG
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Release SHARKBAY\_FSP\_GOLD\_001\_16-DEC-2013: (December 16, 2013)

- First public release.

Notes:

- \*. When XHCI is enabled, ECHI controllers are disabled to save power
- \*\* . RMT is only enabled when Fastboot is disabled or during the first boot.  
To capture RMT debug messages, please enable debug serial output and set MRC debug level to "ALL" through BCT