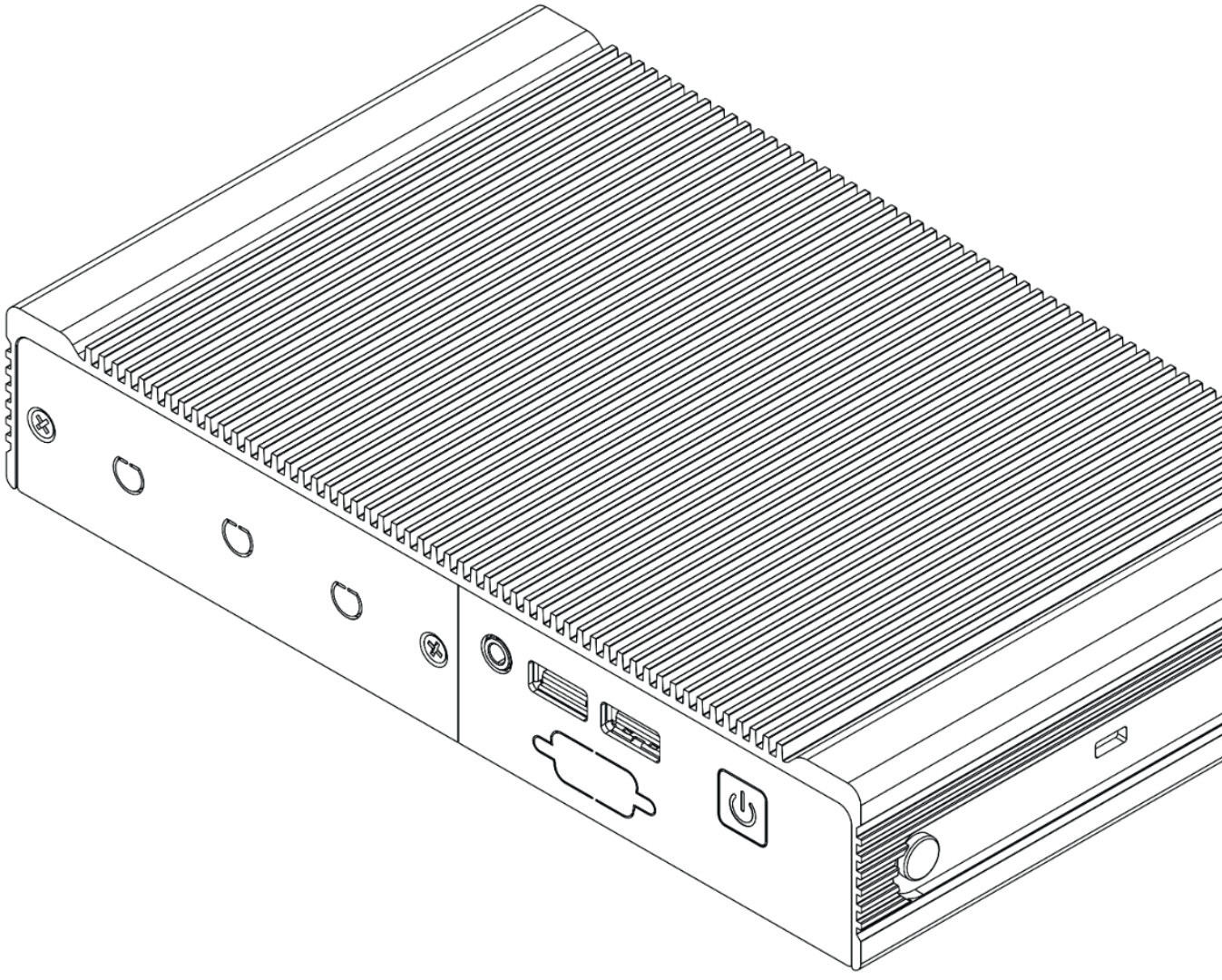
HX310 / HX330 BIOS Manual DRAFT 8/26/2021



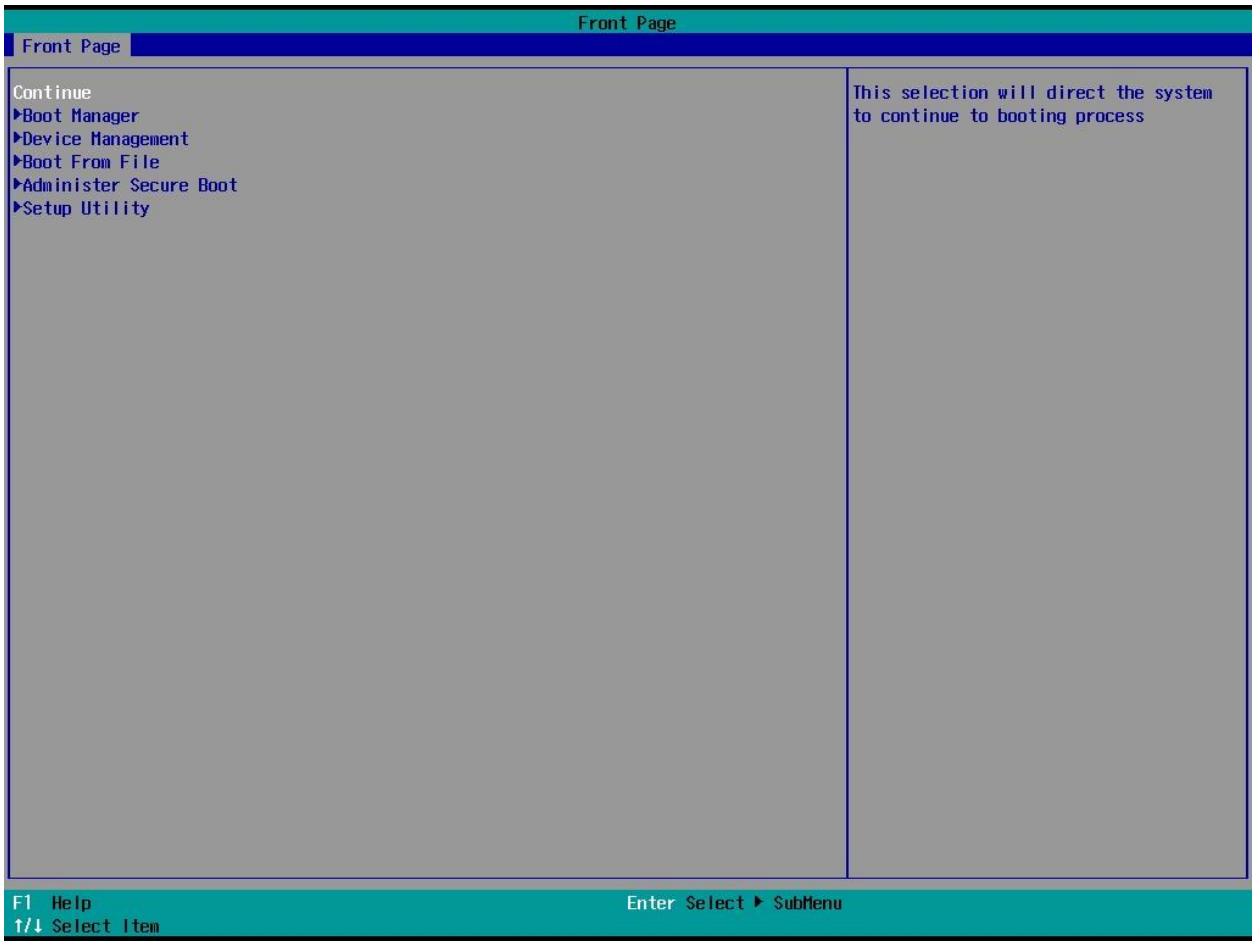
Revision History

Revision History	Date
First release of HX310/HX330 BIOS Manual	7/30/2021

Table of Contents

NOTE: To enter the BIOS on Helix systems, hold the ‘Delete’ key on your keyboard during boot.

1 - Front Page



Boot Manager

Type	Menu
BIOS Page	Front Page
Description	Opens the list of detected bootable devices, allowing you to manually select a device to boot, such as an OS or PXE

Device Management

Type	Menu
BIOS Page	Front Page

Description	Opens the Device Manager menu which includes a configuration menu for Intel Rapid Storage Technology and a Network Device List (if RST and Network Stack are enabled)

Boot From File

Type	Menu
BIOS Page	Front Page
Description	Allows you to boot from a UEFI bootable file

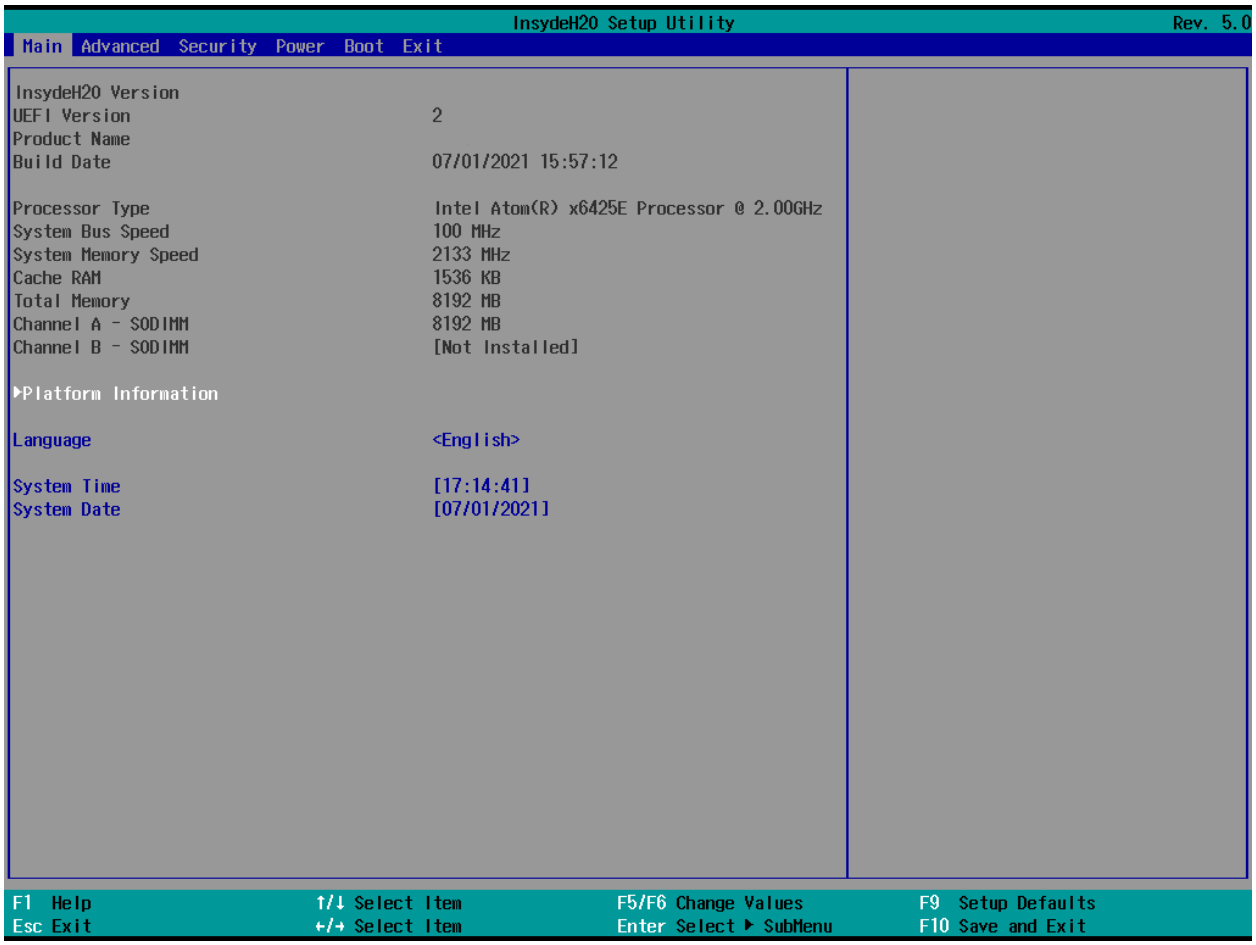
Administer Secure Boot

Type	Menu
BIOS Page	Front Page
Description	Opens the Secure Boot configuration menu

Setup Utility

Type	Menu
BIOS Page	Front Page
Description	Opens the primary BIOS configuration menu referenced in sections 2 through 6 of this manual

2 - Main Page



InsydeH2O Version

Type	Information
BIOS Page	Main Page
Description	Displays current system BIOS version

Build Date

Type	Information
BIOS Page	Main Page
Description	Displays the BIOS build date in MM/DD/YYYY

Processor Type

Type	Information
BIOS Page	Main Page
Description	Displays model number of installed CPU

Total Memory

Type	Information
BIOS Page	Main Page
Description	Displays total capacity of all memory installed in system

Channel A

Type	Information
BIOS Page	Main Page
Description	Displays capacity of memory installed in Channel A

Channel B

Type	Information
BIOS Page	Main Page
Description	Displays capacity of memory installed in Channel B

System Memory Speed

Type	Information
BIOS Page	Main Page
Description	Displays base frequency of installed memory

Language

Type	Information
BIOS Page	Main Page
Description	Selects the current default language used by the BIOS

System Time

Type	Information
BIOS Page	Main Page
Description	Displays the time in HH:MM:SS. Valid range is from 0 to 23, 0 to 59, 0 to 59. Use +/- to increase/decrease

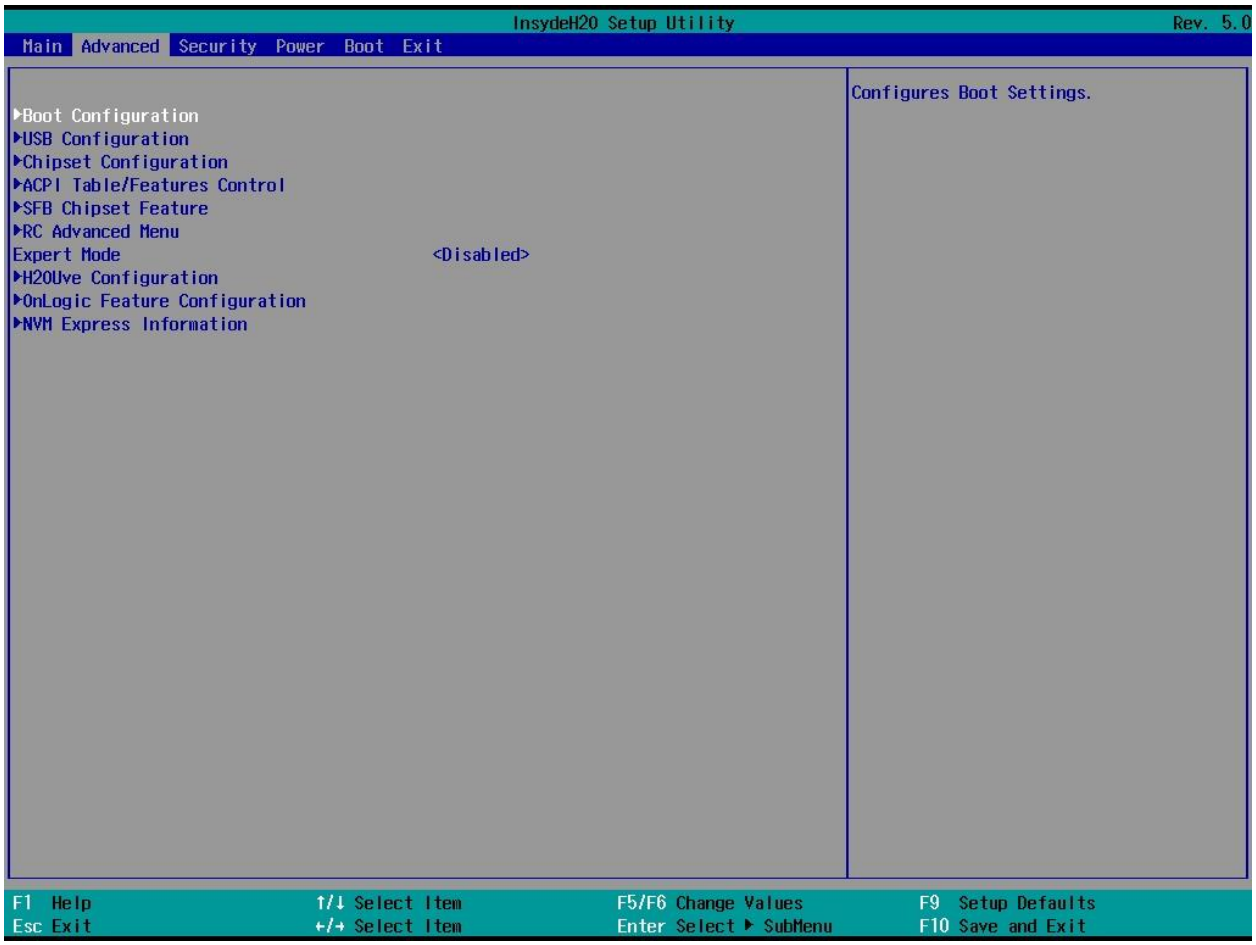
System Date

Type	Information
BIOS Page	Main Page
Description	Displays the date in MM:DD:YYYY. Valid range is from 1 to 12, 1 to 31, 2000 to 2099. Use +/- to increase/decrease

Platform Information

Type	Subsection
BIOS Page	Main Page
Description	Contains detailed information about the system processor, pch, and firmware component versions.

3 - Advanced Page



Expert Mode

Type	Configurable Setting
BIOS Page	Advanced
Description	Expose additional BIOS configuration options.
Default Value	Disabled

3.1 - Boot Configuration

Numlock

Type	Configurable Setting
BIOS Page	Advanced > Boot Configuration
Description	Sets state of Num Lock key when system is booted
Default Value	Off

Rotate Screen

Type	Configurable Setting
BIOS Page	Advanced > Boot Configuration
Description	Rotate the screen 90 or 270 degrees clockwise
Default Value	Off

3.2 - USB Configuration

USB BIOS Support

Type	Configurable Setting
BIOS Page	Advanced > USB Configuration
Description	Set USB BIOS Support as disabled, enabled, or UEFI only
Default Value	Enabled

3.3 - Chipset Configuration

Platform Trust Technology

Type	Configurable Setting

BIOS Page	Advanced Page > Chipset Configuration
Description	Enables or Disables Intel Platform Trust Technology
Default Value	Enabled

3.4 - ACPI Table/Features Control

FACP - RTC S4 Wakeup

Type	Configurable Setting
BIOS Page	Advanced > ACPI Table/Features Control
Description	Enables or disables the ability to use the RTC to wake from S4
Default Value	Enabled

3.5 - SFB Chipset Feature

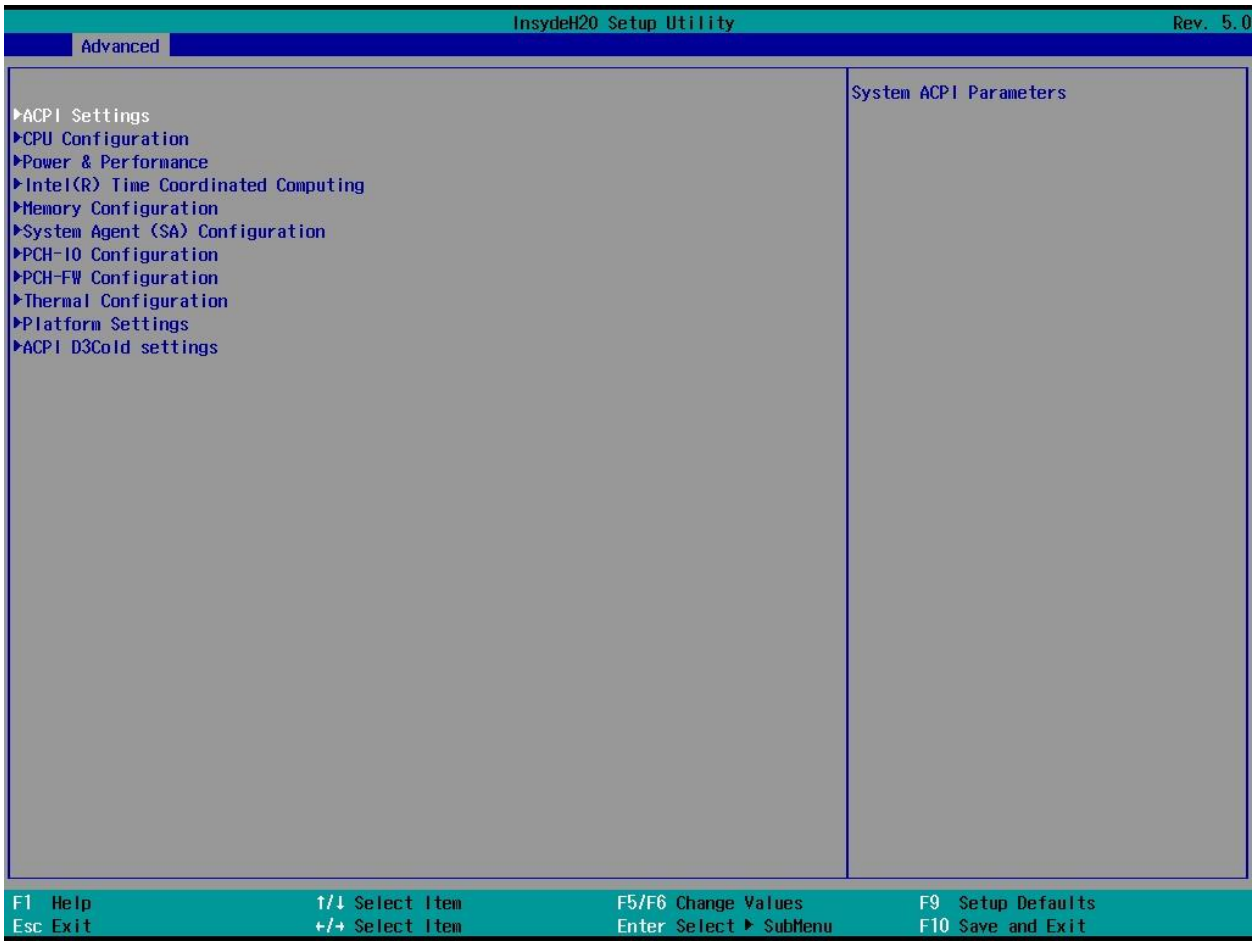
Wake on USB from S5

Type	Configurable Setting
BIOS Page	Advanced > SFB Chipset Feature
Description	Enable/Disable Wake on USB from S5 state
Default Value	Disabled

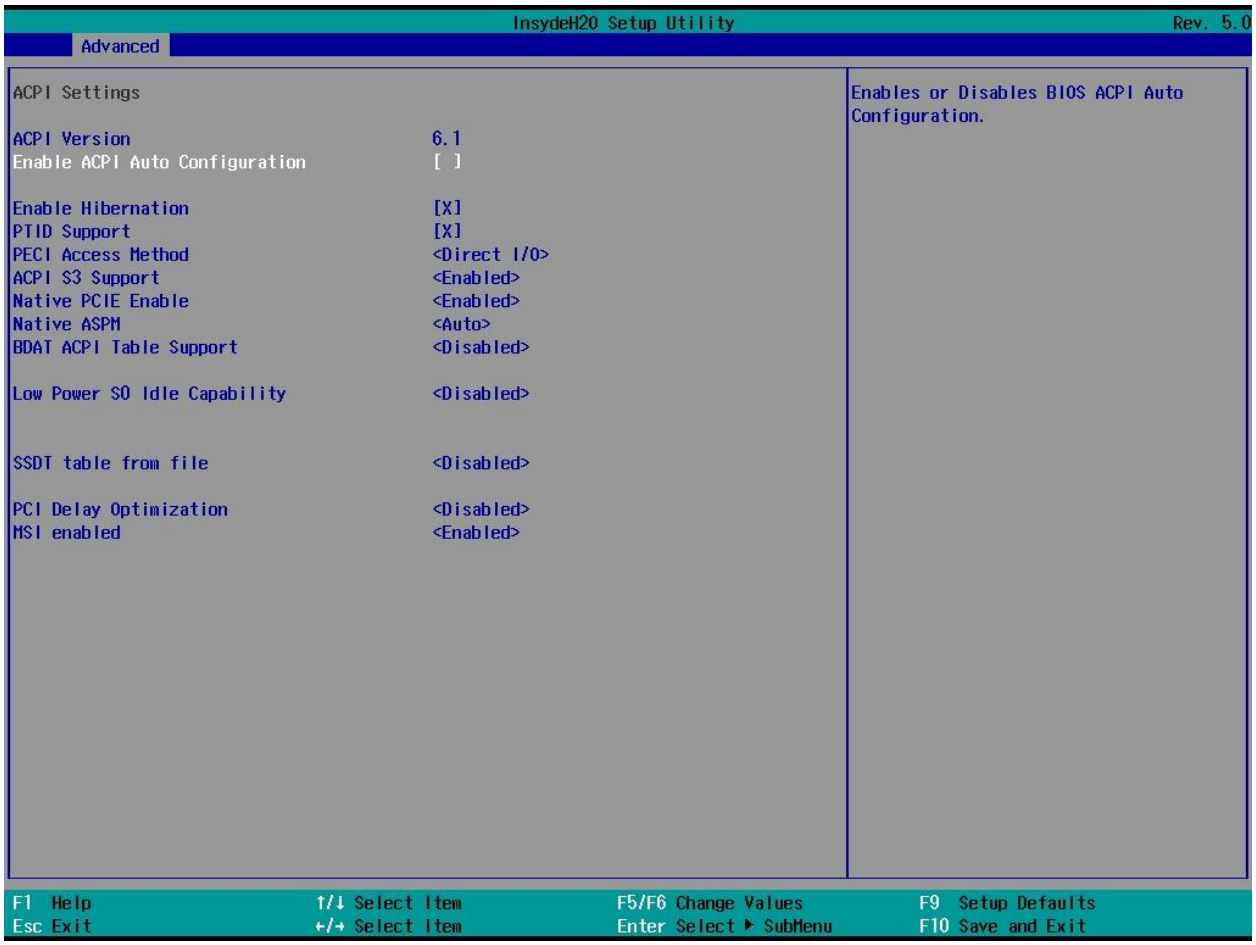
Wake on USB Wait Time

Type	Configurable Setting
BIOS Page	Advanced > SFB Chipset Feature
Description	Wait Time for USB re-enumeration during S5 state. Select from 5 - 60 seconds.
Default Value	5

3.6 - RC Advanced Menu



3.6.1 - ACPI Settings



Enable ACPI Auto Configuration

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	Enables or Disables BIOS ACPI Auto Configuration.
Default Value	Disabled

Enable Hibernation

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	Enables or Disables System ability to Hibernate (OS/S4 Sleep State). This option may not be effective with some OSs.

Default Value	Enabled

PTID Support

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	PTID Support will be loaded if enabled.
Default Value	Enabled

PECI Access Method

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	Set PECI access method as either Direct I/O or ACPI
Default Value	Direct I/O

ACPI S3 Support

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	Enables or Disables ACPI S3 support
Default Value	Enabled

Native PCIE Enabled

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	Configure support for native PCIE
Default Value	Enabled

Native ASPM

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings

Description	Auto: Automatically select between enabling/disabling Native ASPM Enabled: OS Controlled ASPM Disabled: BIOS Controlled ASPM
Default Value	Auto

BDAT ACPI Table Support

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	Enables support for the BDAT ACPI table
Default Value	Enabled

Low Power S0 Idle Capability

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	Enable ACPI Lower Power S0 Idle Capability (Mutually exclusive with Smart connect). While this is enabled, it also disables the 8254 timer for SLP_S0 support.
Default Value	Disabled

SSDT Table From File

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	Generate SSDT table from its file
Default Value	Disabled

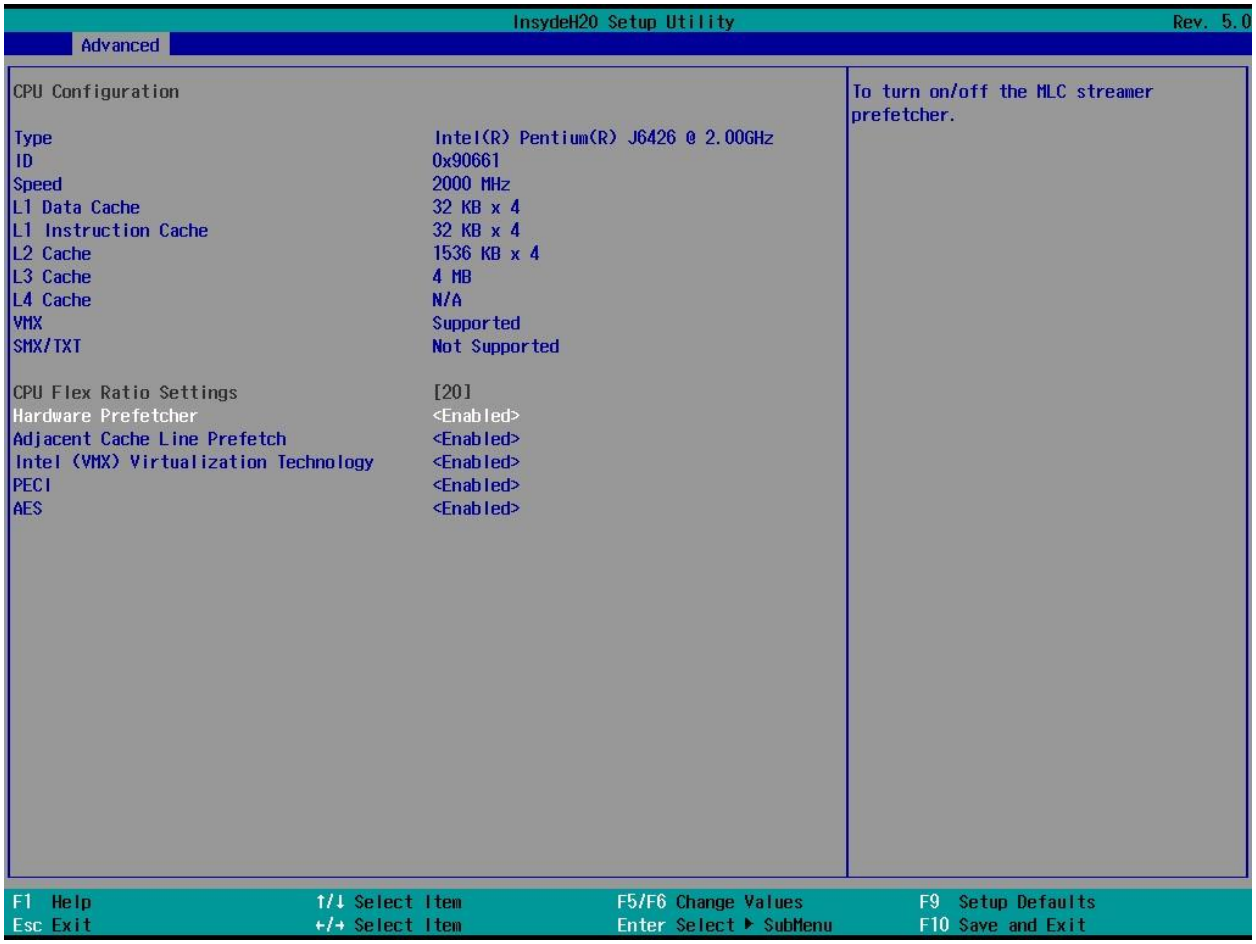
PCI Delay Optimization

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	Experimental ACPI additions for FW latency optimization
Default Value	Disabled

MSI Enabled

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > ACPI Settings
Description	When disabled, MSU support is disabled in FADT
Default Value	Enabled

3.6.2 - CPU Configuration



CPU Flex Ratio Settings

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > CPU Configuration
Description	CPU flex ratio value. It must fall between the Max Efficiency Ratio (LFM) and the Maximum non-turbo ratio set by hardware (HFM).

Default Value	20

Hardware Prefetcher

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > CPU Configuration
Description	Turn on/off the MLC streamer prefetcher.
Default Value	Enabled

Adjacent Cache Line Prefetch

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > CPU Configuration
Description	Turn on/off prefetching of adjacent cache lines.
Default Value	Enabled

PECI

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > CPU Configuration
Description	Turn on/off PECI.
Default Value	Enabled

3.6.3 - CPU - Power Management Control

Boot Performance Mode

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Power & Performance > CPU - Power Management Control
Description	Select the performance state that the BIOS will set starting from the reset vector.
Default Value	Max Non-Turbo Performance

Intel SpeedStep

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Power & Performance > CPU - Power Management Control
Description	Allows more than two frequency ranges to be supported.
Default Value	Enabled

Platform PL1 Enable

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Power & Performance > CPU - Power Management Control
Description	Enable/Disable Platform Power Limit 1 programming. If this option is enabled, it activates the PL1 value to be used by the processor to limit the average power of a given time window.
Default Value	Disabled

Platform PL2 Enable

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Power & Performance > CPU - Power Management Control
Description	Enable/Disable Platform Power Limit 2 programming. If this option is disabled, BIOS will program the default values for Platform Power Limit 2.
Default Value	Disabled

Energy Performance Gain

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Power & Performance > CPU - Power Management Control
Description	Enable/Disable energy performance gain
Default Value	Disabled

Energy Efficient Turbo

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Power & Performance > CPU - Power Management Control
Description	Enable/Disable Energy Efficient Turbo Feature. This feature will opportunistically lower the turbo frequency to increase efficiency. Recommended only to disable in overclocking situations where turbo frequency must remain constant. Otherwise, leave enabled.
Default Value	Enabled

3.6.3 - GT - Power Management Control

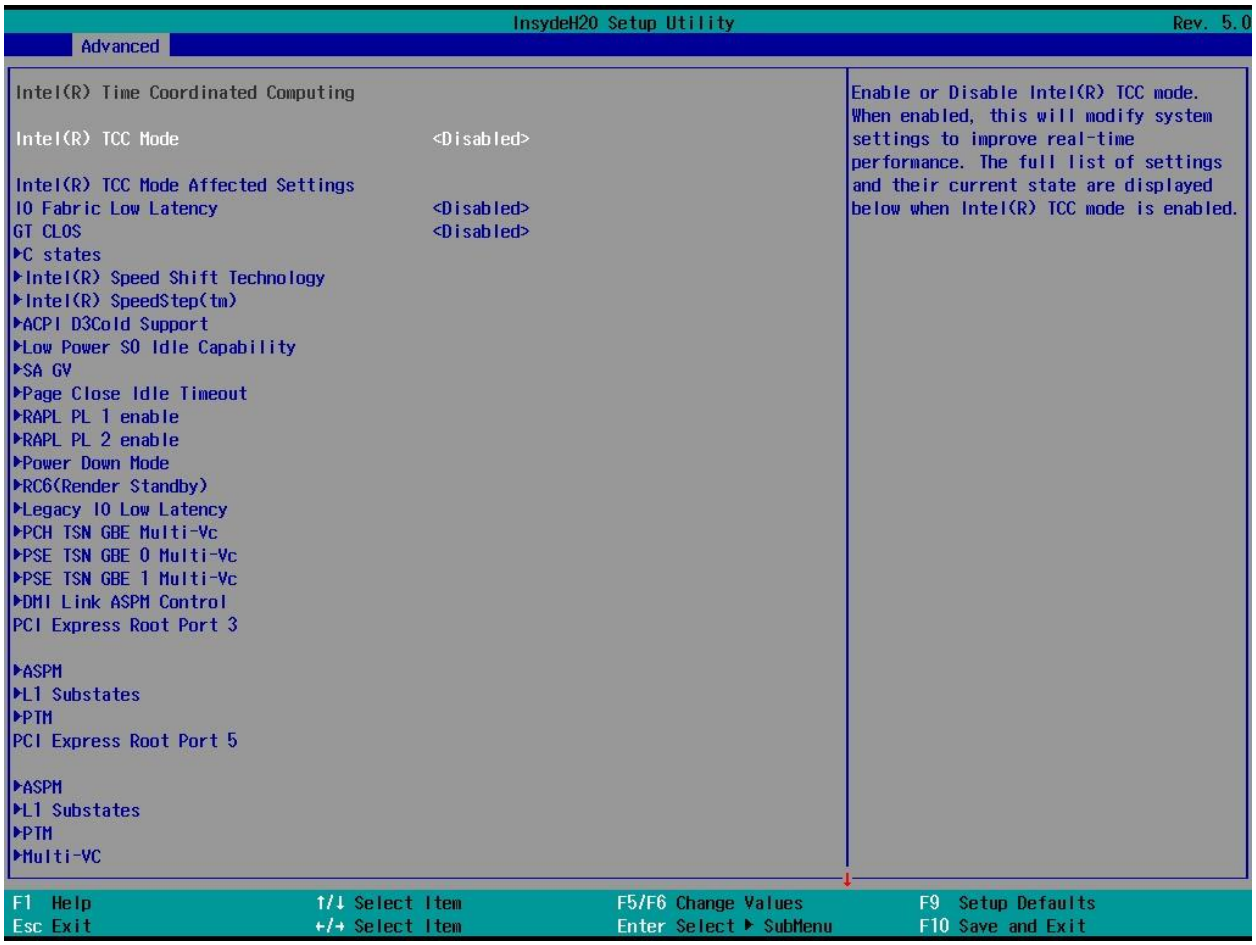
Maximum GT Frequency

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Power & Performance > GT - Power Management Control
Description	Automatically updated GT max frequency
Default Value	Default Max Frequency

Disable Turbo GT Frequency

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Power & Performance > GT - Power Management Control
Description	Set as ‘Disabled’ to prevent limiting GT frequency
Default Value	Disabled

3.6.4 - Intel Time Coordinated Computing



Intel TCC Mode

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Intel(R) Time Coordinated Computing
Description	Enable or Disable Intel(R) TCC mode. When enabled, this will modify system settings to improve real-time performance. The full list of settings and their current state are displayed below when Intel(R) TCC mode is enabled.
Default Value	Disabled

IO Fabric Low Latency

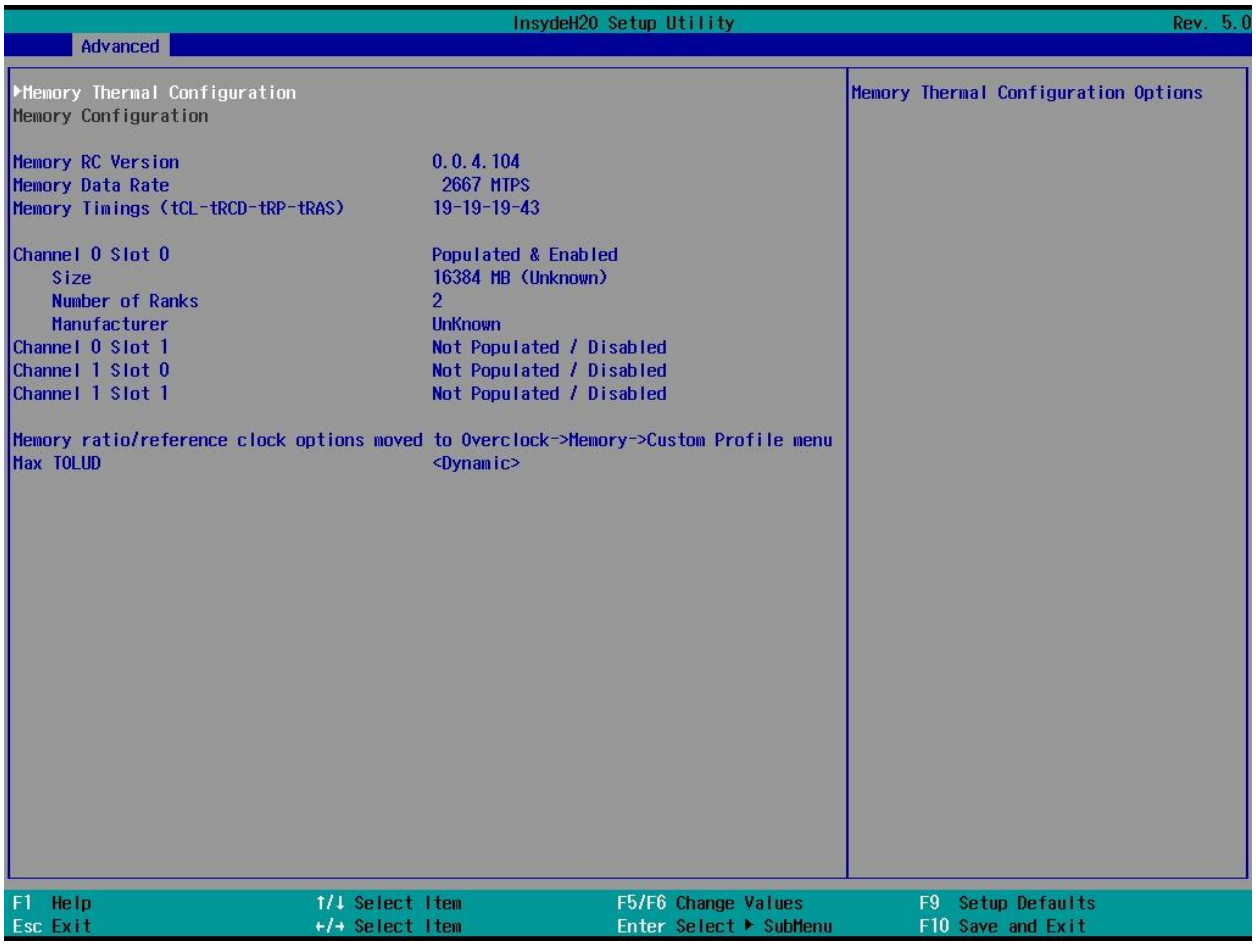
Type	Configurable Setting

BIOS Page	Advanced > RC Advanced Menu > Intel(R) Time Coordinated Computing
Description	Enable or Disable IO Fabric Low Latency. This will turn off some power management in the PCH IO fabrics. This option provides the most aggressive IO Fabric performance setting. S3 state is NOT supported.
Default Value	Disabled

GT CLOS

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Intel(R) Time Coordinated Computing
Description	Enable or Disable Graphics Technology(GT) Class of Service. Enable will reduce Gfx LLC allocation to minimize impact of Gfx workload on LLC
Default Value	Disabled

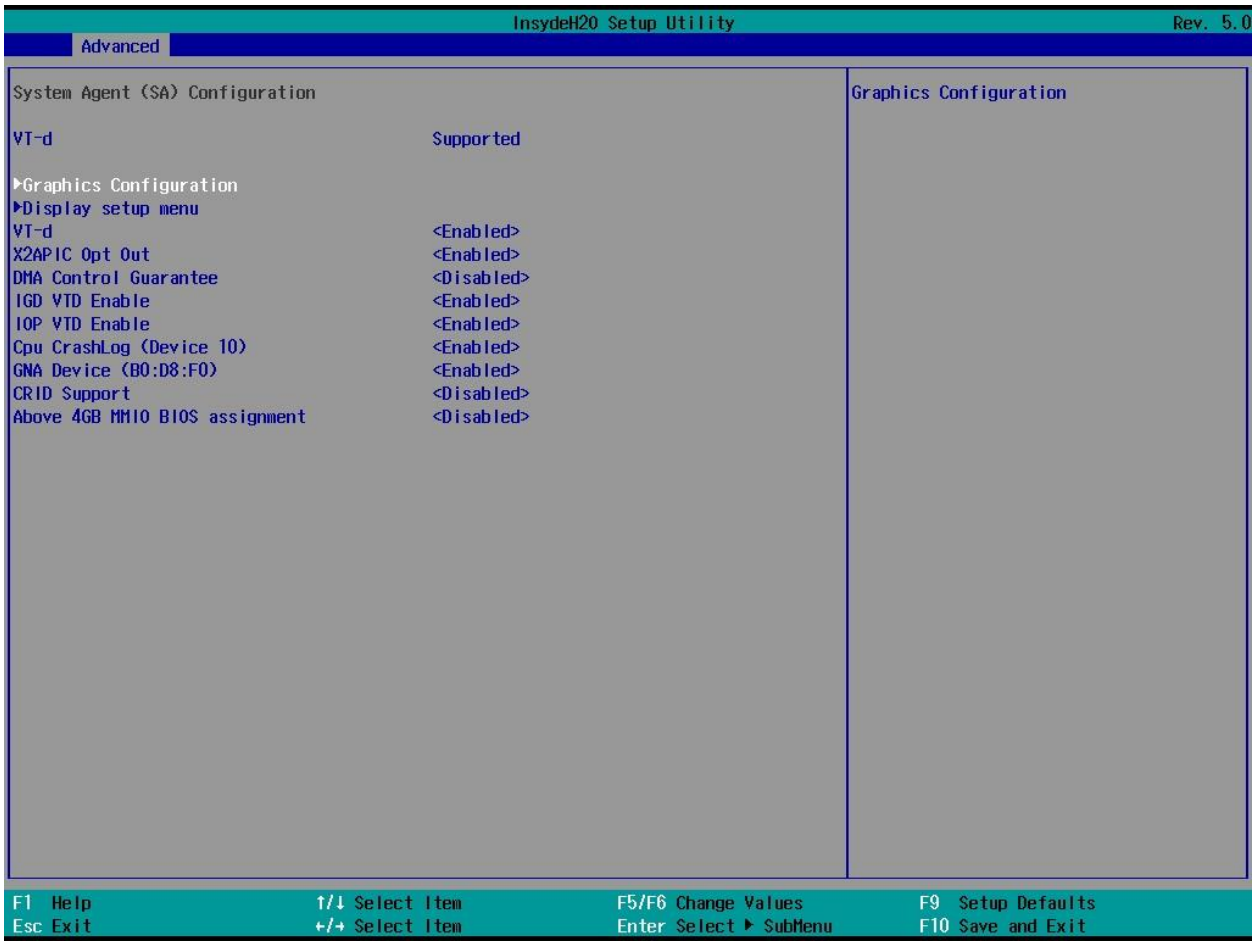
3.6.5 - Memory Configuration



Max TOLUD

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > Memory Configuration
Description	Maximum Value of TOLUD. Dynamic assignment would adjust TOLUD automatically based on largest MMIO length of installed graphic controller
Default Value	Dynamic

3.6.5 - System Agent (SA) Configuration



VT-d

Type	Info
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration
Description	If the system supports VT-d capabilities

DMA Control Guarantee

Type	Configurable Setting (Locked)
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration
Description	Program the state of the DMA_CONTROL_GUARANTEE bit

Default Value	Disabled

IGD VTD Enable

Type	Configurable Setting (Locked)
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration
Description	Enable/Disable IGD VTD
Default Value	Enabled

IOP VTD Enable

Type	Configurable Setting (Locked)
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration
Description	Enable/Disable IOP VTD
Default Value	Enabled

Cpu CrashLog

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration
Description	Enable or disabled the CPU CrashLog on Device 10
Default Value	Enabled

GNA Device

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration
Description	Enable/Disable the SA GNA device
Default Value	Enabled

CRID Support

Type	Configurable Setting

BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration
Description	Enable/Disable SA CRID and TCSS CRID control for Intel SIPP
Default Value	Disabled

Above 4G MMIO BIOS Assignment

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration
Description	Enable/Disable above 4GB MemoryMappedIO BIOS assignment. This is enabled automatically when Aperture Size is set to 2048MB.
Default Value	Disabled

3.6.6 - Graphics Configuration

Skip Scanning of External Gfx Card

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	If Enabled, the BIOS will not scan for External Gfx Card on PEG and PCH PCIE Ports
Default Value	Disabled

Internal Graphics

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Force the Internal Graphics enable state. Setting this to disabled without an external graphics card will prevent display output.
Default Value	Auto

GTT Size

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Set the GTT size to 2, 4, or 8 MB
Default Value	8MB

Aperture Size

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Select the Aperture Size. Above 4GB MMIO BIOS assignment is automatically enabled when selecting 2048MB aperture. To use this feature, please disable CSM Support.
Default Value	256MB

PSMI Support

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Enable/Disable PSMI Support.
Default Value	Disabled

DVMT Pre-Allocated

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Select DVMT 5.0 Pre-Allocated (Fixed) Graphics Memory size used by the Internal Graphics Device.
Default Value	60M

DVMT Total Gfx Mem

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Select DVMT5.0 Total Graphic Memory size used by the Internal Graphics Device.
Default Value	256M

DiSM Size

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	DiSM Size for 2LM Sku.
Default Value	0GB

VDD Enable

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Enable/Disable forcing of VDD in the BIOS
Default Value	Enabled

PM Support

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Enable/Disable PM support
Default Value	Enabled

PAVP Enable

Type	Configurable Setting

BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Enable/Disable PAVP
Default Value	Enabled

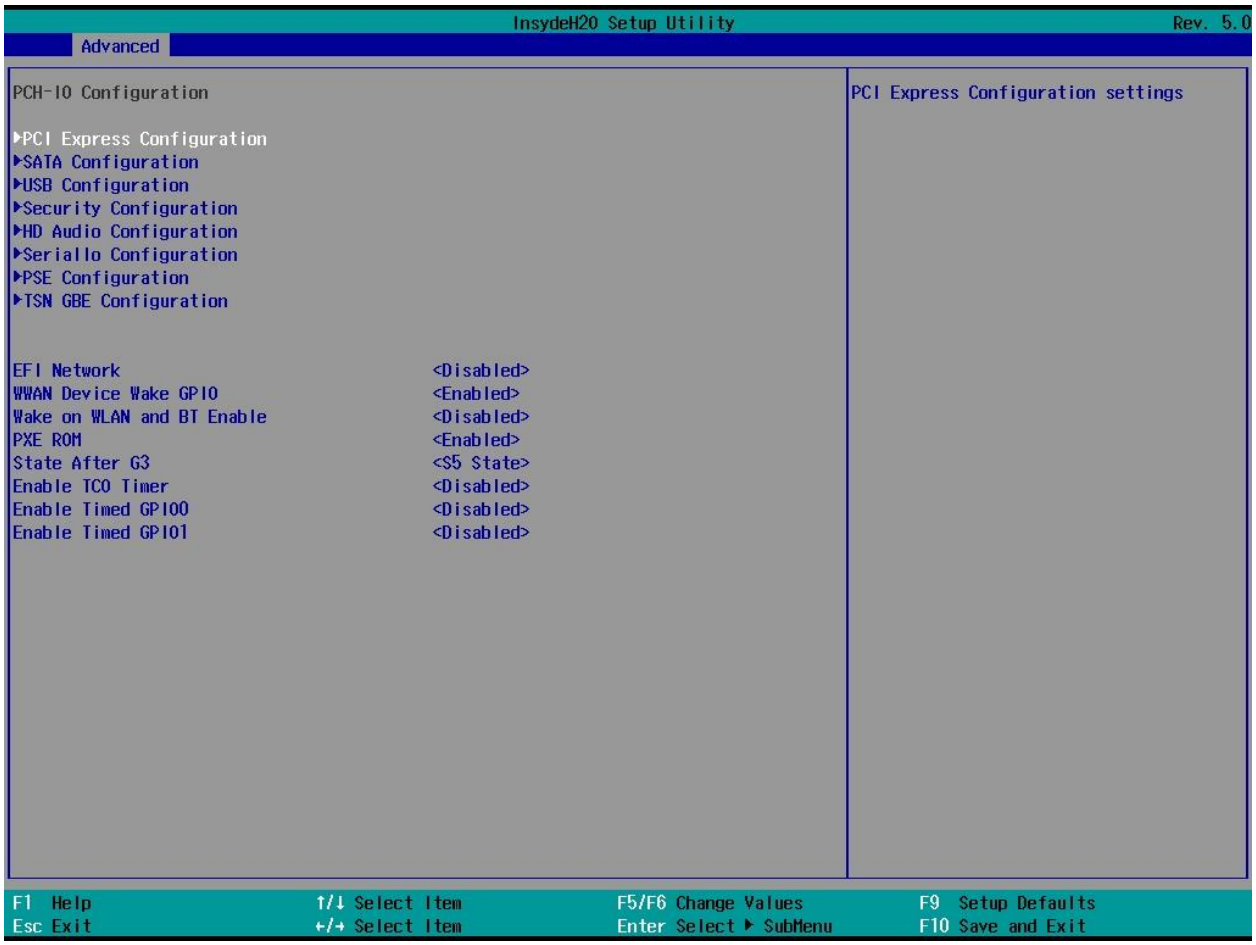
Cdynmax Clamping Enable

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Enable/Disable Cdynmax Clamping
Default Value	Disabled

Skip Full CD Clock Init

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > System Agent (SA) Configuration > Graphics Configuration
Description	Enabled: Skip Full CD clock initialization. Disabled: Initialize the full CD clock if not initialized by Gfx PEIM
Default Value	Disabled

3.6.7 - PCH-IO Configuration



EFI Network

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration
Description	Enable/Disable networking functionality for the onboard network interfaces in the UEFI environment.
Default Value	Onboard NIC

WWAN Device Wake GPIO

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration

Description	Enable/Disable using the WWAN device wake gpio pins as potential wake sources.
Default Value	Enabled

Wake on WLAN and BT Enable

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration
Description	Enable/Disable PCI Express Wireless LAN and Bluetooth to wake the system.
Default Value	Disabled

PXE ROM

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration
Description	Enable/Disable PXE Option ROM execution.
Default Value	Enabled

State After G3

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration
Description	Specify what state to go to when power is reapplied after a power failure (G3 state).
Default Value	S5 State (Off)

Enable TCO Timer

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration
Description	Enable/Disable TCO timer. When disabled, it disables PCH ACPI timer, stops TCO timer, and ACPI WDAT table will not be published.

Default Value	Disabled

Enable Timed GPIO0

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration
Description	Enable/Disable Timed GPIO0. When disabled, it disables cross time stamp time-synchronization as extension of Hammock Harbor time synchronization.
Default Value	Disabled

3.6.8 - PCI Express Configuration

DMI Link ASPM Control

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > PCI Express Configuration
Description	The control of Active State Power Management of the DMI Link.
Default Value	Auto

Port8xh Decode

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > PCI Express Configuration
Description	PCI Express Port8xh Decode Enable/Disable.
Default Value	Disabled

3.6.8 - PCI Express Root Port Configuration

PCI Express Root Port

Type	Configurable Setting
BIOS Page	Advanced Page > PCH-IO Configuration > PCI Express Configuration > PCI Express Root Port Settings
Description	Enables or disables the selected PCI Express Root Port
Default Value	Enabled

ASPM

Type	Configurable Setting
BIOS Page	Advanced Page > PCH-IO Configuration > PCI Express Configuration > PCI Express Root Port Settings
Description	Sets the PCI Express Active State Power Management mode
Possible Values	Auto, Disabled, L0s, L1, L0sL1
Default Value	Auto

PCIE Speed

Type	Configurable Setting
BIOS Page	Advanced Page > PCH-IO Configuration > PCI Express Configuration > PCI Express Root Port Settings
Description	Sets the PCIe Speed of the selected port
Possible Values	Auto, Gen1, Gen2, Gen3
Default Value	Auto

Detect Timeout

Type	Configurable Setting
BIOS Page	Advanced Page > PCH-IO Configuration > PCI Express Configuration > PCI Express Root Port Settings
Description	Sets the number of milliseconds reference code will wait for the link to exit detect state for enabled ports before assuming there is no device and potentially disabling the port
Default Value	0

3.6.9 - SATA Configuration

SATA Controller(s)

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SATA Configuration
Description	Enable/Disable SATA Device.
Default Value	Enabled

SATA Mode Selection

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SATA Configuration
Description	Set the SATA operation mode
Default Value	AHCI

SATA Ports Multiplier

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SATA Configuration
Description	Ports Multiplier Enable/Disable
Default Value	Disabled

SATA Speed

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SATA Configuration
Description	Set the SATA generation to Gen 1, 2, or 3
Default Value	Gen3

Aggressive LPM Support

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SATA Configuration
Description	Enable PCH to aggressively enter link power state.
Default Value	Enabled

Port X

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SATA Configuration
Description	Enable or disable the given SATA port.
Default Value	Enabled

Hot Plug

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SATA Configuration
Description	Enable or disable SATA hot plug drive detection for the given port.
Default Value	Disabled

3.6.10 - USB Configuration

xDCI Support

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > USB Configuration
Description	Enable/Disable xDCI (USB OTG Device).
Default Value	Disabled

USB2 PHY Sus Well Power Gating

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > USB Configuration
Description	Select 'Enabled' to enable SUS Well PG for USB2 PHY. This option has no effect on PCH-H
Default Value	Enabled

USB3 Link Speed Selection

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > USB Configuration
Description	This option is to select USB3 Link Speed GEN1 or GEN2
Default Value	GEN2

USB Overcurrent

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > USB Configuration
Description	Enable/disable USB overcurrent detection
Default Value	Enabled

USB Overcurrent Lock

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > USB Configuration
Description	Select 'Enabled' if Overcurrent functionality is used. Enabling this will make xHCI controller consume the Overcurrent mapping data
Default Value	Enabled

USB Port Disable Override

Type	Configurable Setting

BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > USB Configuration
Description	Selectively Enable/Disable the corresponding USB port from reporting a Device Connection to the controller.
Default Value	Disabled

USB Device/Host Mode Override

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > USB Configuration
Description	Selectively Enable/Disable the corresponding USB 2.0 and USB 3.0 port device mode
Default Value	Disabled

USB UCSI ACPI Device

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > USB Configuration
Description	Enable/Disable USB UCSI ACPI device
Default Value	Disabled

3.6.11 - Security Configuration

RTC Memory Lock

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > Security Configuration
Description	Enable will lock bytes 38h-3Fh in the lower/upper 128-byte bank of RTC RAM
Default Value	Enabled

BIOS Lock

Type	Configurable Setting

BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > Security Configuration
Description	Enable/Disable the PCH BIOS Lock Enable feature. Required to be enabled to ensure SMM protection of flash.
Default Value	Enabled

Force Unlock on All GPIO Pads

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > Security Configuration
Description	If enabled BIOS will force all GPIO pads to be in unlocked state
Default Value	Disabled

3.6.12 - SerialIo Configuration

Device Controller

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SerialIo Configuration
Description	Enable or disable the PCH controller for the platform's I2C, SPI, and UART devices.
Default Value	[Enabled/Disabled]

UARTX Hardware Flow Control

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SerialIo Configuration > Serial IO UARTX Settings
Description	Enable or disable the UART hardware flow control signals
Default Value	Enabled

UARTX DMA Enable

Type	Configurable Setting

BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SerialIo Configuration > Serial IO UARTX Settings
Description	Enable or disable the DMA support for the UART interface
Default Value	Enabled

UARTX Power Gating

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > SerialIo Configuration > Serial IO UARTX Settings
Description	Configure option power gating of the UART device in some platform off-states.
Default Value	Auto

3.6.13 - PSE Configuration

PSE Controller

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > PSE Configuration
Description	Enable or disable the Programmable Services Engine. Disabling the PSE will disable: CAN, DIO, Power LED, and HPD
Default Value	Enabled

Log Output Channel

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > PSE Configuration
Description	Target device for the PSE log output. 0: Memory 1-6: UART 7: Disabled
Default Value	0

Shell

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > PSE Configuration
Description	Enable or disable the PSE shell features
Default Value	Enabled

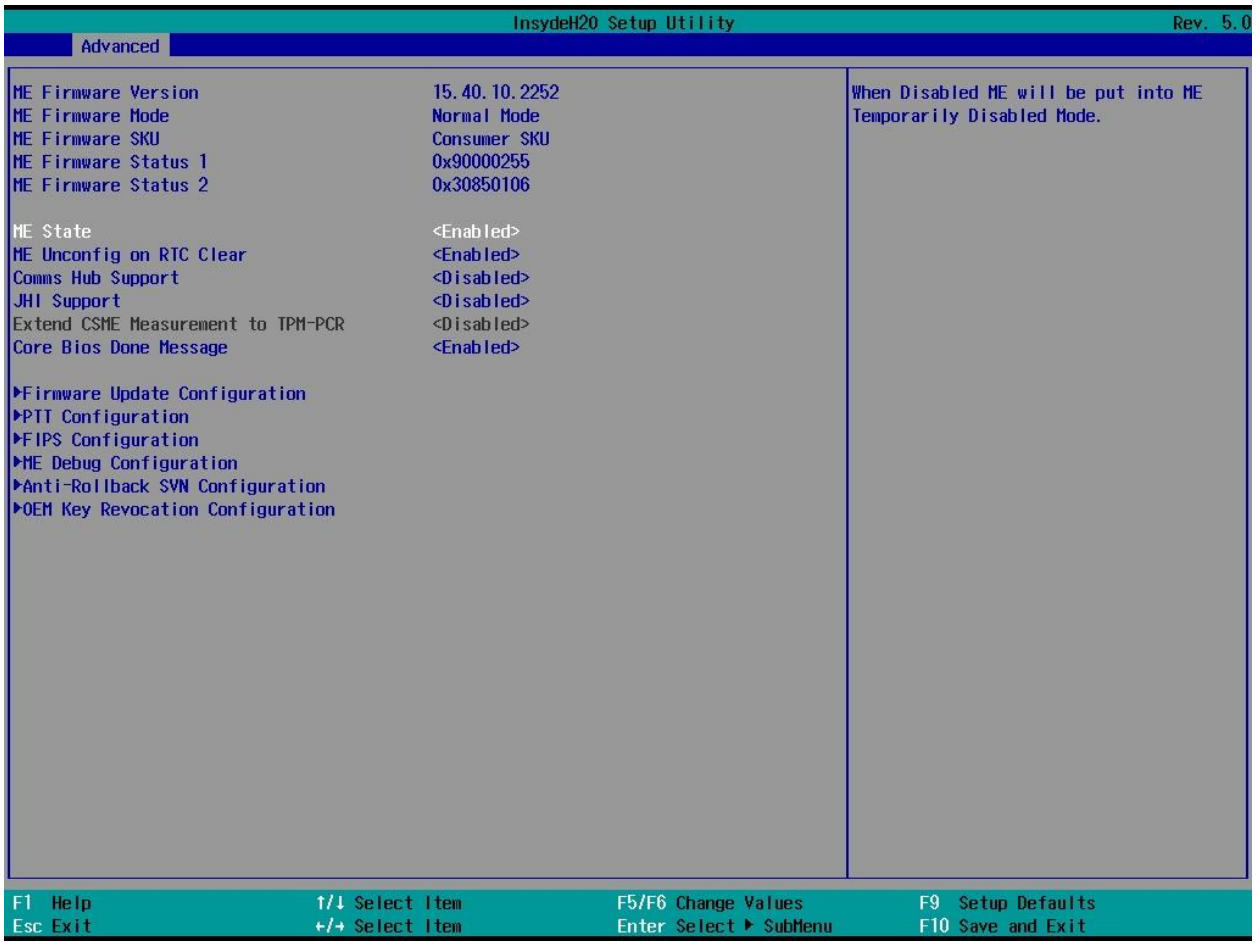
Eclite

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > PSE Configuration
Description	Enable or disable the PSE EC-Lite features
Default Value	Disabled

OOB

Type	Configurable Setting
BIOS Page	Advanced > RC Advanced Menu > PCH-IO Configuration > PSE Configuration
Description	Enable or disable the PSE OOB features
Default Value	Enabled

3.6.14 - PCH-FW Configuration



ME Firmware Version

Type	Information
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration
Description	Displays Management Engine firmware version

ME Firmware Mode

Type	Information
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration
Description	Displays Management Engine firmware mode

ME Firmware SKU

Type	Information
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration
Description	Displays Management Engine firmware SKU

ME Firmware Status 1

Type	Information
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration
Description	Displays Management Engine firmware status 1

ME Firmware Status 2

Type	Information
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration
Description	Displays Management Engine firmware status 2

ME State

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration
Description	When Disabled ME will be put into ME Temporarily Disabled Mode. Default value: Enabled
Possible Values	Enabled (Management Engine will act normally) Disabled (Management Engine will be put into ME Temporarily Disabled Mode)
Default Value	Enabled

Comms Hub Support

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration
Description	Enables or Disables support for Comms Hub
Default Value	Disabled

JHI Support

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration
Description	Enables or Disables Intel DAL Host Interface Service (JHI)
Default Value	Disabled

Core BIOS Done Message

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration
Description	Enable or Disable sending Core BIOS Done Message to ME
Default Value	Enabled

HECI Timeouts

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > ME Debug Configuration
Description	Enable Host Embedded Control Interface timeouts
Default Value	Enabled

3.6.15 - Firmware Update Configuration

ME Firmware Re-Flash

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > Firmware Update Configuration
Description	Enables or Disables Management Engine Firmware Image Re-Flash function
Default Value	Disabled

FW Update

Type	Configurable Setting

BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > Firmware Update Configuration
Description	Enables or Disabled FW Update
Default Value	Enabled

3.6.16 - PTT Configuration

PTT Capability / State

Type	Info
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > PTT Configuration
Description	Report if the PTT (firmware TPM) is enabled and ready.

3.6.17 - FIPS Configuration

FIPS Mode Select

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > FIPS Configuration
Description	Enables or Disables FIPS
Default Value	Disabled

Current FIPS Mode

Type	Info
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > FIPS Configuration
Description	Report the current FIPS mode

Crypto Driver FIPS Version

Type	Info

BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > FIPS Configuration
Description	Report the FIPS crypto driver version

3.6.18 - Anti-Rollback SVN Configuration

Automatic HW-Enforced Anti-Rollback SVN

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > Anti-Rollback SVN Configuration
Description	Enables or disables Automatic HW-Enforced Anti-Rollback SVN
Default Value	Disabled

Set HW-Enforced Anti-Rollback for Current SVN

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > Anti-Rollback SVN Configuration
Description	Enables or disables setting the HW-Enforced Anti-Rollback for Current SVN
Default Value	Disabled

Minimal Allowed Anti-Rollback SVN

Type	Info
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > FIPS Configuration
Description	Report the current Minimal Allowed Anti-Rollback SVN

Executing Anti-Rollback SVN

Type	Info
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > FIPS Configuration
Description	Report the Executing Anti-Rollback SVN

3.6.19 - OEM Key Revocation Configuration

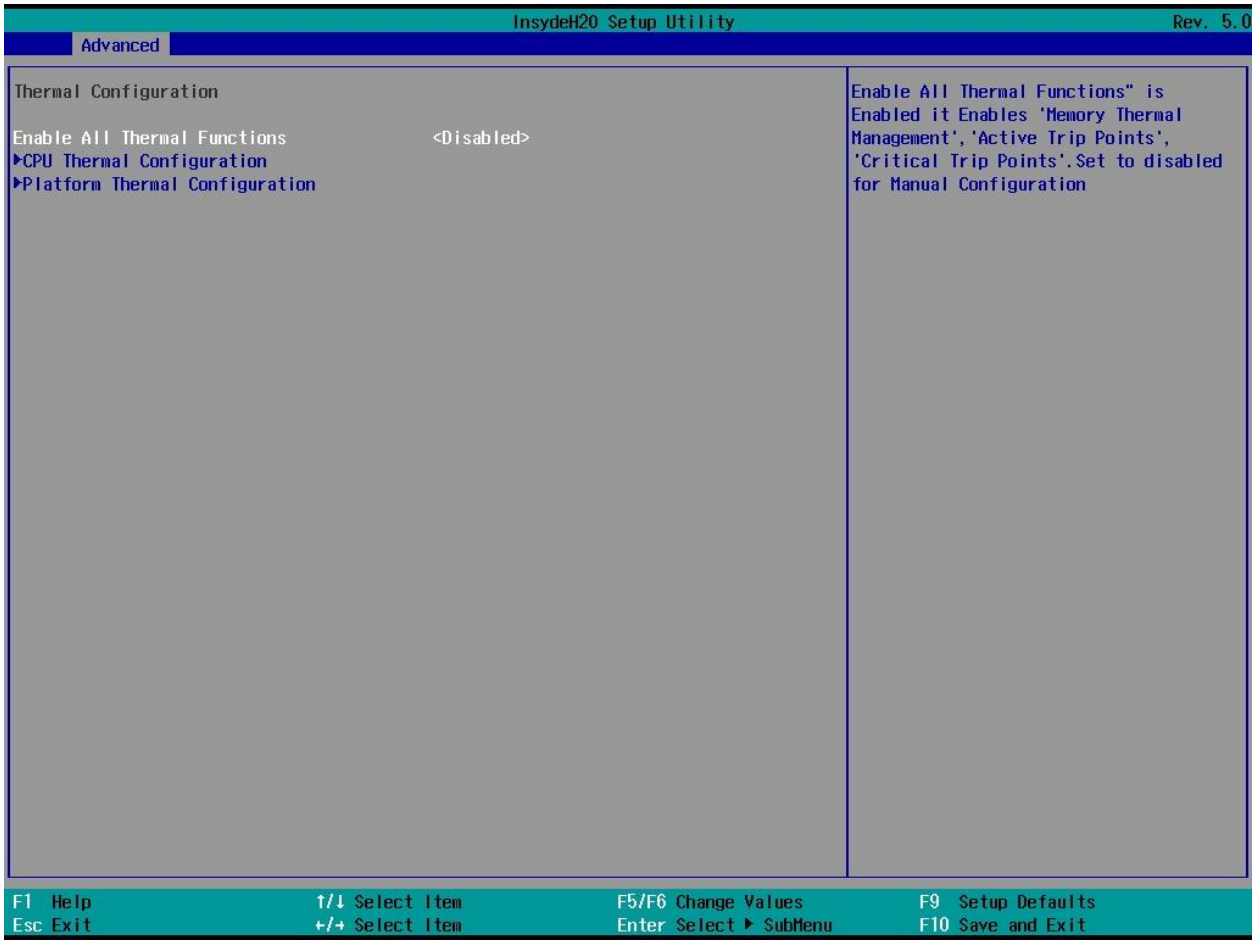
Automatic OEM Key Revocation

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > OEM Key Revocation Configuration
Description	Enables or disables automatically revoking OEM keys
Default Value	Disabled

Invoke OEM Key Revocation

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > PCH-FW Configuration > OEM Key Revocation Configuration
Description	Enable to execute OEM key revocation
Default Value	Disabled

3.6.20 - Thermal Configuration



Enable All Thermal Functions

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration
Description	Enables ‘Memory Thermal Management’, ‘Active Trip Points’, and ‘Critical Trip Points’. Set to disabled for manual configuration.
Default Value	Disabled

3.6.21 - CPU Thermal Configuration

DTS SMM

Type	Configurable Setting

BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration
Description	Disabled: ACPI thermal management uses EC reported temperature values. Enabled: ACPI thermal management uses DTS SMM mechanism to obtain CPU temperature values. Out of Spec: ACPI Thermal Management uses EC reported temperature values and DTS SMM is used to handle Out of Spec conditions.
Default Value	Disabled

TCC Activation Offset

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration
Description	Offset from factory set Tcc activation temprature at which the Thermal Control Circuit must be activated. Tcc will be activated at: Tcc Activation Temp - Tcc Activation Offset. Tcc Activation Offset range is 0 to 63.
Default Value	0

TCC Offset Time Window

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration
Description	Tcc Offset Time Window for Running Average Temperature Limit(RATL) feature. The Tcc offset time window can range from 5ms to 448s.
Default Value	Disabled

TCC Offset Clamp Enable

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration

Description	Tcc Offset Clamp bit Enable for Running Average Temperature Limit(RATL) feature to allow CPU to throttle below P1.
Default Value	Disabled

TCC Offset Lock Enable

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration
Description	Lock Enable for Running Average Temperature Limit(RATL) feature to lock Temperature Target MSR.
Default Value	Enabled

Bi-directional PROCHOT#

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration
Description	When a processor thermal sensor trips (either core), then PROCHOT# will be driven. If bi-direction is enabled, external agents can drive PROCHOT# to throttle the processor.
Default Value	Enabled

Disable PROCHOT# Output

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration
Description	Enable/Disable PROCHOT# Output
Default Value	Enabled

Disable VR Thermal Alert

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration

Description	Enable/Disable VR Thermal Alert
Default Value	Disabled

PROCHOT Response

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration
Description	Enable/Disable PROCHOT Response
Default Value	Enabled

PROCHOT Lock

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration
Description	Enable/Disable PROCHOT Lock
Default Value	Disabled

ACPI T-States

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > CPU Thermal Configuration
Description	Enable/Disable ACPI T-States
Default Value	Disabled

3.6.22 - Platform Thermal Configuration

Critical Trip Point

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets the temperature value of the ACPI Critical Trip Point (the point at which the system will shut off.)

	Note: 119C is the Plan Of Record (POR) for all Intel processors.
Possible Values	15, 23, 31, 39, 47, 55, 63, 71, 79, 87, 95, 100, 103, 111, 119, 127 (C)
Default Value	119 C (POR)

Active Trip Point 0

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets the temperature value of the ACPI Active Trip Point 0 (the point at which the OS will set the processor fan to Active Trip Point 0 Fan Speed)
Possible Values	15, 23, 31, 39, 47, 55, 63, 71, 79, 87, 95, 100, 111, 127 (C)
Default Value	71 C

Active Trip Point 0 Fan Speed

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets Active Trip Point 0 Fan Speed percentage (the percentage of maximum speed at which the fan will run when Active Trip Point 0 is crossed)
Possible Values	0 to 100
Default Value	100

Active Trip Point 1

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration

Description	Sets the temperature value of the ACPI Active Trip Point 1 (the point at which the OS will set the processor fan to Active Trip Point 1 Fan Speed)
Possible Values	15, 23, 31, 39, 47, 55, 63, 71, 79, 87, 95, 100, 111, 127 (C)
Default Value	55 C

Active Trip Point 1 Fan Speed

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets Active Trip Point 1 Fan Speed percentage (the percentage of maximum speed at which the fan will run when Active Trip Point 1 is crossed)
Possible Values	0 to 100
Default Value	75

Passive Trip Point

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets the temperature value of the ACPI Passive Trip Point (the point in which the OS will begin throttling the processor frequency)
Possible Values	15, 23, 31, 39, 47, 55, 63, 71, 79, 87, 100, 103, 111, 119 (POR), 127 (C)
Default Value	95 C

Passive TC1 Value

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets the TC1 value for the ACPI Passive Cooling Formula

Possible Values	1 to 16
Default Value	1

Passive TC2 Value

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets the TC2 value for the ACPI Passive Cooling Formula
Possible Values	1 to 16
Default Value	5

Passive TSP Value

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets the TSP value for the ACPI Passive Cooling Formula. This value represents how often (in tenths of a second) the OS will read the temperature when passive cooling is enabled
Possible Values	2 to 32
Default Value	10

Active Trip Points

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Enables or Disables Active Trip Points
Default Value	Enabled

Passive Trip Points

Type	Configurable Setting
BIOS Page	Advanced Page > Thermal Configuration

Description	Enables or Disables Passive Trip Points
Default Value	Disabled

Critical Trip Points

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Enables or Disables Critical Trip Points
Default Value	Enabled

Active Trip Points

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Enables or Disables Active Trip Points
Default Value	Enabled

PCH Temp Read

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Enables or Disables reading of PCH temperature
Default Value	[X] (enabled)

CPU Energy Read

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Enables or Disables reading of CPU power draw
Default Value	[X] (enabled)

CPU Temp Read

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Enables or Disables reading of CPU temperatures
Default Value	[X] (enabled)

Alert Enable Lock

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Enables or Disables locking of all Alert Enable settings
Default Value	Disabled

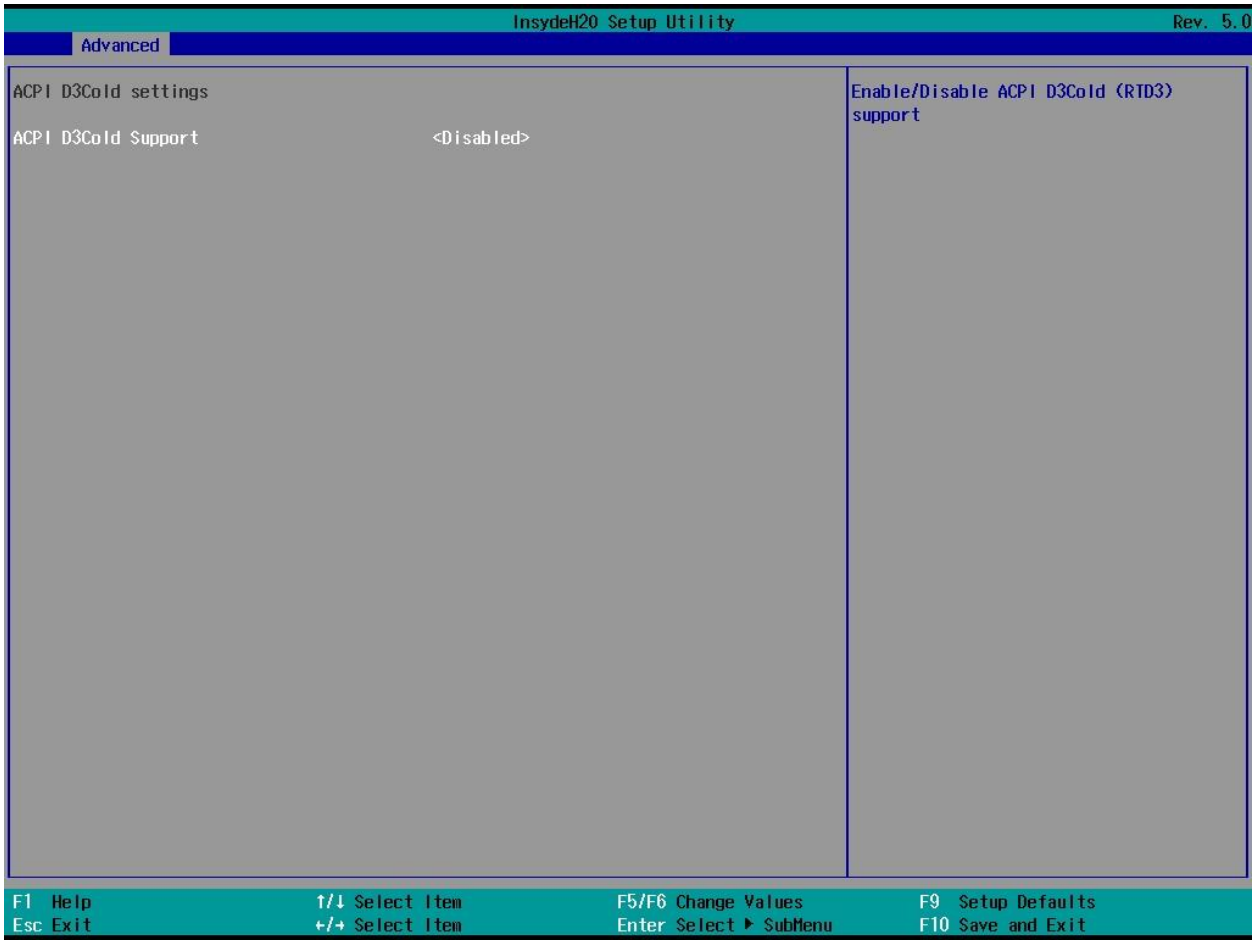
CPU Temp

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets the Fail Safe temperature that the embedded controller will use if the OS is hung
Default Value	75

CPU Fan Speed

Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > Thermal Configuration > Platform Thermal Configuration
Description	Sets the fan speed that the embedded controller will use if the OS is hung
Possible Values	0-100%
Default Value	65%

3.6.23 - ACPI D3Cold Settings



ACPI D3Cold Support

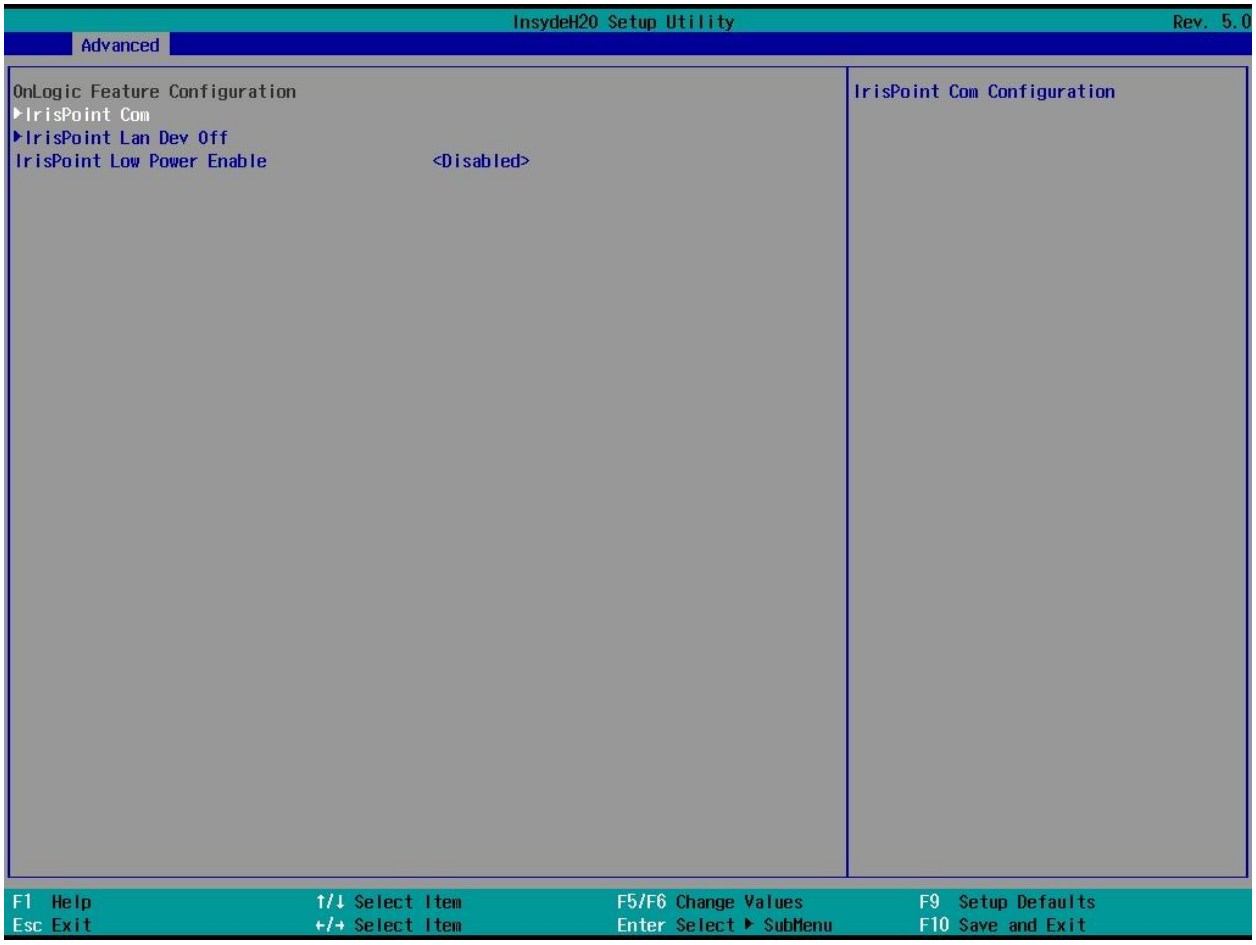
Type	Configurable Setting
BIOS Page	Advanced Page > RC Advanced Menu > ACPI D3Cold Settings
Description	Enable/Disable ACPI D3Cold (RTD3) support
Default Value	Disabled

3.7 - H2OUVE Configuration

H2OUVE Support

Type	Configurable Setting
BIOS Page	Advanced Page > H2OUVE Configuration
Description	Enable/Disable interface for configuring settings via the H2OUVE tool.
Default Value	Disabled

3.7 - OnLogic Feature Configuration



Low Power Enable

Type	Configurable Setting
BIOS Page	Advanced > OnLogic Feature Configuration
Description	When enabled, the system will transition to a lower power state after shutting down. When enabled, the only wake source for the system is the front power button.
Default Value	Disabled

3.7.1 - COM

COMx Mode Selection

Type	Configurable Setting

BIOS Page	Advanced > OnLogic Feature Configuration > COM
Description	RS-232: Set COM mode as RS-232. RS-485 Half Duplex: Set COM mode as RS-485. RS-485 Half Duplex (Terminated): Set COM mode as RS-485, and enable internal termination and bias resistors. RS-422 Full Duplex: Set COM mode as RS-422. RS-422 Full Duplex (Terminated): Set COM mode as RS-422, and enable internal termination and bias resistors. **Note:** RS-422 and RS-485 modes use a different driver framework at the OS level.
Default Value	RS-232

COMx Slew Rate

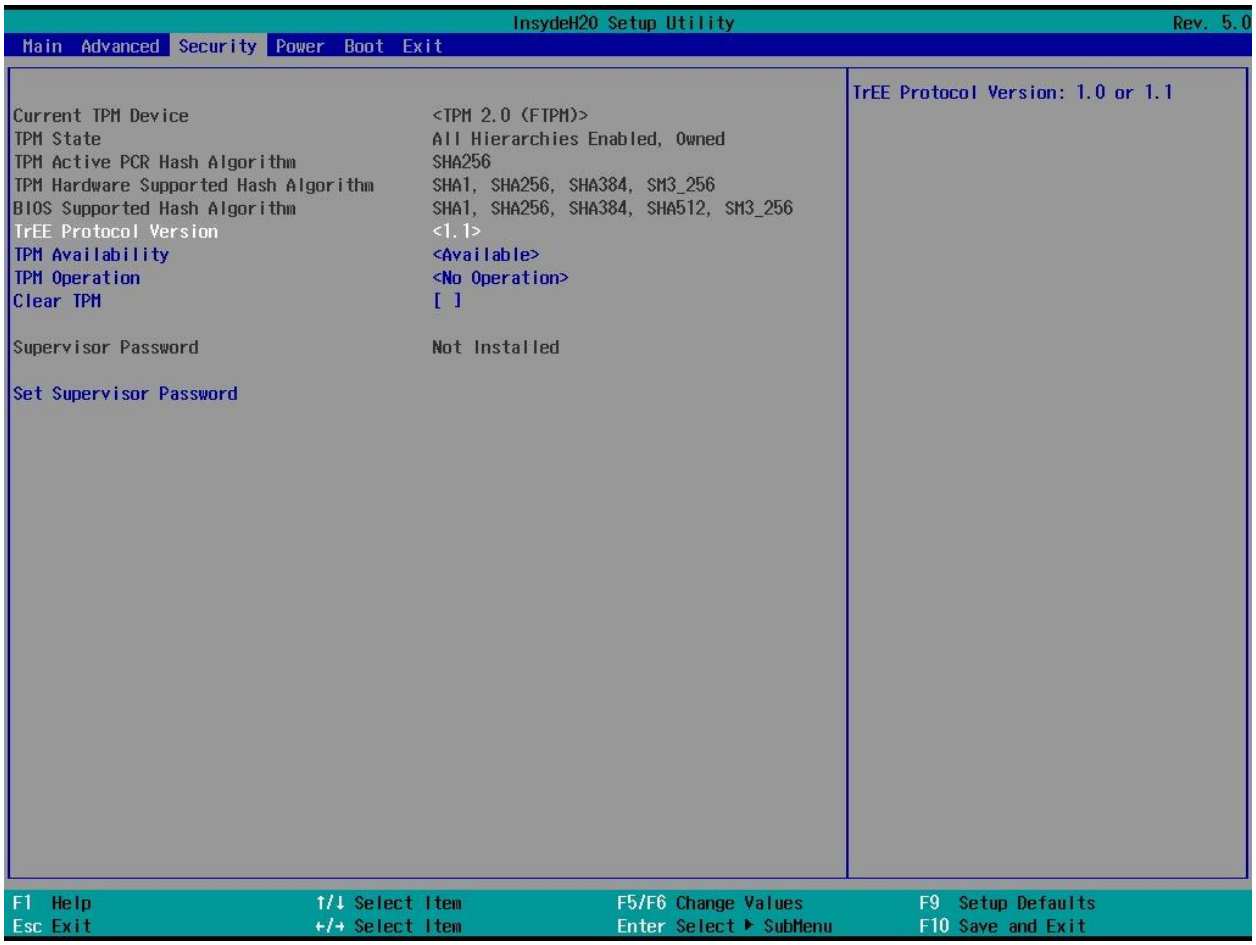
Type	Configurable Setting
BIOS Page	Advanced > OnLogic Feature Configuration > COM
Description	Set the slew rate of a given COM port to slow or fast
Default Value	Fast

3.7.2 - Lan Dev Off

LAN x Dev Off

Type	Configurable Setting
BIOS Page	Advanced > OnLogic Feature Configuration > LAN Dev Off
Description	Disable the corresponding onboard NIC with a hardware power gate.
Default Value	Disabled

4 - Security Page



Current TPM Device

Type	Information
BIOS Page	Security Page
Description	Displays current TPM device

TPM State

Type	Information
BIOS Page	Security Page
Description	Displays current TPM state

TPM Active PCR Hash Algorithm

Type	Information
BIOS Page	Security Page
Description	Displays active PCR hash algorithm

TPM Hardware Supported Hash Algorithm

Type	Information
BIOS Page	Security Page
Description	Displays hardware supported hash algorithm

BIOS Supported Hash Algorithm

Type	Information
BIOS Page	Security Page
Description	Displays BIOS supported hash algorithm

TrEE Protocol Version

Type	Configurable Setting
BIOS Page	Security Page
Description	Sets the TrEE Protocol Version: 1.0 or 1.1. Possible values: 1.1, 1.0. Default value: 1.1
Possible Values	1.1, 1.0
Default Value	1.1

TPM Availability

Type	Configurable Setting
BIOS Page	Security Page
Description	Enables or Disables the TPM hardware
Possible Values	Available (enabled), Hidden (disabled)
Default Value	Available

TPM Operation

Type	Configurable Setting
BIOS Page	Security Page
Description	Sets the TPM2 operation state
Possible Values	- No Operation - Enable - SetPCRBanks(Algorithm) - LogAllDigests - SetPPRequiredForClear_True - SetPPRequiredForClear_False - SetPPRequiredForTurnOn_False - SetPPRequiredForTurnOn_True - SetPPRequiredForTurnOff_False - SetPPRequiredForTurnOff_True - SetPPRequiredForChangePCRs_False - SetPPRequriedForChangePCRs_True - SetPPRequiredForChangeEPS_False - SetPPRequiredForChangeEPS_True - ChangeEPS
Default Value	No Operation

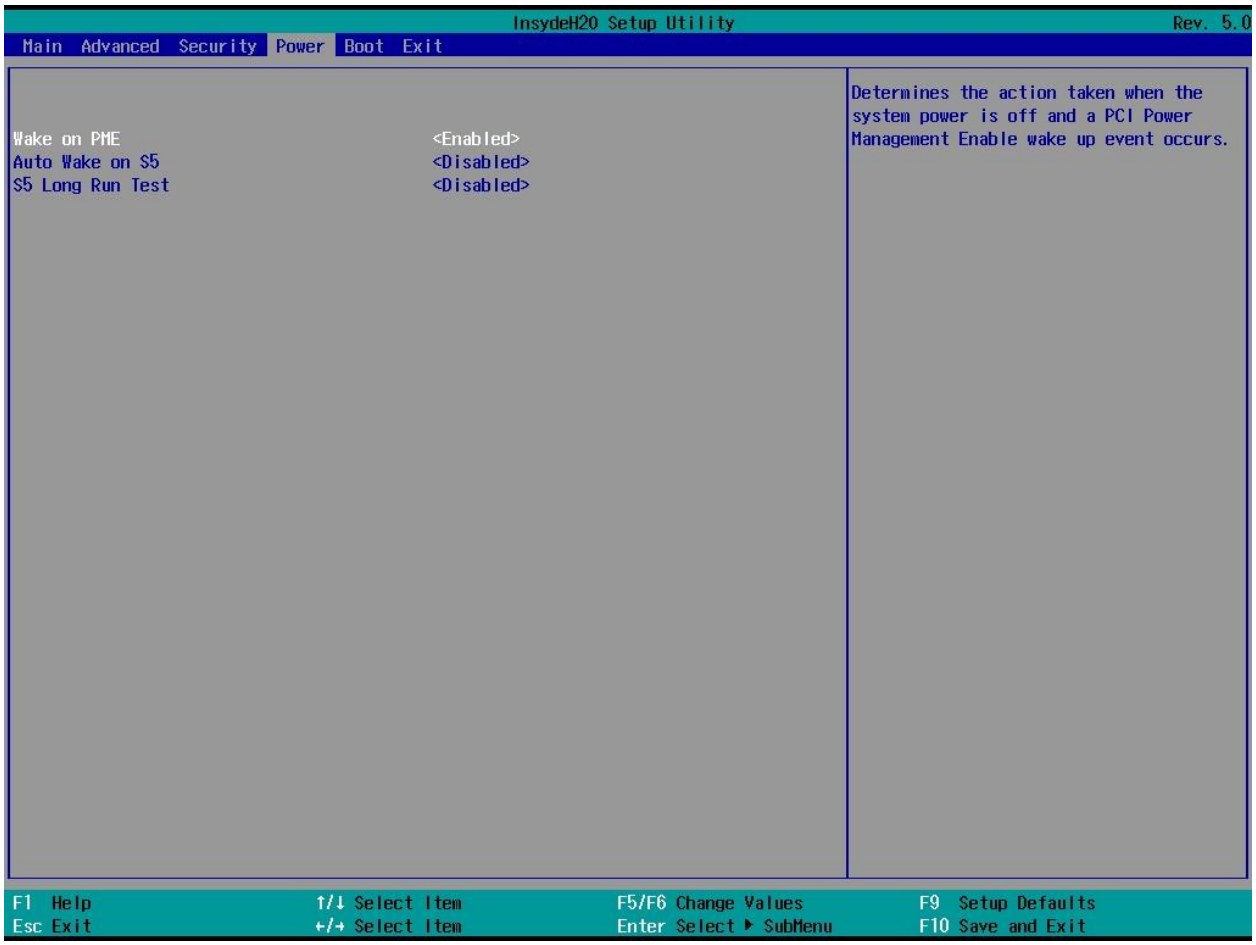
Clear TPM

Type	Configurable Setting
BIOS Page	Security Page
Description	Enables or Disables clearing TPM user data such as passwords, certificates, and keys
Default Value	[ ] (disabled)

Set Supervisor Password

Type	Configurable Setting
BIOS Page	Security Page
Description	Sets or Changes the supervisor password **Note:** The password must be more than one character in length

5 - Power Page



Wake on PME

Type	Configurable Setting
BIOS Page	Power
Description	Enable wake from a PCI Power Management Enable wake up event when the system is off
Default	Enabled

Auto Wake on S5

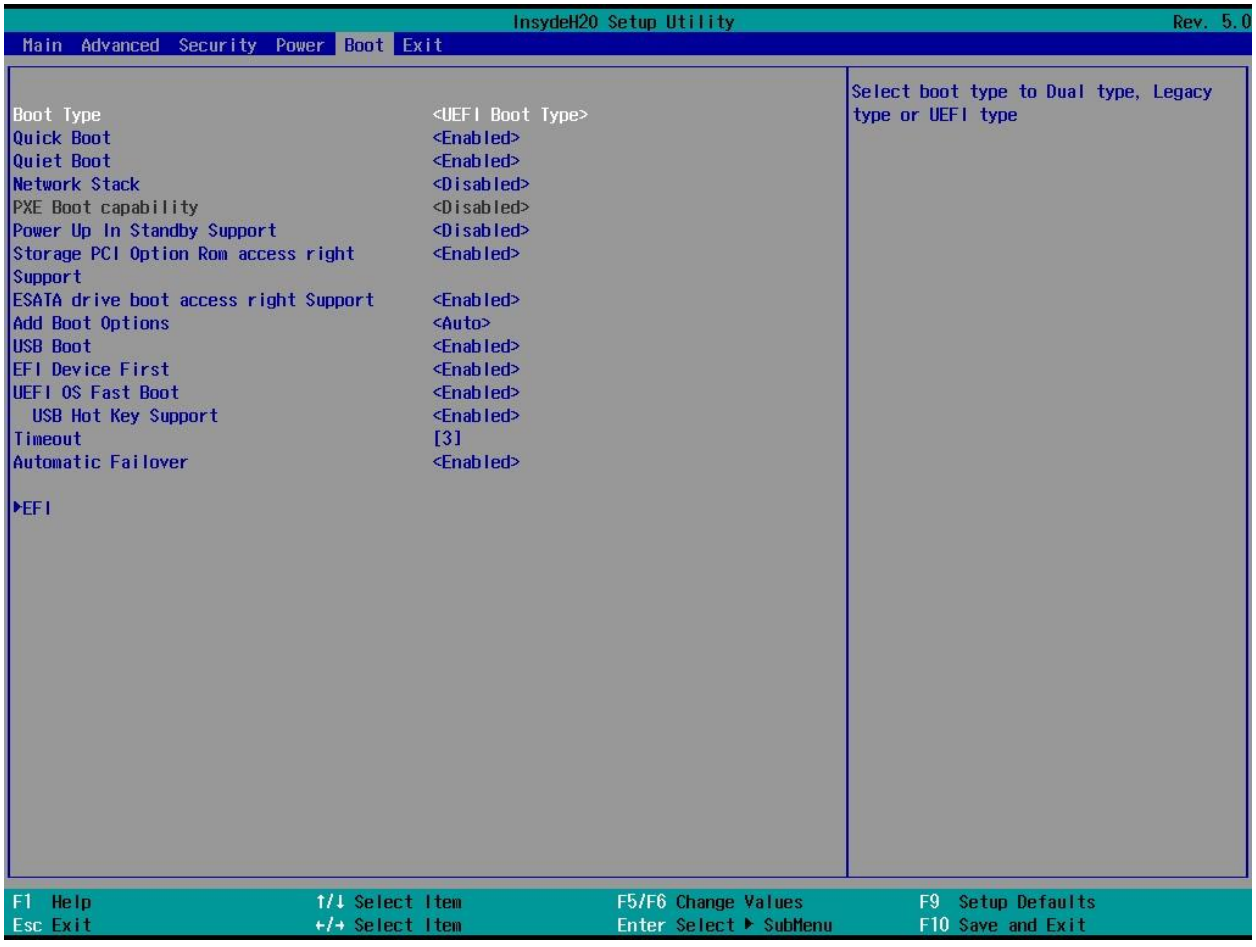
Type	Configurable Setting
BIOS Page	Power

Description	Software auto-power-on feature. This motherboard also features a hardware ATX jumper that provides the same functionality.
Default	Disabled

S5 Long Run Test

Type	Configurable Setting
BIOS Page	Power
Description	Force to enable RTC S5 wake up, even if the OS disables it. Supports 'ipwrtest' performing RTC S5 wakeup.
Default	Disabled

6 - Boot Page



Boot Type

Type	Configurable Setting
BIOS Page	Boot Page
Description	Sets the boot mode
Possible Values	UEFI Boot Type, Legacy Boot Type, Dual Boot Type
Default Value	UEFI Boot Type

Network Stack

Type	Configurable Setting
BIOS Page	Boot Page
Description	Enables or Disables the onboard NICs before UEFI handoff Default value: Disabled
Default Value	Disabled

PXE Boot Capability

Type	Configurable Setting
BIOS Page	Boot Page
Description	Sets the PXE Boot mode **Note:** This setting is unavailable unless Network Stack is Enabled. Additionally PXE Boot over SGMII on this platform is not currently available. Updated UNDI drivers are planned to support this feature.
Possible Values	- Disabled - UEFI: IPv4 - UEFI: IPv6 - UEFI: IPv4/IPv6
Default Value	Disabled

Add Boot Options

Type	Configurable Setting
BIOS Page	Boot Page

Description	Sets which device in the boot order list the system will attempt to boot first and the direction it will move through the list (see section 5.1 below)
Possible Values	- Auto (boot order is not configurable, uses the system default) - First (system moves through the boot order list top to bottom) - Last (system moves through the boot order list bottom to top)
Default Value	Auto

USB Boot

Type	Configurable Setting
BIOS Page	Boot Page
Description	Enables or Disables booting from USB devices
Default Value	Enabled

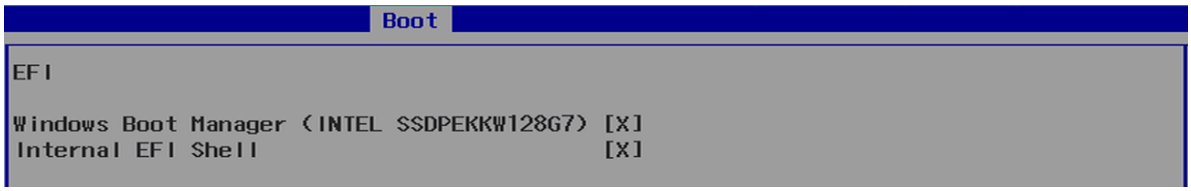
UEFI OS Fast Boot

Type	Configurable Setting
BIOS Page	Boot Page
Description	Enables or Disables Fast Boot mode. When enabled, the BIOS will not initialize the keyboard during boot or watch for the BIOS menu keypress
Default Value	Disabled

EFI

Type	Sub-Menu
BIOS Page	Boot Page
Description	Opens the EFI Boot Order sub-menu (see section 5.1 below)

6.1 - EFI



Note: The EFI boot order configuration in this menu can only be changed if the Add Boot Options option above is set to First or Last.

In this menu, you set which devices the system can boot to, as well as change the order in which it attempts to boot. Highlight a boot device and press Enter to enable or disable booting to it. Use the F5 and F6 keys to move the boot device up and down the list.

7 - Exit Page

Exit Saving Changes

Type	Exit Mode
BIOS Page	Exit Page
Description	Saves your changes and exits the BIOS setup menu

Save Change Without Exit

Type	Exit Mode
BIOS Page	Exit Page
Description	Saves your changes, but does not exit the BIOS setup menu

Exit Discarding Changes

Type	Selectable
BIOS Page	Exit Page
Description	Exits the BIOS setup menu without saving your changes

Load Optimal Defaults

Type	Selectable
BIOS Page	Exit Page
Description	Loads the firmware's optimal default settings

Load Custom Defaults

Type	Selectable
BIOS Page	Exit Page
Description	Loads user-specified set of default settings

Save Custom Defaults

Type	Selectable
BIOS Page	Exit Page
Description	Saves current settings as user-specified set

Discard Changes

Type	Selectable
BIOS Page	Exit Page
Description	Discards all changes, but does not exit the BIOS setup menu

8 - BIOS Updates

The latest BIOS updates are available from the OnLogic support site.