PRODUCT BRIEF Intel<sup>®</sup> Firmware Support Package Intelligent Systems



# Intel® Firmware Support Package

Ideal for Intelligent Systems—context-aware, securely managed embedded devices that connect seamlessly to networks, clouds, and each other.

### **Product Overview**

The Intel® Firmware Support Package (Intel® FSP) provides key firmware components for initializing Intel® silicon, including the processor, memory controller, chipset, and certain bus interfaces, as needed. It can be easily integrated into a boot loader of the developer's choice, such as coreboot,\* Wind River VxWorks,\* BIOS, Real-Time Operating Systems (RTOS), Linux,\* and open source firmware.

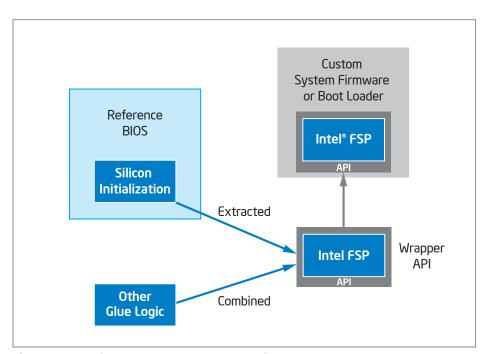
Intel FSP is easy to adopt, economical to build, and scalable to design, thereby reducing time-to-market. As it is not a stand-alone boot loader, it must be integrated with a host boot loader infrastructure to carry out other functions. This includes initializing non-Intel components, conducting bus enumeration, and discovering devices in the system.

## **Product Highlights and Benefits**

- Royalty-free solution from Intel
- Allows fast boot implementations
- Supported across the Intelligent Systems processor roadmap for Intel® Atom,<sup>™</sup>
  Intel® Core,<sup>™</sup> and Intel® Xeon® processors
- Widely adopted by Intel's extensive ecosystem, integrating the Intel FSP into an array of value-add boot loader solutions
- Easily integrated into existing custom firmware implementations of other architectures
- Can be integrated with RTOS, open source, and other proprietary boot loaders

#### **Technical Highlights**

- Simple interface for a boot loader to integrate
- Small footprint (less than 200 KB, in most cases)
- Fast execution (less than 200 milliseconds, in most cases)
- Customizable configuration data region for the developer's platform environment



# Code and Tools included in the Intel<sup>®</sup> FSP

- CPU initialization code
- Memory reference code
- Chipset initialization code
- Micro-code updates

- Binary configuration tool: some data that resides in a configurable region can be customized to match individual designs.
- Rebasing tool: Intel FSP may be placed at the specific rebasing address location as required by the build process.

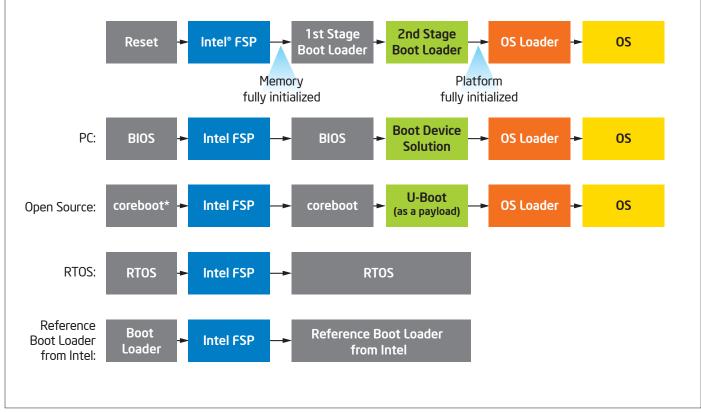


Figure 2. Boot Solutions with Intel® Firmware Support Package

# For further product information and to download the Intel<sup>®</sup> FSP, visit www.intel.com/fsp Intel in Intelligent Systems: intel.com/intelligentsystems

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