SD350

UEFI User Guide

1. UEFI Setup Utilities

Using the BIOS Setup Utility

This section describes the BIOS Setup Utility options, which is used to change server configuration defaults. You can run BIOS Setup with or without an operating system being present.

Starting Setup

To enter the BIOS setup screens, follow the steps below:

Step1. Power on the motherboard.

Step2. Press the <F1> key on your keyboard when you see the following text prompt: Press F1 to run Setup.

Step3. After you press the <F1> key, the main BIOS setup menu displays. You can access the other setup screens from the main BIOS setup menu,

BIOS Setup Menu

The main BIOS setup menu is the first screen that you can navigate. Each main BIOS setup menu option is described in this user's guide.

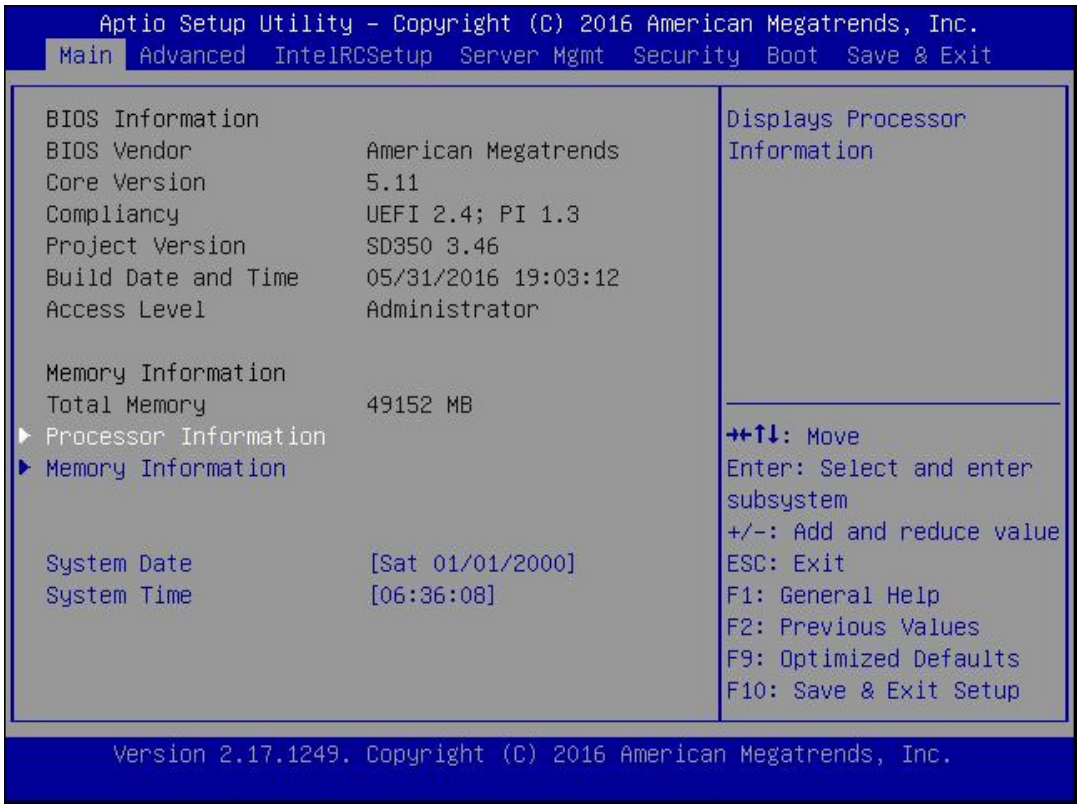
The Main BIOS setup menu screen has two main frames. The left frame displays all the options that can be configured. "Grayed-out" options cannot be configured. Options is blue can be.

The right frame displays the key legend. Above the key legend is an area reserved for a text message. When an option is selected in the left frame, it is highlighted in white.

2. UEFI Setup Menu Introduction

1. Main Setup

When you first enter the BIOS Setup Utility, you will enter the Main setup screen. You can always return to the Main setup screen by selecting the Main tab. There are two Main Setup options. They are described in this section. The Main BIOS Setup screen is shown below



Item	Option	description
BIOS Information		
BIOS Vendor	Read only	Display BIOS vendor
Core Version	Read only	Display System BIOS Core version information
Compliancy	Read only	Display BIOS compliancy information
Project Version	Read only	Display BIOS version information
Build Date and Time	Read only	Display System BIOS build date and time

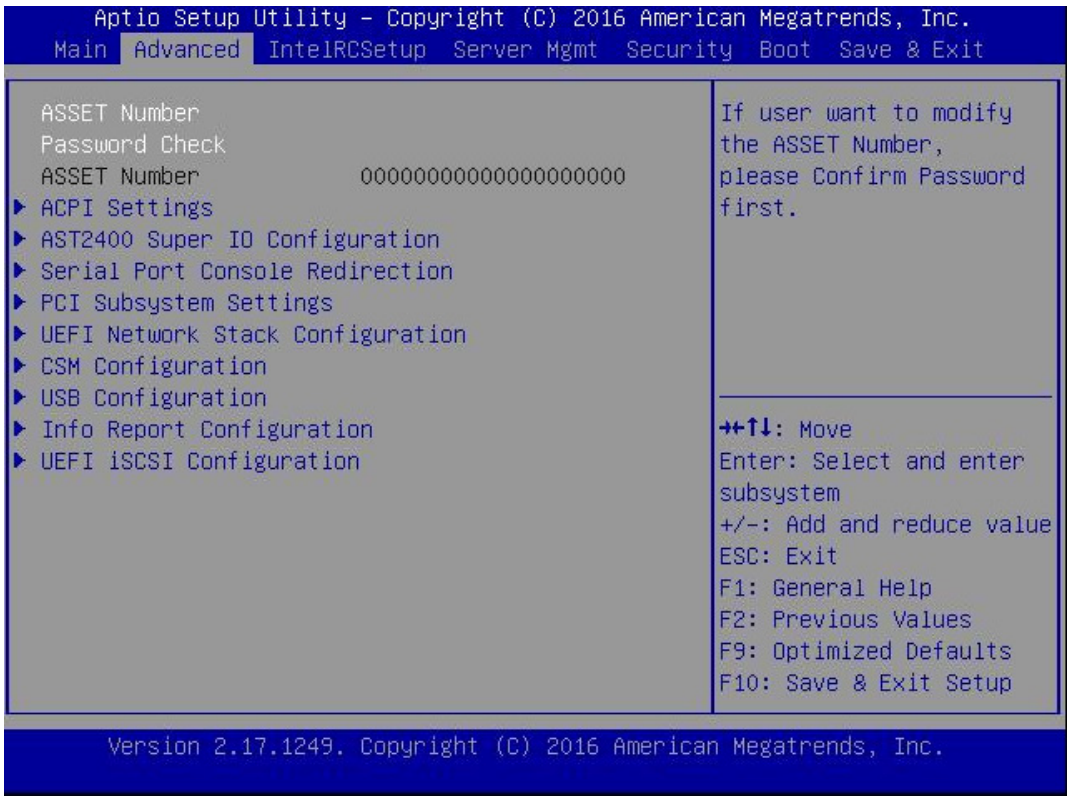
Memory Information		
Total Memory	Read only	Display total memory size
System Date	DAY MM/DD/YYYY	Set system date
System Time	XX:XX:XX	Set system time
Access Level	Read only	Display the current access

2. Advanced

Select the Advanced tab from the BIOS setup screen to enter the Advanced BIOS Setup screen.

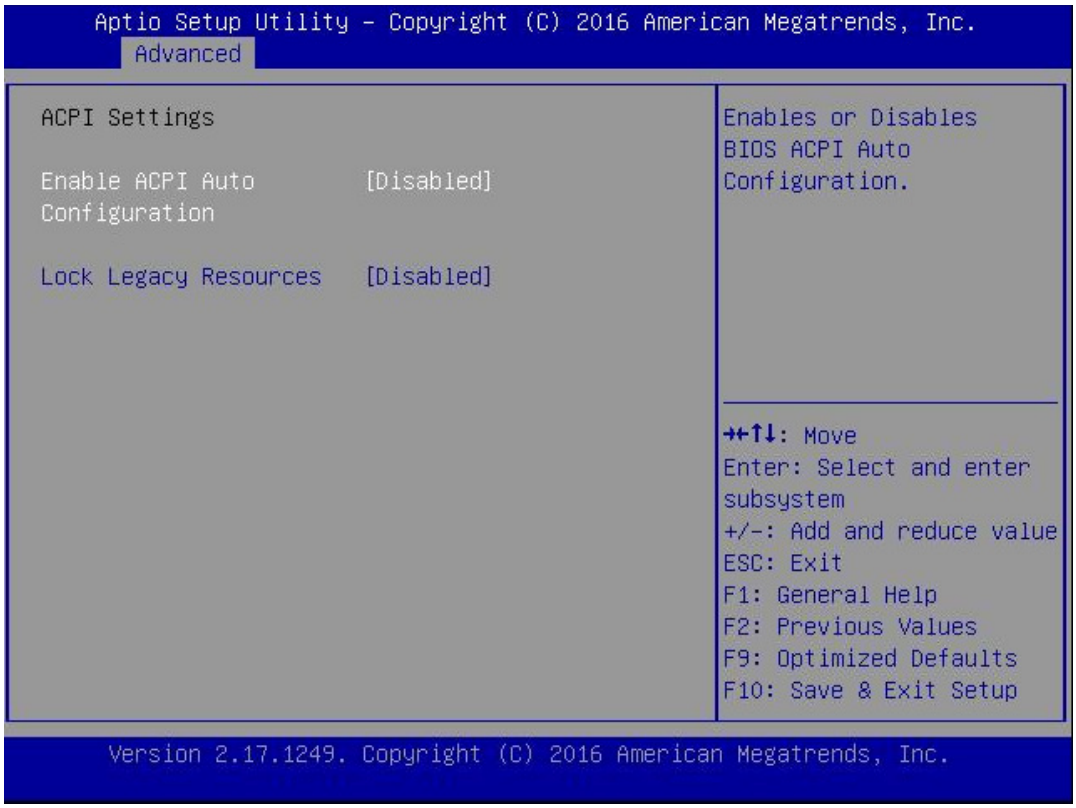
You can display an Advanced BIOS Setup option by highlighting it using the <Arrow> keys. All Advanced BIOS Setup options are described in this section.

The Advanced BIOS Setup screen is shown below. The sub menus are described on the following pages



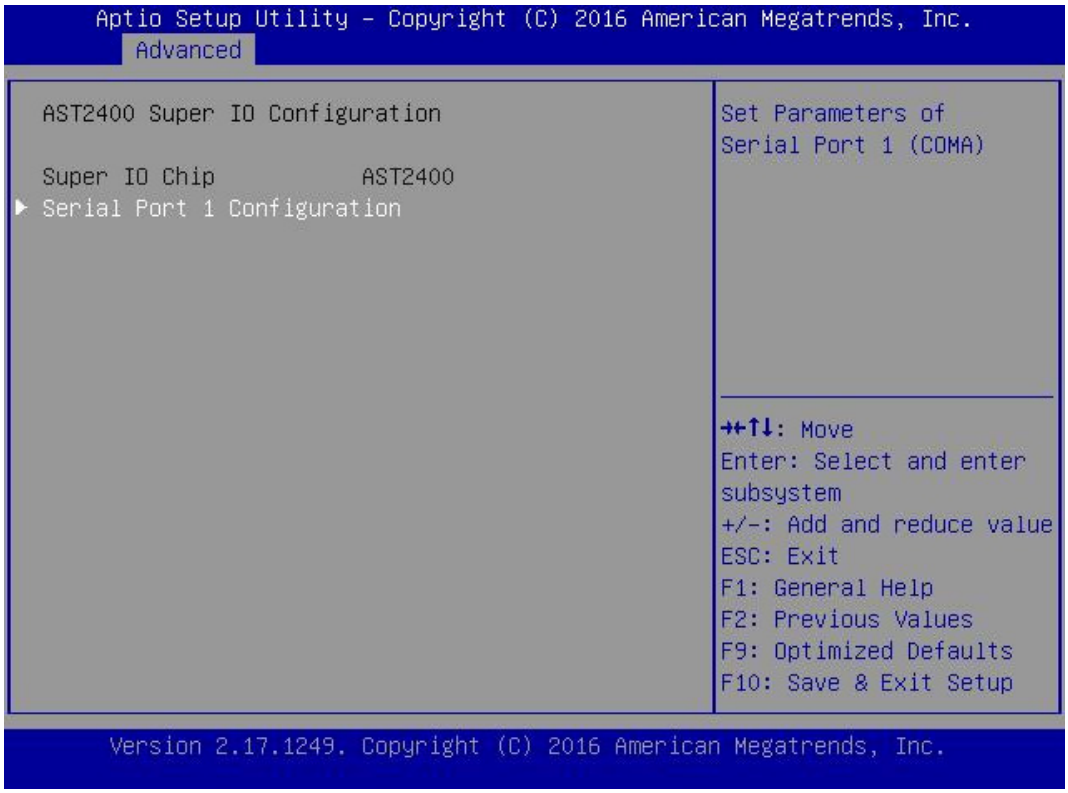
Item	Option	description
ACPI Settings		See the table below
AST2400 Super IO Configuration		See the table below
Serial Port Console Redirection		See the table below
PCI Subsystem Settings		See the table below
UEFI Network stack Configuration		See the table below
CSM Configuration		See the table below
USB Configuration		See the table below
Info Report Configuration		See the table below
iSCSI Configuration		See the table below

2.1 ACPI Settings



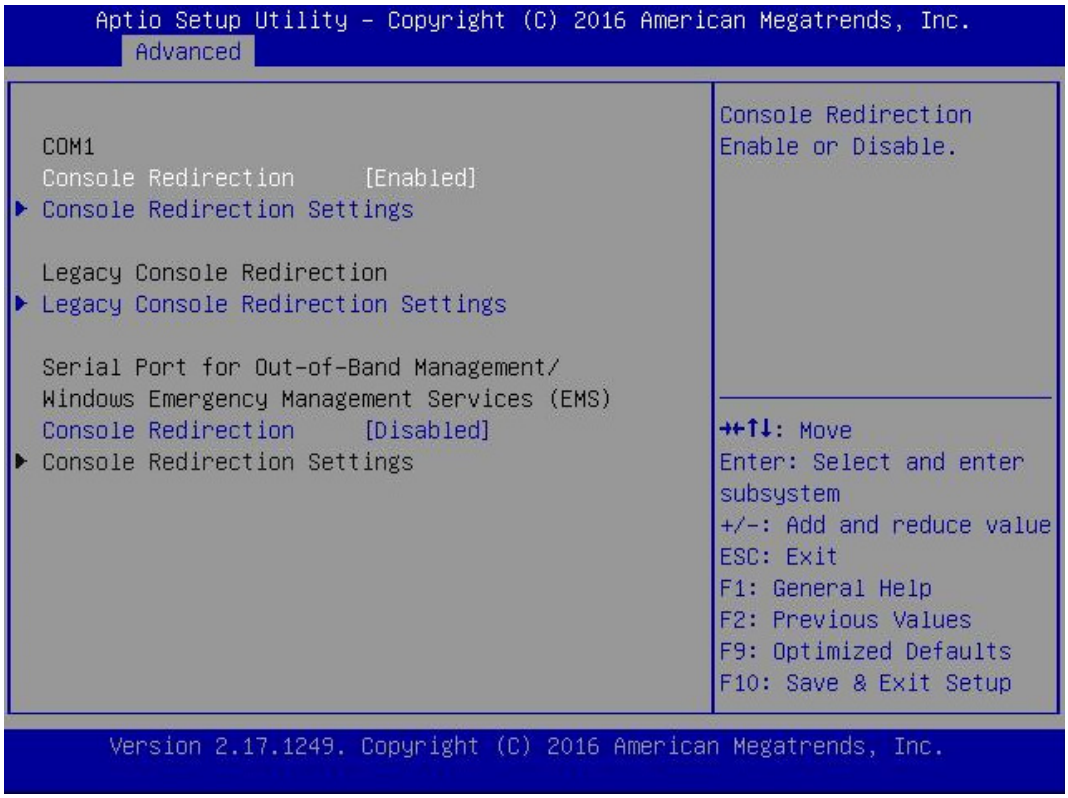
Item	Option	description
Enable ACPI Auto Configuration	[Disabled] Enabled	Enables or Disables BIOS ACPI Auto Configuration.
Lock Legacy Resources	[Disabled] Enabled	Enables or Disables Lock of Legacy Resources

2.2 AST2400 Super IO Configuration



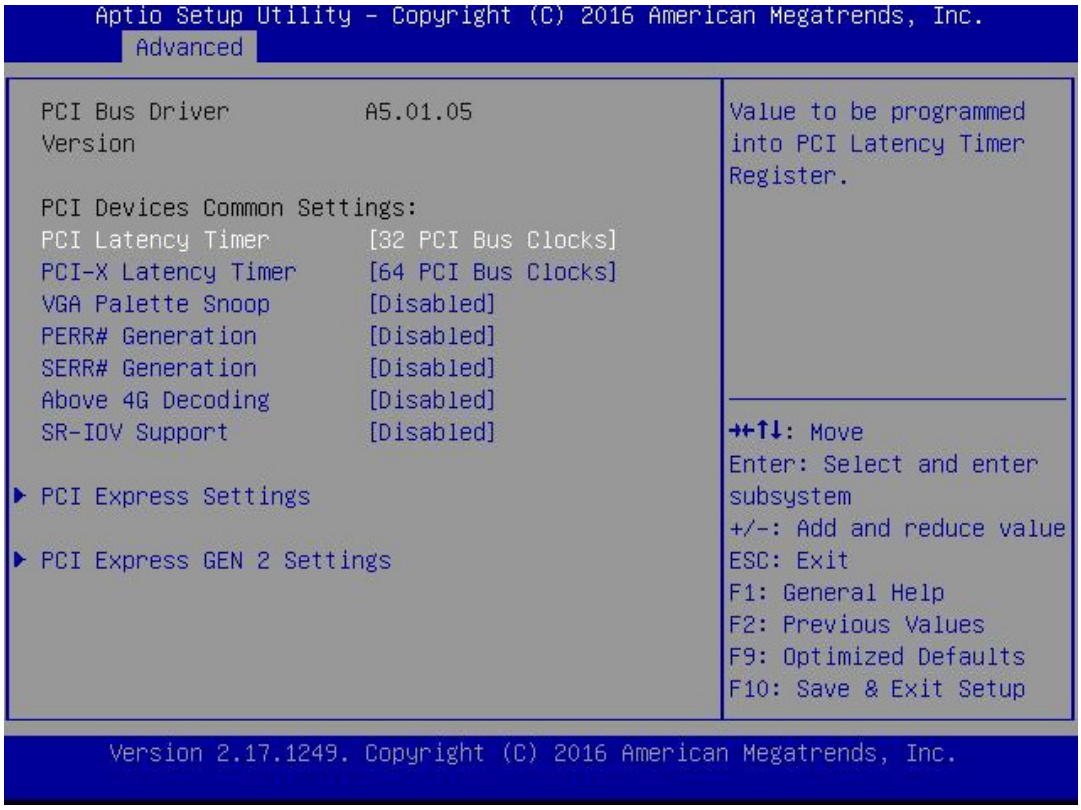
Item	Option	description
Serial Port 1 Configuration		Set Parameters of Serial Port 1 (COMA)

2.3 Serial Port Console Redirection



Item	Option	description
Console Redirection	Disabled [Enabled]	Console Redirection Enable or Disable.

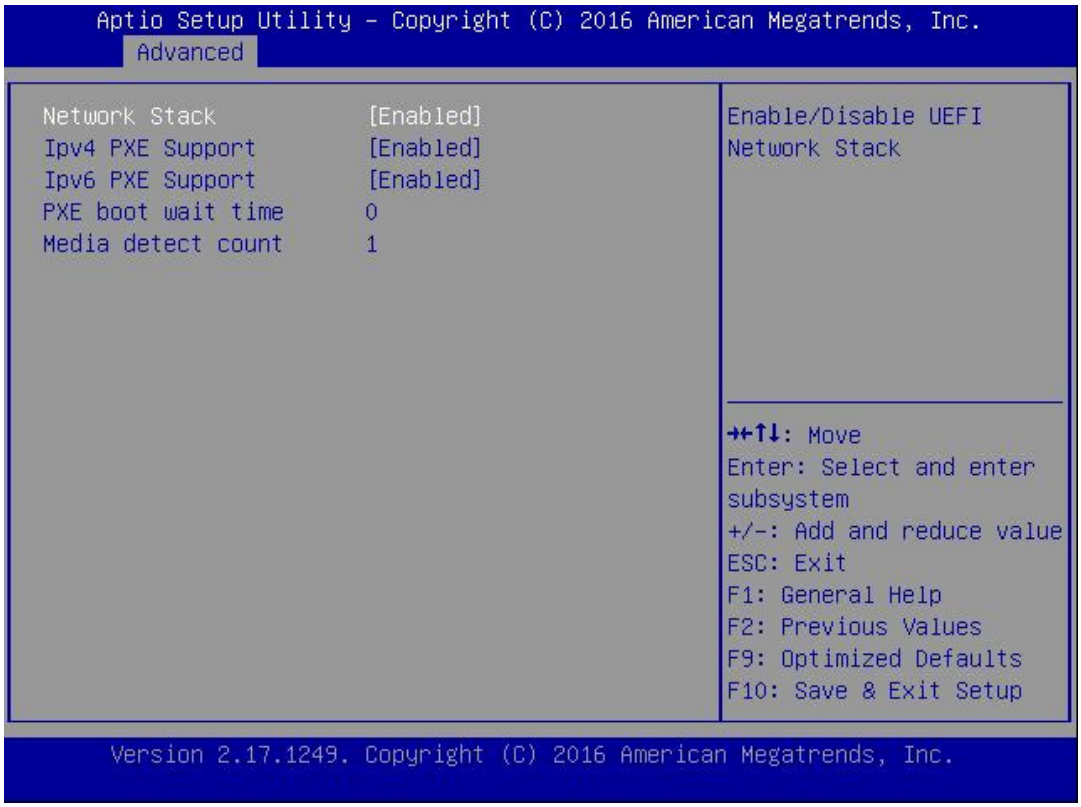
2.4 PCI Subsystem Settings



Item	Option	description
PCI Latency Timer	32 PCI Bus Clocks	Value to be programmed into PCI Latency Timer Register.
PCI-X Latency Timer	64 PCI Bus Clocks	Value to be programmed into PCI-X Latency Timer Register.
VGA Palette Snoop	[Disabled] Enabled	Enables or Disables VGA Palette Registers Snooping.
PERR# Generation	[Disabled] Enabled	Enables or Disables PCI Device to Generate PERR#.
SERR# Generation	[Disabled] Enabled	Enables or Disables PCI Device to Generate SERR#.

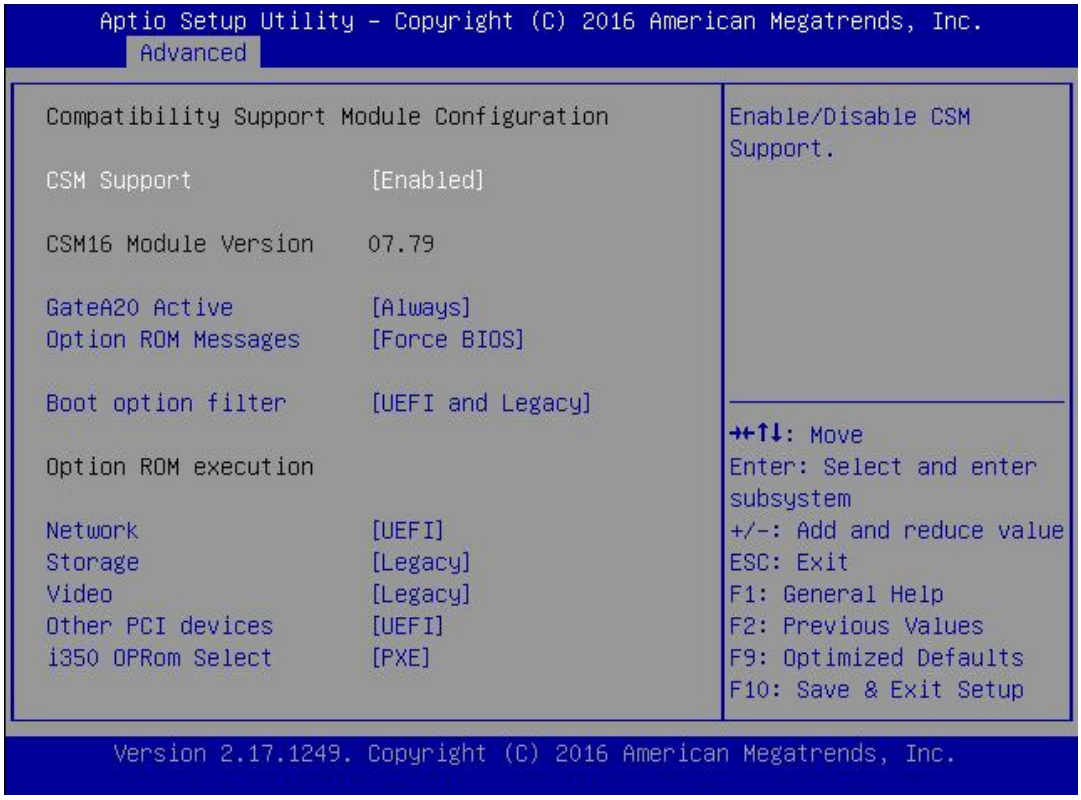
Above 4G Decoding	[Disabled] Enabled	Enables or Disables 64bit capable Devices to be Decoded in Above 4G Address Space (Only if System Supports 64 bit PCI Decoding).
SR-IOV Support	[Disabled] Enabled	Enable or disable the SR-IOV support

2.5 UEFI Network stack Configuration



Item	**Option**	**description**
Network Stack	Disabled [Enabled]	Enable/Disable UEFI Network Stack
Ipv4 PXE Support	Disabled [Enabled]	Enable Ipv4 PXE Boot Support. If disabled IPV4 PXE boot option will not be created
Ipv6 PXE Support	Disabled [Enabled]	Enable Ipv4 PXE Boot Support. If disabled IPV6 PXE boot option will not be created
PXE boot wait time	0	Wait time to press ESC key to abort the PXE boot
Media detect count	1	Number of times presence of media will be checked

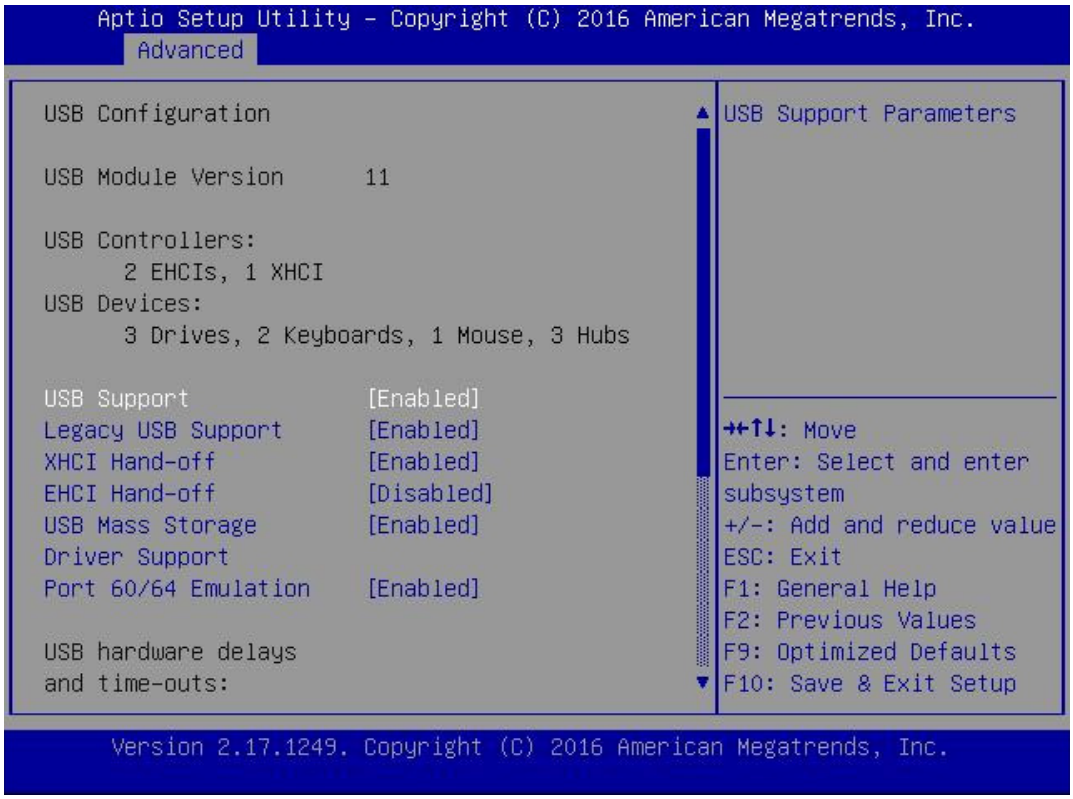
2.6 CSM Configuration



Item	**Option**	**description**
CSM Support	Disabled [Enabled]	Enable/Disable CSM Support.
GateA20 Active	Upon Request [Always]	UPON REQUEST - GA20 can be disabled using BIOS services. ALWAYS - do not allow disabling GA20; this option is useful when any RT code is executed above 1MB.
Option ROM Message	[Force BIOS] Keep Current	Set display mode for Option ROM
Boot option filter	[UEFI and Legacy] Legacy only UEFI only	This option controls Legacy/UEFI ROMs priority
Network	Do not launch [UEFI] Legacy	Controls the execution of UEFI and Legacy PXE OpROM
Storage	Do not launch UEFI [Legacy]	Controls the execution of UEFI and Legacy Storage OpROM

Video	Do not launch UEFI [Legacy]	Controls the execution of UEFI and Legacy Video OpROM
Other PCI device	[UEFI] Legacy	Determines OpROM execution policy for devices other than Network, Storage, or Video
I350 OPRom Select	[PXE] iSCSI	Determines i350 OPRom execution policy for PXE or iSCSI

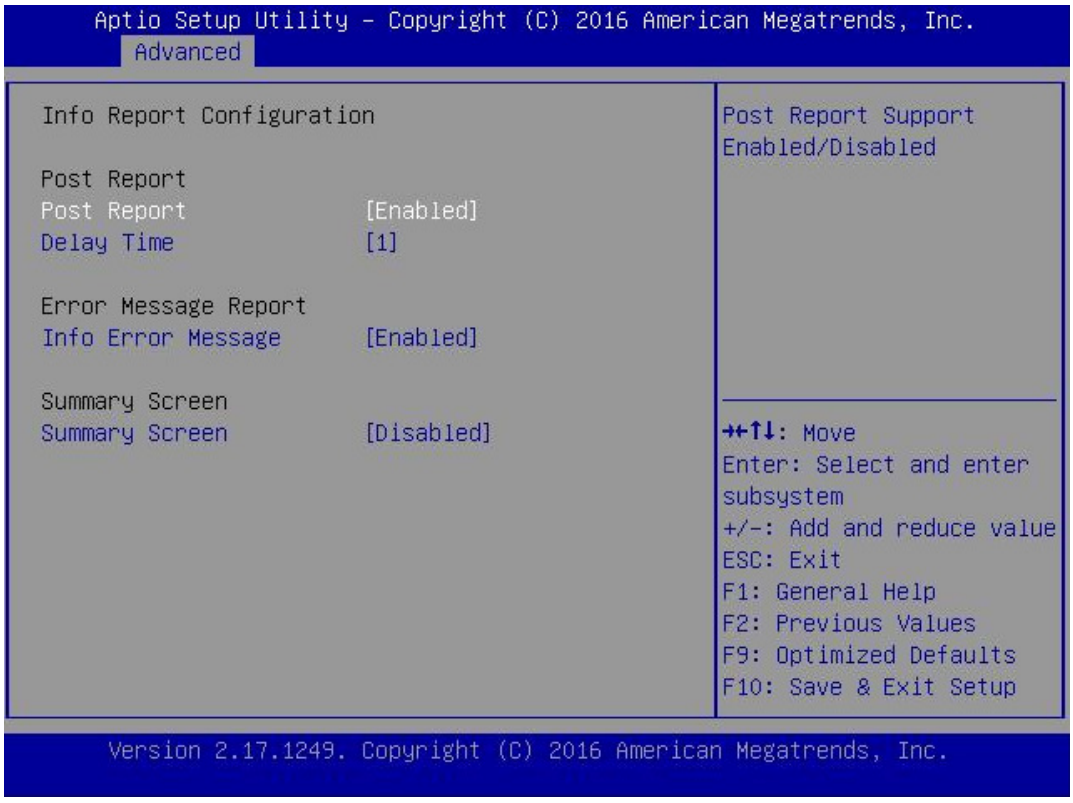
2.7 USB Configuration



Item	**Option**	**description**
USB Support	Disabled [Enabled]	USB Support Parameters
Legacy USB Support	Disabled [Enabled]	Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.

XHCI Hand-off	Disabled [Enabled]	This is a workaround for OSes without XHCI hand-off support. The XHCI ownership change should be claimed by XHCI driver.
EHCI Hand-off	[Disabled] Enabled	This is a workaround for OSes without EHCI hand-off support. The EHCI ownership change should be claimed by EHCI driver.
USB Mass Storage driver Support	Disabled [Enabled]	Enable/Disable USB Mass Storage Driver Support
Port 60/64 Emulation	Disabled [Enabled]	Enables I/O port 60h/64h emulation support. This should be enabled for the complete USB keyboard legacy support for non-USB aware OSes.

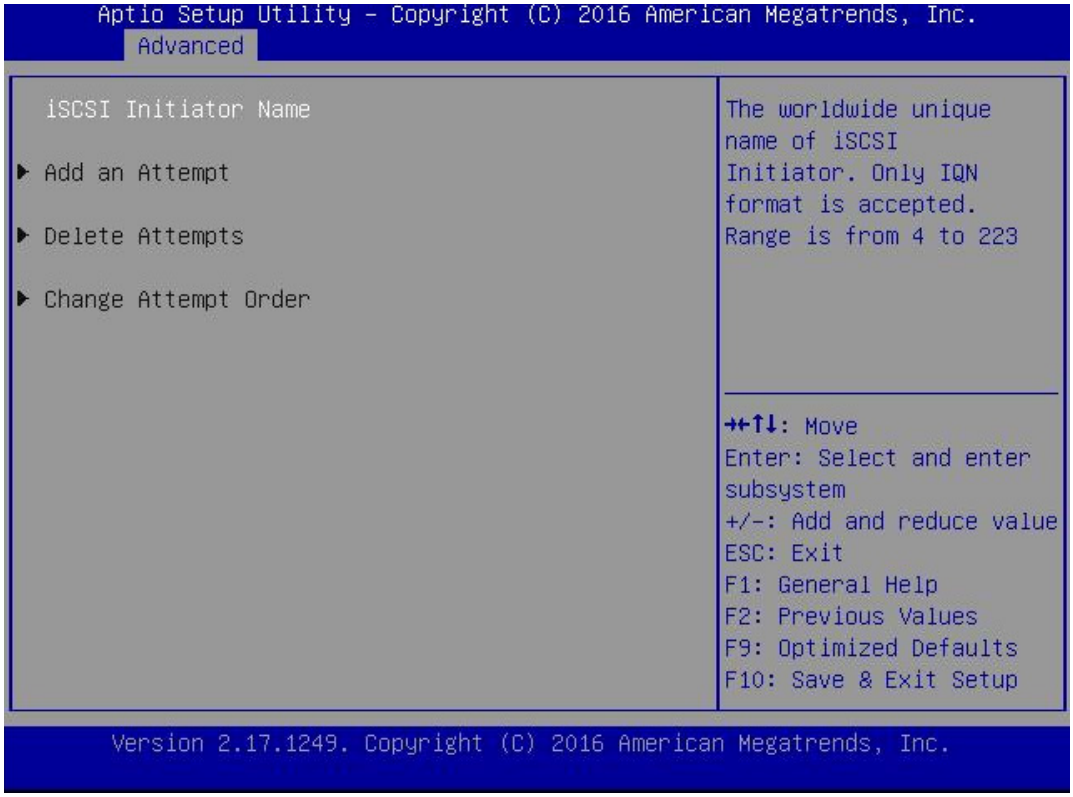
2.8 Info Report Configuration



Item	**Option**	**description**
Post Report	Disabled [Enabled]	Post Report Support Enabled/Disabled
Delay Time	1	Post Report Wait Time: 0 ~ 10 Seconds

Info Error Message	Disabled [Enabled]	Info Error Message Support Enabled/Disabled
Summary Screen	[Disabled] Enabled	Summary Screen Support Enabled/Disabled

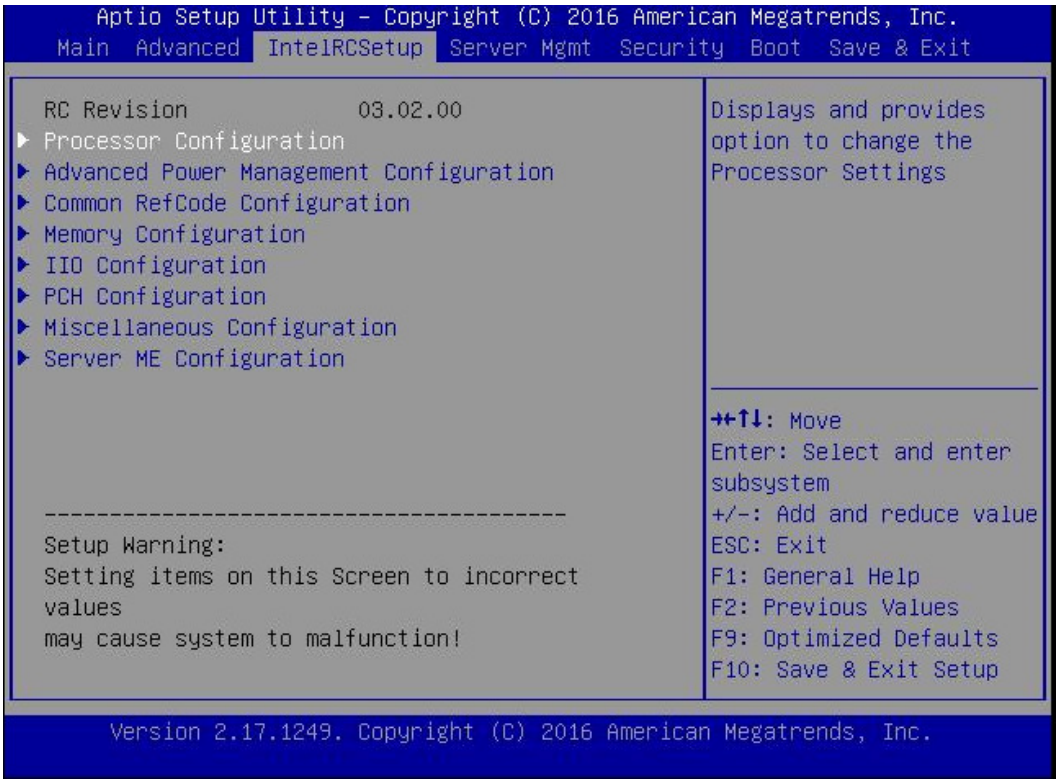
2.9 iSCSI Configuration



Item	**Option**	**description**
iSCSI Initiator Name		The worldwide unique name of iSCSI Initiator. Only IQN format is accepted. Range is from 4 to 223

3. IntelRCSetup

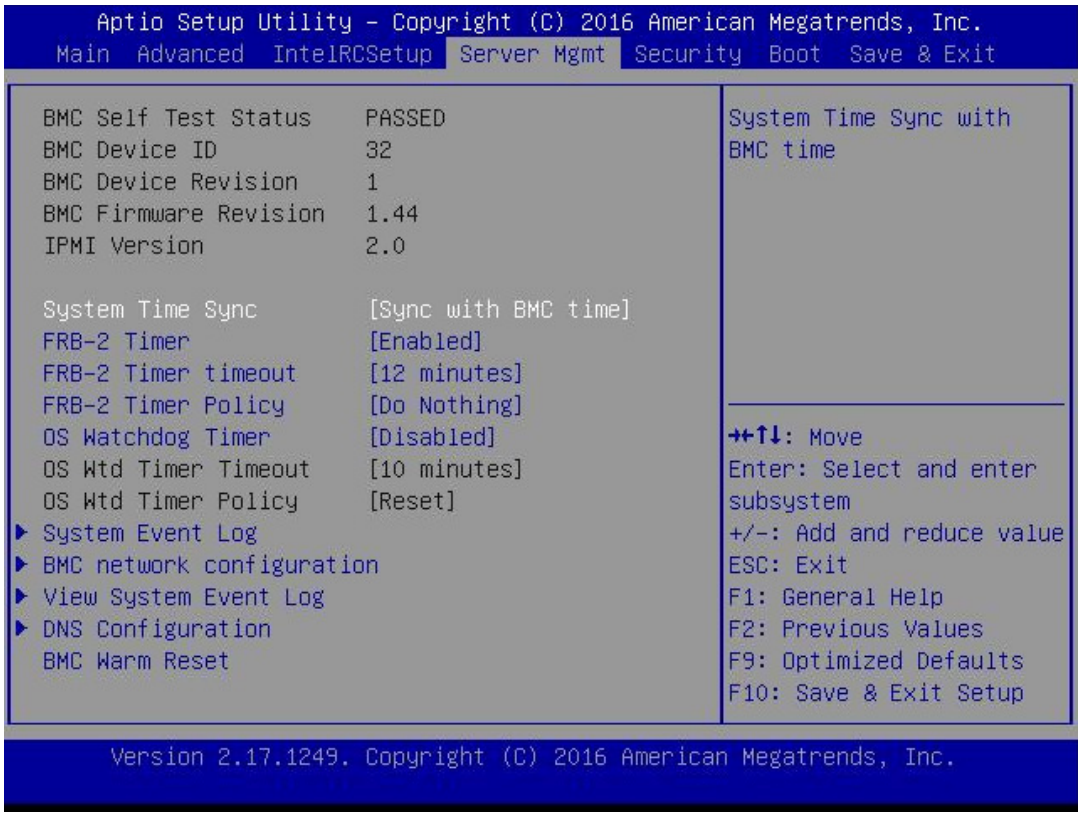
Setting items on this Screen to incorrect values may cause system to malfunction!



Item	Option	description
Processor Configuration		Displays and provides option to change the Processor Settings
Advanced Power Management Configuration		Displays and provides option to change the Power Management Settings
Common RefCode Configuration		Displays and provides option to change the Common RefCode Settings
Memory Configuration		Displays and provides option to change the Memory Settings
IIO Configuration		Displays and provides option to change the IIO Settings
PCH Configuration		Displays and provides option to change the PCH Settings
Miscellaneous Configuration		

Server ME configuration		Configure Server ME Technology Parameters

4. Server Mgmt



Item	**Option**	**description**
System Time Sync	[Sync with BMC time] Sync with BIOS time No sync	System Time Sync with BMC time or RTC time.
FRB-2 Timer	Disabled [Enabled]	Enable or Disable FRB-2 timer(POST timer)

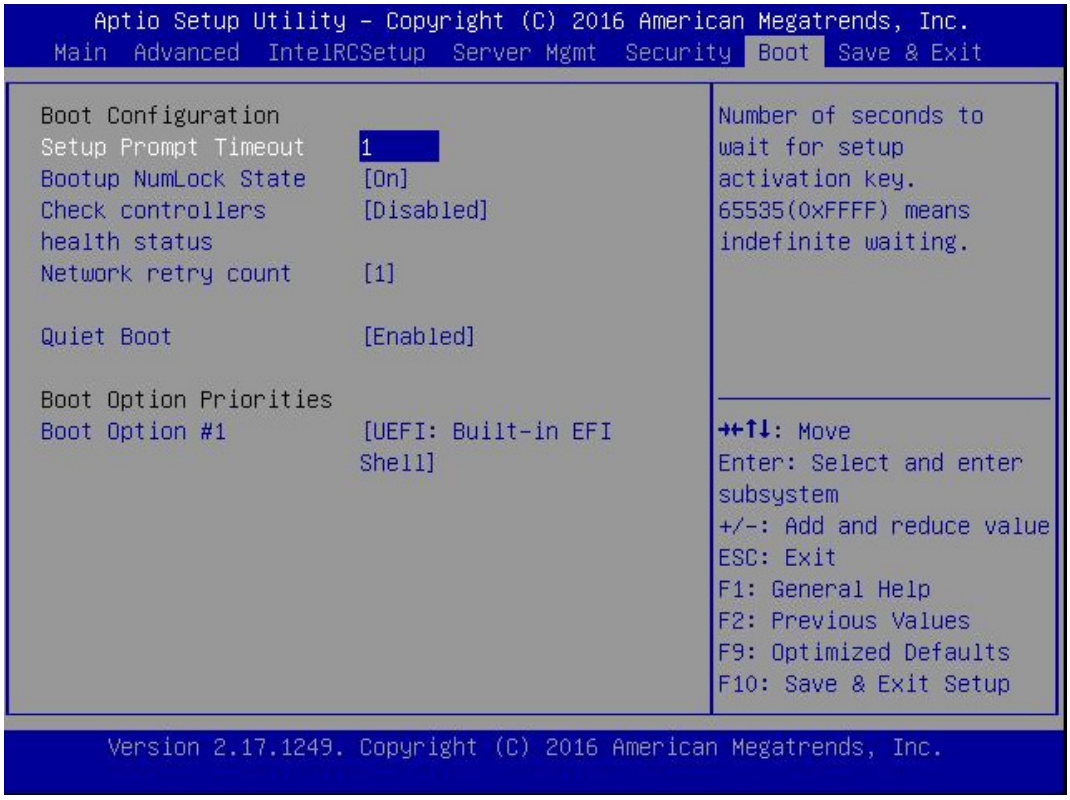
FRB-2 Timer timeout	3 MINUTES 4 MINUTES 5 MINUTES 6 MINUTES [12 MINUTES]	Enter value Between 3 to 12 min for FRB-2 Timer Expiration value
FRB-2 Timer Policy	[Do Nothing] Reset Power Down Power Cycle	Configure how the system should respond if the FRB-2 Timer expires. Not available if FRB-2 Timer is disabled.
OS Watchdog Timer	[Disabled] Enabled	If enabled, starts a BIOS timer which can only be shut off by Management Software after the OS loads. Helps determine that the OS successfully loaded or follows the OS Boot Watchdog Timer policy.
System Event Log		Press <Enter> to change the SEL event log configuration.
BMC Network Configuration		Configure BMC network parameters
DNS configuration		Configure DNS Configuration
BMC Warm Reset		Press <Enter> to do Warm Reset BMC.

Note: When user sets bonding mode enabled with BMC web interface, UEFI cannot get a shared NIC IP address, UEFI only can get the dedicated IP address.

5. Security

Item	Option	description
Administrator Password		Set Administrator Password
User Password		Set User Password

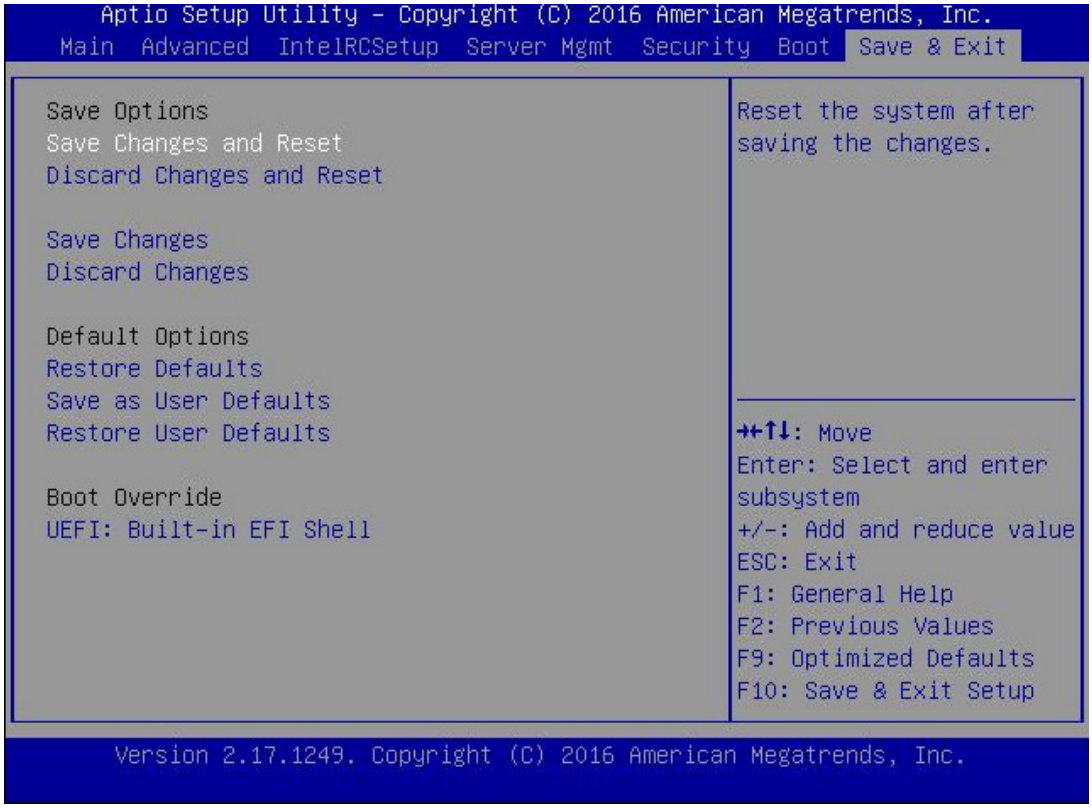
6. Boot



Item	Option	description
Setup Prompt Timeout	1	Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
Bootup NumLock State	[On] Off	Select the keyboard NumLock state
Check Controllers health status	[Disabled] Enabled	Enables or disables checking of health status of hardware components
Network retry count	[1] 2 3 Always	Number of times try of all PXE devices

	Disabled	
Quiet Boot	Disabled [Enabled]	Enables or disables Quiet Boot option

7. Save & Exit



Item	**Option**	**description**
Save Changes and Reset		Reset the system after saving the changes.
Discard Changes and Reset		Reset system setup without saving any changes.
Save Changes		Save Changes done so far to any of the setup options.
Discard Changes		Discard Changes done so far to any of the setup options.

Restore Defaults		Restore/Load Default values for all the setup options.
Save as User Defaults		Save the changes done so far as User Defaults.
Restore User Defaults		Restore the User Defaults to all the setup options.

3. Recovery BIOS Function

The BIOS support the boot block to re-flash the main BIOS image when the BIOS is be corrupted and cannot boot to the EFI Shell or operating system to perform a standard update.

Recovery BIOS Step:
Step1. Insert the USB Key (This USB key need include the Recovery ROM file (AMIBOOT.ROM) in).
Step2. Power on the server and wait system into recovery mode in setup menu.
Step3. Select “Proceed with flash update” and Enter to start flash update.