Intel® Firmware Support Package (Intel® FSP) for Intel® Atom™ Processor C2000 Product Family POSTGOLD3

Release Notes

9 April 2015

Version History/Revision History

These are the main releases of the Intel® Firmware Support Package (Intel® FSP) for Intel® Atom™ Processor C2000 Product Family:

Date	Revision	Description
April 9, 2015	POSTGOLD3	Post-Gold 003 Release
April 2, 2014	POSTGOLD2	Post-Gold 002 Release
December 18, 2013	POSTGOLD1	Post-Gold 001 Release – first public release

Intended Audience

Platform and system developers who intend to use an Intel® FSP-based boot loader for the firmware solution for their overall design based on the Intel® Atom™ Processor C2000 Product Family. This group includes, but is not limited to, system BIOS developers, boot loader developers, and system integrators.

Customer Support

For technical support, see the Intel® Embedded Design Center (Intel® EDC) Support website at:

http://www.intel.com/content/www/us/en/intelligent-systems/embedded-design-center-contact-us.html

Contents:

1 Introduction

This package contains required binary image(s) and collateral for the Intel® Firmware Support Package (Intel® FSP) for the Intel® Atom™ Processor C2000 Product Family.

This document provides system requirements, installation instructions, issues and limitations, and legal information.

To learn more about this product, see:

- New features listed in the New in this Release section below, or in the help.
- Reference documentation listed in the Related Documentation, Tools, and Packages section below.
- Installation instructions listed in the How to Install this Release section below.

2 New in This Release

New Features

This release includes the following new features and product changes:

- Updated platform reference code
- Support for ITemp DIMMs
- Support for 8GB UDIMMs
- Support for staggered SATA spin-up
- Added FSP memory region to resource HOB
- New configuration items, including serial port baud rate options

3 Known Issues

The console serial port is fixed at IO port address 0x2F8.

4 Related Documentation, Tools, and Packages

- Intel® Firmware Support Package for Intel® Atom™ Processor C2000 Product Family Integration Guide
- Binary Configuration Tool (BCT) for Intel® FSP – Available at www.intel.com/fsp

5 Where to Find the Release

This package can be found at www.intel.com/fsp.

How to Install this Release

This release can be installed on either a Windows or a Linux system.

For Windows:

1. Download the Windows .exe file from www.intel.com/fsp.
2. Run the .exe file to perform the installation.

For Linux:

1. Download the Linux .tgz file from www.intel.com/fsp.
2. Extract the contents of the .tgz file.
3. See the Readme_Extract.txt file for further instructions to complete the installation.

How to Enable the Rank Margining Tool (RMT)

1. Start the Binary Configuration Tool (BCT) and open the RangeleyFsp.bsf file that was included with the FSP kit.
2. In the **North Complex** section:
    a. Set **Enable Rank Margin Tool** to **Enabled**.
    b. Set **RMT CPGC exp_loop_cnt** to **13**.
    c. Set **RMT CPGC num_bursts** to **13**.
3. In the **Platform Settings** section:
    a. Set **Enable Serial Debug Messages** to **Enabled**.
4. Save the settings in an .absf file.
5. Apply the settings to the FSP binary file.

6 Release Content

This release package contains:

- FSP Binary
- Boot Setting File (BSF)
- FSP Integration Guide
- Release Notes
- Sample Code
- Intel® Atom™ Processor C2000 SoC Microcode

7 Hardware and Software Compatibility

Supported Hardware

The FSP included in this release is specifically targeted for the Intel® Atom™ Processor C2000 Product Family System on a Chip (SoC).

Supported Operating Systems

This release installs on either a Windows or a Linux system. However, the FSP binary itself can be used with any software development environment to generate a complete boot loader solution.

8 Configuration

A Binary Configuration Tool (BCT) for the Intel® FSP is provided as a companion tool and is intended to be used to:

- Customize the FSP binary configuration options based on the Boot Setting File (BSF).
- Rebase the FSP binary to a different base address (the default base address of the Intel® FSP for Intel® Atom™ Processor C2000 Product Family is 0xFFF80000).

It's recommended to use latest BCT with this release.

Please refer to the BCT User Guide for the usage instructions. See the Related Documentation, Tools, and Packages to obtain the BCT.

9 Acronyms and Terms

The following acronyms and terms are used in this document (arranged in alphabetic order):

Acronym/Term	Description
BCT	Binary Configuration Tool
BSF	Binary Settings File
CRB	Customer Reference Board
EDC	Embedded Design Center
FSP	Firmware Support Package
HOB	Hand Off Block
RMT	Rank Margining Tool
SoC	System on a Chip
UPD	Updatable Product Data
VPD	Vital Product Data

10 Legal Information