



Intel[®] 6 Series Express Chipset - Intel[®] Management Engine 7.0 SKU

1.5 MB Firmware Getting Started User Guide

August 2010

Revision 1.0

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Revision History

Document Number	Revision	Description	Date
445075	0.5	Initial release of the document.	March 2010
	0.55	Updated title page to include new firmware naming convention.	April 2010
	1.0	Updated Figure 1 Updated Table 2 with latest product SKUs Updated Training Video IBP #'s	August 2010

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To-Do Checklist

1 To-Do Checklist

The following checklist is intended to help you get started on using the Intel® Management Engine 1.5 MB Firmware (Intel® ME 1.5 MB FW) release kit.

Table 1. To-Do Checklist

	What You Need To Do	How To Get It Done
<input type="checkbox"/>	Download the latest Intel® ME 1.5 MB FW kit from Intel® Validation Internet Portal (VIP) website	<p>Login to VIP website at https://platformsw.intel.com</p> <p>If you know the Kit #, use the box</p> <div><input type="text" value="Search Kits by Kit #"/> <input type="button" value="Go!"/></div> <p>Otherwise, search for kit by Platform/Product.</p> <p>Note: Engineering releases will be stored under,</p> <div>Product Documentation & Other Software</div> <p>This link is located on the left side of the VIP Main Page. Click on this link and search for "ME Firmware 7" to find latest Engineering release kit.</p>
<input type="checkbox"/>	Create Flash Image for your platform and Program Image onto SPI Flash devices	<p>Follow the <i>1.5 MB FW Bring Up Guide</i> which is included with the kit.</p> <p>This document provides step-by-step instructions to create the Flash image. Details are also provided on how to program the image onto Serial Peripheral Interface (SPI) Flash devices and perform a quick check on firmware status.</p>
<input type="checkbox"/>	Review 1.5 MB FW Release Notes ¹	<p>The <i>1.5 MB FW Release Notes</i>¹ document is included with the kit (see Figure 1 for location).</p> <p>This document provides Important Notes as well as Open and Closed Issues for this release. Review these sections for any special instructions required for this release. In addition, these sections identify areas to avoid and workarounds for your platform compliancy and validation testing.</p>
<input type="checkbox"/>	Platform Validation and Compliancy	<p>Login to VIP (https://platformsw.intel.com) and download Intel® ME Compliance and Debug Kit. This kit includes documents, tools and install packages for:</p> <ul style="list-style-type: none">• Intel® ME Test Suite (see 1.5 MB Compliance Guide)• Intel® Automated Power Switch• Intel® ME Debug Tool <p>Follow documents for each component to test platform compliancy.</p>
<input type="checkbox"/>	Review Manufacturing Recommendations and Guidelines	<p>The following documents will be available around Beta release timeframe:</p> <ul style="list-style-type: none">• Manufacturing Recommendations for Cougar Point Platforms (available on Intel® Business Portal (IBP) https://businessportal.intel.com)• Manufacturing Advantage Service (MAS) for Cougar Point Platforms (available on Intel® Learning Network (ILN) https://learn.intel.com) <p>In addition, the System Tools User Guide (included with the kit) provides useful information on how to use the following tools in the manufacturing environment: Flash Programming Tool, FWUpdate, MEInfo and MEManuf.</p>

Please contact your local Intel® representative if you have any questions.



To-Do Checklist

NOTE: ¹ The 1.5 MB FW Release Notes is included with the release kits on VIP but this document is not in the ".zip" Installation File. The Release Notes can be found in the "Supporting Documentation" section as shown below.

Figure 1. VIP - Release Notes in Supporting Documentation

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Intel® Validation Internet Portal

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[View Registered Users](#)
[Return to Main Page](#)
[Enter/View Sightings](#)
[Product Documentation & Other Software](#)
[View All Kits](#)
[Email Notification SignUp & Update](#)
[Site Feedback](#)
[Change Password](#)
[Manage Home Page Content](#)
[Add/Remove Companies](#)
[View VIP License Agreement](#)
[FAE Access](#)
[Export Control Report](#)

[Software Naming Convention Definition](#)
Release Name: Intel® Management Engine Firmware 7.0 SKU 1.5MB Beta Build 7.0.0.1061
Kit 26133 (Description: Intel® ME Firmware 7.0 SKU 1.5MB, **Posted:** 7/7/2010 1:56:55 PM)
Kit Supported Platforms:: [see list](#)
[ADD ALL](#) add/remove all kit files to/from download cart
Components
(-) Intel® ME Firmware 7.0 SKU 1,5MB

Package #: 100365
Release Version: 7.0.0.1061
Software Version: 7.0.0.1061

(+) Supported Operating Systems

(+) Supported Languages

(-) Supporting Documentation

[1.5MB FW Getting Started Guide.pdf](#) (183.92 KB)

[1.5MB FW Bring Up Guide 7.0.0.1061.pdf](#) (1.99 MB)

[1.5MB FW Release Notes 7.0.0.1061.pdf](#) (493.11 KB)

[BIOS Release Notes 31.pdf](#) (173.07 KB)

(-) Installation Files

[CPT_1.5M_7.0.0.1061.zip](#) (32.17 MB)

Note: click (+) to expand/collapse entries, click to add file to file queue

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Introduction

2 Introduction

This document provides a guide to using Intel® Management Engine 1.5 MB Firmware (Intel® ME 1.5 MB FW). Important overview details on the platform architecture, bring up, compliancy and validation, and manufacturing topics are covered along with details on where you can find more information.

Intel® ME 1.5 MB FW is stored on SPI Flash and executes on the Cougar Point PCH. It enables unique, value add consumer capability on Cougar Point based platforms. These features are highlighted in the below table.

Table 2. Intel® ME 1.5 MB FW Features and Product SKUs

Feature	Desktop				Mobile				Details
	P67	H67	H61	Z68	QS67	HM67	HM65	UM67	
Integrated Clock Control (ICC)									Controls configuration and settings for platform clocks
Thermal Reporting									Reports processor and graphics thermal data to host accessible registers
Intel® Anti-Theft Technology (Intel® AT)									Hardware-based security that allows laptops to be disabled if they are lost or stolen
PAVP									Integrated protected audio and video high definition content

For more information regarding the firmware features listed above, please refer to the appropriate Product Requirements Document (PRD) which can be downloaded from the Intel® Business Portal (IBP) website at <https://businessportal.intel.com>.

For details about Intel® AT Technology, contact your local Intel sales representative for platform enabling details or refer to <http://www.intel.com/technology/anti-theft/> for general information.

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3 Platform Architecture Overview

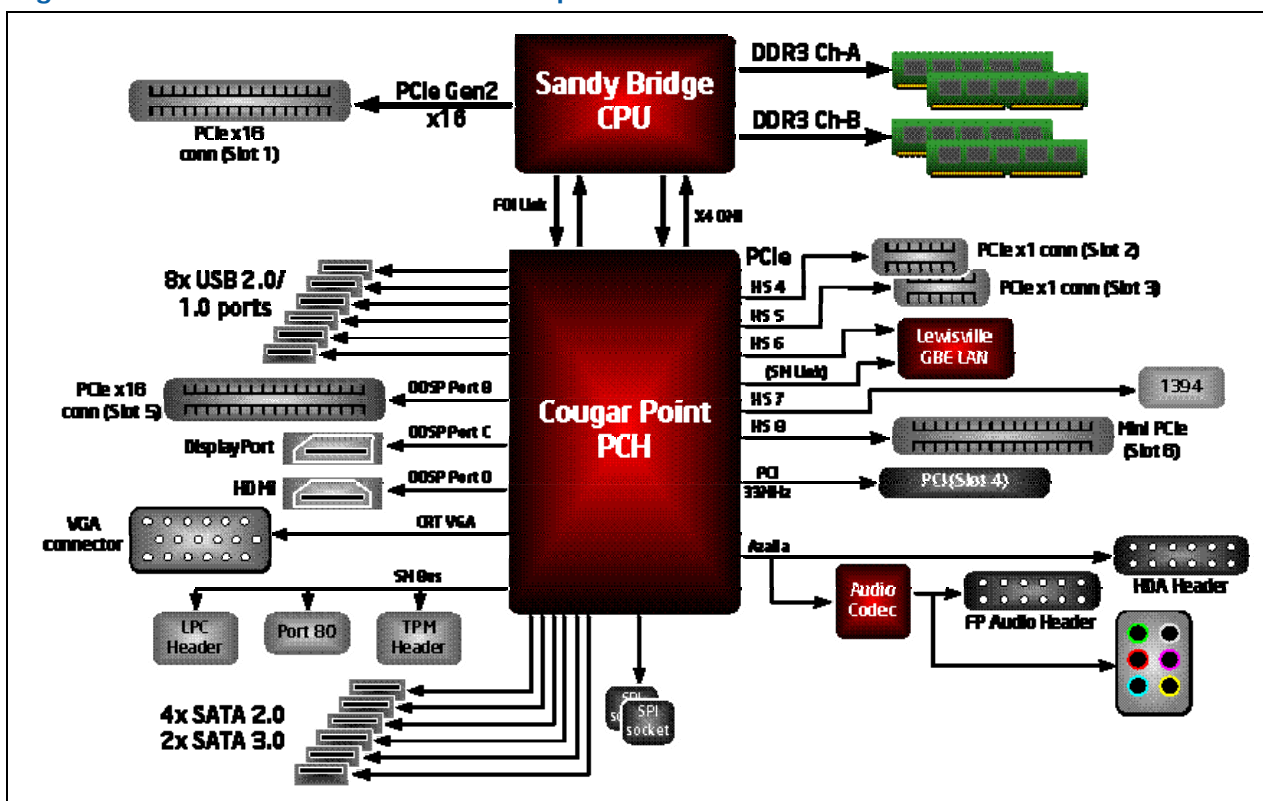
Platform requirements needed to properly support Intel® ME 1.5 MB FW includes:

- Sandy Bridge-based Core family processor
- Intel® 6 Series Express Chipset (Cougar Point) Platform Controller Hub (PCH)
- Hardware design based on Intel® Customer Reference Board (CRB) - Sugar Bay Desktop CRB or Huron River Mobile CRB

The following hardware documents and design files are available on IBP (<https://businessportal.intel.com>):

- Sugar Bay and Huron River Platform Design Guides
- Sugar Bay and Huron River Schematics, Layout files and IBIS Models
- Sandy Bridge Processor External Design Specification
- Cougar Point PCH External Design Specification

Figure 2. Platform Architecture and Components



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4 Training Videos

Below is a list of training videos that are available for download.

Table 3. Intel® ME 1.5 MB FW Training Videos

Video Title	Download Location
Intel® Management Engine 1.5MB Firmware (Intel ME) Overview and Getting Started - Part 1 – Training and Video	IBL # 454384 http://www.intel.com/cd/edesign/library/asmo-na/eng/454384.htm
Intel® Management Engine 1.5MB Firmware (Intel ME) Bring Up and FITC Wizard - Part 2 – Training and Video	IBL # 454385 http://www.intel.com/cd/edesign/library/asmo-na/eng/454385.htm
Intel® ME Manufacturing Overview	TBD

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