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™, Intel® Core™, 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

Figure 1. Intel® Firmware Support Package Creation and Usage Model
**Code and Tools included in the Intel® 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.

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**Figure 2. Boot Solutions with Intel® Firmware Support Package**

For further product information and to download the Intel® FSP, visit [www.intel.com/fsp](http://www.intel.com/fsp)

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