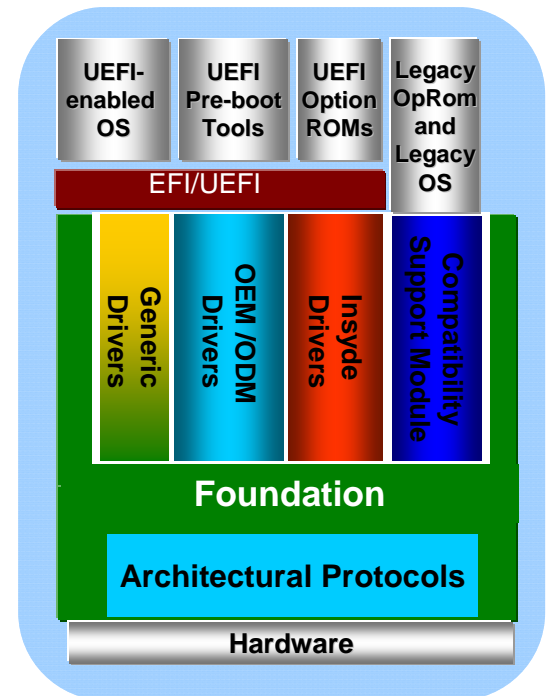


InsydeH2O™

UEFI Framework Firmware

■ Key Features

- All Popular Platforms Supported
- Legacy OS compatible
- InsydeFlash & EZH2O
- H2ODDT debug and diagnostic tool
- Advanced Technology:
 - ❖ Turbo Memory
 - ❖ Embedded Control Support
 - ❖ Virtualization Technology
 - ❖ Crisis Recovery
 - ❖ Intel AMT
 - ❖ Intel SpeedStep™ and EIST™



The InsydeH2O™ product family is an architecture-independent system software that uses the latest in BIOS technologies for a clean, simple interface between operating systems and desktop, mobile, server and embedded platforms. InsydeH2O integrates UEFI (Unified Extensible Firmware Interface) specifications and the Intel® Platform Innovation Framework for EFI (The Framework) to provide a seamless “Hardware-2-OS” (H2O) interface.

Through InsydeH2O’s Compatibility Support Module (CSM), backward compatibility to legacy operating systems are permitted allowing the continued use of standard operating systems and tools while making a gradual transition to UEFI. InsydeH2O allows application modules to be easily interchanged and is also written in easy-to-use C language. All of which bolsters platform design innovation and speeds time-to-market.

InsydeH2O’s InsydeFlash™ is a powerful and intelligent tool for updating and maintaining the computer system BIOS under various Windows environments. Boot Block Protection performs backups of current system BIOS before updating, verifies system BIOS reliability, and automatically detects hardware compatibility for enhanced security.

System debug is simplified using InsydeH2O’s built-in diagnostic and debugging software tool called H2ODDT™. Because it functions like an ICE, H2ODDT reduces the need for additional costly lab equipment. H2ODDT enables source-level debugging at an early PEI stage before memory sizing occurs thereby sidestepping memory issues. Its powerful breakpoint capabilities allow greater flexibility in setting and removing breakpoints before and during module loads as well as in System Management Interrupt (SMI) mode. Developers can view traces simultaneously in both C and 64-bit Assembly language.

InsydeH2O Embedded Highlights

UEFI
Legacy Support (CSM)
Legacy Free Support
Turbo Memory
EZH2O
Embedded Control Support
Virtualization Technology
Crisis Recovery
H2ODDT Integrated debugger
Intel AMT 4.0
Intel SpeedStep™ and EIST™

InsydeH2O Embedded Core Features*

EFI:

UEFI 1.0
UEFI 2.0 & 2.1
UEFI run-time services

Compatibility Support Module (CSM):

CSM16
SMM
Legacy USB 2.0
BIOS Interrupts
Legacy Option ROMs
Fixed BIOS entry points
Fixed CMOS locations
BDA and EBDA
BIOS Boot Specification
IRQ routing

Memory Support:

Memory initialization
Memory discovery via SPD
Supports 4, 16 & 64 GB memory
Supports TSEG
ECC support
ME/HECI init/MRC init
Turbo Memory

EZH2O:

Allows enable/disable of on-board LAN
Update Video BIOS image
Allows enable/disable of on-board Video
Update Logo image
Update processor microcode

Management Functions:

ASF Messages, Boot Options
EFI BDS Serial Console
VGA Serial Console Redirect
IPMI 2.0 Basic Support
SMBIOS v2.4 Support

Embedded Control Support:

EC Init for power control
EC init for fan control
Virtual Battery Support

Power Management Support:

Legacy APM
ACPI v2.0 & v3.0b support
Wake on LAN, USB activity, PME, RTC, SMBUS
S-state support: S0, S1, S2, S3, S4, S5
C-state support: C0, C1, C2, C3, C4, C6, C6e
North/South bridge ASPM support

Processor Support:

Multi-processor ACPI table
Up to 4, 64, and 256 processors
Microcode Update (INT15)
Intel VT-x
Intel SpeedStep™ and EIST™
AMD VT
APIC support

Crisis Recovery:

Detect cause of crisis recovery (CR)
Recover from Device (RC)

Operating System Support:

EFI Shell
Windows CE v xx
Windows XP Professional (32 & 64-bit)
Windows Embedded XP
Windows Vista (32 & 64-bit)
Windows Server 2003 (64-bit)
Windows Server 2008 (64-bit) IDE Mode
Linux 2.4, 2.6, Suse 10.2
Fedora 8
Unix
VxWorks
DOS
QNX

Tools:

UEFI Flash utility (x86)
Flash utility for DOS and Windows (IHISI)
Integrated debugger (H2ODDT)

Working with Insyde

Our business models are flexible so you'll always find a working relationship that fits your style.

Flexible Development Model:

- Turn Key
- Blended – Shared resources/project
- Point solutions:
 - ❖ On-Site board bring up
 - ❖ Specific drivers
 - ❖ Special functions

Flexible Business Model:

- Retainer based support
- Source code only
- Royalty-Free option

* Features may differ according to platform.



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