

Handbuch

GRAFENTHAL

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Dear users of GRAFENTHAL server:

Sincerely thank you for selection of GRAFENTHAL server!

This manual introduces the technical characteristics and the system installation and setup of the server, and helps you to particularly understand and expediently use this server. Please deliver the package of our product to the waste recycling station for recycling, in favor of pollution prevent and benefit the humankind.

Please contact GRAFENTHAL Gmbh, if you have any questions or advice about this manual.

GRAFENTHAL GmbH. Februar 2016

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Copyright Introduction

Document version: V1.0 Date: 12th Juli 2016

Document Introduction: The 1st formal issuance.

Abstract

The manual introduces issues closely related to maintenance such as specification, hardware operation, software configuration, service terms, fault diagnosis etc. of the server.

Readers of this guide will be deemed to have abundant knowledge about the server product, and will not cause any personal injury or product damage during operation and maintenance, for sufficient trainings received by them.

Target Audience

This manual mainly adapts to the following personnel:

- Technical support engineers
- Product maintenance engineers

It is suggested that server maintenance operation shall be carried out by professional engineers with related server knowledge via referring to this manual.



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1. Safety Introduction

Warning: the following warnings show that there are potential dangers that may cause

property loss, personal injury or death:

- The power supply equipment in the system may generate high voltage and dangerous electrical energy and thus cause personal injury. Please do not dismount the cover of the host or to dismount and replace any component in the system by yourself, unless otherwise informed by the distributor; only maintenance technicians trained by the distributor have the right to disassemble the cover of the host, dismount and replace the internal components.
- Please connect the equipment to appropriate power supply, and the power should be supplied by external power supply which is indicated on the rated input label. To prevent your equipment from damages caused by momentary spike or plunge of the voltage, please use relevant voltage stabilizing equipment or uninterruptible power supply equipment.
- If extended cables are needed, please use the three-core cables matched with correct earthed plug, and check the ratings of the extended cables to make sure that the sum of rated current of all products inserted into the extended cables do not exceed 80% of the limits of the rated currents of the extended cables.
- Please be sure to use the supplied power supply component, such as power lines, power socket (if supplied with the equipment) etc. For the safety of equipment and the user, do not replace randomly power cables or plugs.
- To prevent electric shock dangers caused by leakage in the system, please make sure that the power cables of the system and peripheral equipment are correctly connected to the earthed power socket. Please connect the three-core power line plug to the three- core AC power socket that is well earthed and easy to access, be sure to use the earthing pin of power lines and do not use the patch plug or the earthing pin unplugged with cables. In case of the earthing protections, please do not operate or use the equipment. Contact and consult with the electrician.
- To avoid short circuit of internal components and fire or electric shock hazards, please do not fill any object into the open pores of the system.
- Please place the system far away from the cooling plate and at the place with heat sources, and be sure not to block the air vents.
- Be sure not to scatter food or liquid in the system or on other components, and do not use the product in humid and dusty environment.
- The replacement of batteries with those of another model may cause explosion. When replacement of batteries is required, please consult first the manufacturer and choose batteries of the same or a similar model recommended by the manufacturer. Do not dismount, extrude and pink the batteries or make the external connection point short circuit, and do not expose them in the environment over 60°C. Never throw them into fire or water. Please do not try to open or repair the batteries, and be sure to reasonably deal with the flat batteries and do not put the fl at batteries, the circuit boards that may include the batteries and other components with other wastes. For relevant battery recovery, please contact the local waste recovery and treatment mechanism.



- Before installing equipment in the chassis, please install front and side supporting feet on the independent chassis; for cabinet connecting with other chassis, it shall install the front supporting foot first. If you fail to install correspondingly the supporting foot before installing equipment in the chassis, it may cause the cabinet to turn over in some cases, and thus may cause personal injury. Therefore, it is necessary to install supporting feet before installing equipment in the chassis. After installing the equipment and other components in the chassis, it can only pull out one component from the cabinet through its sliding component at one time. Pulling out several components at the same time may lead the cabinet to turn over and cause serious personal injury.
- Please do not move the chassis independently. Considering the height and weight of the chassis, at least two people are needed to complete its movement.
- Please do not carry out direct contact operation on power copper busbar when the cabinet is powered on, and it is prohibited to carry out direct short circuit of power copper busbar.
- The product is Grade A product, and in the living environment, it may cause radio interference. In such case, it may need the user to take feasible measures for the interference.

 \triangle Note: In order to help you use the equipment, the following considerations can help avoid the occurrence of problems that may damage the components or cause data loss etc.

- In case of the following cases, please unplug the power line plug of products from the power socket and contact customer service department of the distributor:
- The power cables, extended cables or power plugs are damaged.
- The products get wet by water.
- The products have fallen off or been damaged.
- Objects fall into the products.
- When operating according to the operation instructions, the products cannot function normally.
- If the system becomes damp, please dispose according to the following steps:
- Switch off the power supplies of the system and the equipment, disconnect them with the power socket, wait for 10 to 20 minutes, and then open the cover of the host.
- Move the equipment to the ventilation place to dry the system at least for 24 hours and make sure that the system is fully dried.
- Close the cover of the host, re-connect the system to the power socket, and then start the equipment.
- In case of operation failure or abnormal situation, please contact the distributor and get technical support.
- Pay attention to the position of the system cables and power cables, wire them in places not to be stepped on or knocked down and ensure not to place other objectives on the cables.
- Before dismounting the cover of host or contacting the internal components, you shall cool down the equipment first; to avoid damaging the main-board, please power off



the system and wait for 5 seconds, and then dismount the components from the mainboard or disconnect the connection of peripheral equipment of the system.

- If there are modulator-demodulator, telecommunication or local area network options in the equipment, please pay attention to the following matters:
- In case of thunder and lightning weather, please do not connect or use the modulatordemodulator. Otherwise, it may be subject to lightning strike.
- Never connect or use modulator-demodulator in moist environment.
- Never insert the modulator-demodulator or telephone cables to the socket of network interface controller (NIC).
- Before unpacking the product package, contacting or installing internal components
- or contacting un-insulated cables or jacks of the modulator-demodulator, please disconnect the modulator-demodulator cables.
- In order to prevent the electrostatic discharge from damaging the electronic components in the equipment, please pay attention to the following matters:
- You shall conduct off the static electricity on the body before dismounting or contacting any electronic component in the equipment. You can conduct off the static electricity on the body by contacting the metal earthing objects (such as the unpainted metal surface on the chassis) to prevent the static electricity on the body from conducting itself to the sensitive components.
- For electrostatic sensitive components not ready to be installed for application, please do not take them out from the antistatic package materials.
- During the work, please touch the earthing conductor or the unpainted metal surface on the cabinet regularly to conduct off the static electricity on the body that may damage the internal components.
- When dismounting the internal components with the approval of distributor, please pay attention to the following matters:
- Switch off the system power supply and disconnect the cables, including disconnecting any connection of the system. When disconnecting the cables, please grab the connector of cables and plug it out, and never pull the cables.
- Before dismounting the cover of cabinet or touching the internal components, the products need to be cooled down.
- Before dismounting and touching any electronic component in the equipment, you shall conduct off the static electricity on the body by touching the metal earthingobjectives.
- During the dismounting process, the operation shall not be too big, so as to prevent damage to the components or scratching of the arms.
- Carefully deal with the components and plug-in cards, and please never touch, the components or connection points on the plug-in cards. When taking the plug-in cards or components, you should grab the edges of the plug-in cards or components or their metal fixed supports.
- During the process of cabinet installation and application, please pay attention to the following matters:
- After the installation of cabinet is finished, please ensure that the supporting feet have been fixed to the rack and supported to the ground, and all weight of the rack have been fell onto the ground.
- It shall install into the cabinet according to the sequences from the bottom to the top,



and first install the heaviest component.

- When pulling out the components from the cabinet, it shall apply force slightly to ensure the cabinet to keep balance and stabilization.
- When pressing down the release latch of the sliding rail of components and sliding in or out, please be careful, as the sliding rail may hurt your figures.
- Never make the AC power branch circuit in the cabinet overload. The sum of cabinet load shall not exceed 80% of the ratings of branch circuits.
- Ensure that components in the cabinet have good ventilation.
- When repairing components in the cabinet, never step on any other components.

2. Product Specification Introduction

2.1 Introduction

Uncompromising server performance in desktop format up to 64 GB DDR4 ECC memory and die power of the latest Intel[®] Xeon[®] E3-1200 processor family allow v5 An Outstanding performance and efficiency. Only high-quality server components worry for reliable continuous operation of the systems. The Grafen Compact Server T1004 S2 is yourself Unrestricted Even for demanding server applications. Innovative NVMe SSD technology Grafenthal Where one with the T1004 series S2 first optional M.2 NVMe SSD. The unrivaled M.2 NVMe SSD technology speeds up the system for database applications and other applications are required in To those fast read / write values. In benchmark tests the T1004 S2 scored

Server with NVMe SSD option readings of 2.200MB / s and write performance of 939MB / s.

Intelligent Mobile Backup Option

With Integrated Intel[®] Server Chipset C236 Supports System ALREADY in standard RAID 0, 1, 5 and 10 to protect your data at up to 7 SATA HDD or SSD. The optional module BTD (Backup to Disk) Will pulled with one capacity of 2 TB Can Hot-swap function TAGLICH from the server for more than external storage of your sensitive data. More storage Exigences Meets Gräfen with optional hardware RAID controllers and SAS hard drives SSD Respectively.

remote management

Ideal for branch offices or remote sites. The Grafenthal Compact Server has ONE ASPEED AST 2400 remote management processor of the Fourth Generation and a separate IPMI GLAN interface. With these interface the system will easily administered remotely.





2.2 Features and Specification

Chassis type Processor family Motherboard chipset System Memory HDD/SSD internal (installed /max.) HDD/SSD Hot-Swap (installed /max.) SFF Tower / Desktop Intel[®] Xeon[®] E3-1200 v5 Series Processors Intel[®] C236 4 x DDR4 DIMM slots, Dual Channel DDR4 max. 64 GB DDR4 2133/1866 ECC und U DIMM 0 / 2 (3,5" SATA / SAS*) 0 / 1 M.2 NVMe SSD 0 / 4 (2,5" SATA / SAS*) plus 1 x Hot-Swap Backup to Disk Option * in case of using SAS Drives a controller is needed



RAID level	Intel [®] Software Raid 0, 1, 5 und 10
	(Hardware Raid Controller possible)
LAN	2 x Gigabit Ethernet
Backup	optional per 2TB Hot-Swap Backup to Disk Modul
Dimensions	B 9,6 cm x H 33 cm x D 36,5 cm
Power	Single 300W Gold
Remote-Management	1 x RJ45 dedicated management
	Gigabit Ethernet ASPEED AST2400 IPMI
Warranty	3 Years Bring-In
Ports & interfaces	2 x RJ45 GIGABIT LAN Intel® i210
	1 x RJ45 Dedicated IPMI LAN Port
	6 x USB 3.0 (4 back / 2 front)
	2 x USB 2.0 front
	1x USB 3.0 onboard (bootfähig)
	4 x PCI 3.0 Slots (1 PCI Slot shared with M.2 Port)
	1 x VGA D-SUB
	1 x Serial Port
	2 x Audio Ports (Inaktiv, Audio Karte erforderlich)

3.1 Front Panel

2.3.1 Indicators on Hard Disk Bracket





3.2 Rear Panel

LAN RJ-45 Port (IPMI_LAN)*

USB 3.0 Ports (USB3_1_2)

1.6 I/O Panel

3

4



- 7 LAN RJ-45 Port (LAN2)**
- 8 UID Switch (UID1)



3.3 Mainboard Layout





-			
Des	crip	tio	n
			•••

1	ME Recovery Jumper (ME_RECOVERY1)
2	PMBUS Mode Jumper (PMBUS SEL CLK1)
3	PMBUS Mode Jumper (PMBUS_SEL_DAT1)
4	PMBUS Mode Jumper (PMBUS SEL ALT1)
5	ATX 12V Power Connector (ATX12V1)
6	2 x 288-pin DDR4 DIMM Slots (DDR4 A1, DDR4 B1, White)
7	PSU SMBus (PSU SMB1)
8	ATX Power Connector (ATXPWR1)
9	2 x 288-pin DDR4 DIMM Slots (DDR4_A2, DDR4_B2, Blue)
10	CPU Fan Connector (CPU_FAN1)
11	Front Fan Connector (FRNT_FAN1)
12	Front Fan Connector (FRNT FAN2)
13	SATA SGPIO Connector (SATA_SGPIO1)
14	SATA SGPIO Connector (SATA_SGPIO2)
15	SATA3 DOM Connector (SATA_0), Red
16	SATA3 Connector (SATA_1)
17	SATA DOM Power Jumper (SATAPWR1)
18	USB 3.0 Header (USB3_5_6)
19	SATA DOM Power Header (SATA_PWR1)
20	SATA3 Connector (SATA_2)
21	SATA3 Connector (SATA_3)
22	SATA3 Connector (SATA _4)
23	SATA3 Connector (SATA_5)
24	SATA3 Connector (SATA_6)
25	SATA3 Connector (SATA_7)
26	System Panel Header (PANEL1)
27	Auxiliary Panel Header (AUX_PANEL1)
28	Non Maskable Interrupt Button (NMI_BTN1)
29	Intelligent Platform Management Bus Header (IPMB1)
30	BMC SMBus Header (BMC_SMB1)
31	Speaker Header (SPEAKER1)
32	Vertical Type A USB 3.0 (USB3_7)
33	USB 2.0 Header (USB_1_2)
34	Chassis ID1 Jumper (CHASSIS_ID1)
35	Chassis ID2 Jumper (CHASSIS_ID2)
36	PCI Express Graphics Configuration Jumper (PEG_CFG1)
37	Front Fan Connector (FRNT_FAN3)
38	TPM Header (TPM1)
39	Thermal Sensor Header (TR1)
40	PCIe Power Connector (PCIE_PWR1)
41	CPU PECI Mode Jumper (PECI1)
42	Rear Fan Connector (REAR_FAN2)
43	Rear Fan Connector (REAR FAN1)



3.4 Mainboard Jumper Introduction

2.7 Jumper Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on the pins, the jumper is "Short". If no jumper cap is placed on the pins, the jumper is "Open". The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.

Sho	ort Open	
ME Recovery Jumper (3-pin ME_RECOVERY1) (see p.7 or p.10, No. 1)	1_2 Normal Mode (Default)	2_3 O • • ME Recovery Mode
CPU PECI Mode Jumper (3-pin PECI1) (see p.7, No. 41 or p.10, No. 39)	1_2 •••• CPU PECI connect to PCH	2_3 O • • CPU PECI connect to BMC (Default)
PMBUS Mode Jumper (3-pin PMBUS_SEL_ALT1) (see p.7 or p.10, No. 4) (3-pin PMBUS_SEL_DAT1) (see p.7 or p.10, No. 3) (3-pin PMBUS_SEL_CLK1) (see p.7 or p.10, No. 2)	1_2 ● ● ● ○ PMBus connected to BMC (Default)	2_3



3. BIOS Configuration

This chapter introduces BIOS function setup and mainboard jumper of the server. All operations described in this section are only limited to operators or administrators with system maintenance qualification.

BIOS is a basic input and output system. The system parameter and the hard drive parameter can be adjusted through special set program. BIOS has great influence on the system start and running so that setting parameters improperly may arose the conflict among the hardware resource, or fall down the system run performance. Hence understanding the BIOS setup is significant to the configuration of your server. If no especial requirement, you are suggested to use the default value and not alter the parameters optionally.

Note:

- 1. Before the server BIOS setup is altered, please record the corresponding original setup. Hence when there are operating problems in the system due to the option altered, the setup can revert.
- 2. Ordinarily the factory default system value is the optimized setup. Don't try to alter the parameters before you understand their denotations.
- 3. The common setup is introduced in detail in this paper. The less referred options in the application procedure are simply explained or not.
- 4. The content of the BIOS is diverse based on the different configurations of _______the products; hence the detailed introduction is elided.

3.5 System BIOS Configuration Methods

Power on the server, system starts to boot, when the following content appears below the distributor logo on the screen:

"Press to SETUP or <TAB> to POST or <F12> to PXE Boot.", press [DEL] button, when "Entering Setup..." appears on bottom right on the screen, it will enter system BIOS configuration later, and you could select options using arrow buttons on BIOS main menu to enter sub-menu.

Note: Options in grey are not available. Options with symbol " ", have a sub-menu.

3.6 Chapter 3 UEFI Setup Utility

3.6.1 Introduction

This section explains how to use the UEFI

SETUP UTILITY to confi gure your system. The UEFI chip on the motherboard stores the UEFI SETUP UTILITY. You may run the UEFI SETUP UTILITY when you start up the computer. Please press <F2> or during the Power-On-Self-Test (POST) to enter the UEFI SETUP UTILITY otherwise, POST will continue with its test routines. If you wish to enter the UEFI SETUP UTILITY after POST, restart the system by pressing <Ctrl> + <Alt> + <Delete>, or by pressing the reset button on the system chassis. You may also restart by turning the system off and then back on.

3.6.2 UEFI Menu Bar

The top of the screen has a menu bar with the following selections:

Item	Description
Main	To set up the system time/date information
Advanced	To set up the advanced UEFI features
Boot	To set up the default system device to locate and load the
	Operating System
Security	To set up the security features
Event Logs	For event log confi guration
Server Mgmt	To manage the server
Exit	To exit the current screen or the UEFI SETUP UTILITY

Use < > key or < > key to choose among the selections on the menu bar, and then press <Enter> to get into the sub screen.

3.6.3 Navigation Keys

Navigation Key(s)	Function Description
← / →	Moves cursor left or right to select Screens
↑ / ↓	Moves cursor up or down to select items
+ / -	To change option for the selected items
<tab></tab>	Switch to next function
<enter></enter>	To bring up the selected screen
<pgup></pgup>	Go to the previous page
<pgdn></pgdn>	Go to the next page
<home></home>	Go to the top of the screen
<end></end>	Go to the bottom of the screen
<f1></f1>	To display the General Help Screen
<f7></f7>	Discard changes and exit the UEFI SETUP UTILITY
<f9></f9>	Load optimal default values for all the settings
<f10></f10>	Save changes and exit the UEFI SETUP UTILITY
<f12></f12>	Print screen
<esc></esc>	Jump to the Exit Screen or exit the current screen

3.7 Main Screen

Once you enter the UEFI SETUP UTILITY, the Main screen will appear and display the system overview. The Main screen provides system overview information and allows you to set the system time and date.

```
Aptio Setup Utility - Copyright (C) 2015 American Megatrends, Inc.
Main Advanced
UEFI Version
                : E3C236D4U L0.72
                                                                Set the Date. Use Tab to
BMC Version
                : 7.5.0
                                                                switch between Date elements.
Processor Type : Intel(R) Xeon(R) CPU E3-1270 v5 @ 3.60GHz
Processor Speed : 3600MHz
Microcode Update : 506E3/2D
Cache Size : 8MB
Total Memory : 8GB, Single-Channel Memory Mode
DDR4_A1 : 8GB (DDR4-2133)
DDR4_A2 : None
DDR4_B1 : None
DDR4_B2 : None
                                                                ++: Select Screen
                                                                tl: Select Item
                                                                Enter: Select
                                     [Mon 10/14/2097]
                                                                +/-: Change Option
System Time
                                     [06:23:17]
                                                                F1: General Help
                                                               F7: Discard Changes
                                                               F9: Load UEFI Defaults
                                                               F10: Save and Exit
                                                               ESC: Exit
               Version 2.17.1254. Copyright (C) 2015 American Megatrends.
```

3.8 Advanced Screen

In this section, you may set the configurations for the following items: CPU Configuration, Memory Configuration, Chipset Configuration, Storage Configuration, NVMe Configuration, ACPI Configuration, USB Configuration, WHEA Configuration, Intel Server Platform Services, Super IO Configuration, Serial Port Console Redirection, H/W Monitor, Trusted Computing, Intel TXT Information and Instant Flash.

Aptio Setup Utility – Copyright (C) 2015 American Main Advanced Boot Security Event Logs Server Mgmt Exit	Megatrends, Inc.
CPU Configuration Memory Configuration Chipset Configuration Storage Configuration NVMe Configuration ACPI Configuration USB Configuration USB Configuration Intel Server Platform Services Super IO Configuration Serial Port Console Redirection H/W Monitor Trusted Computing Intel TXT Information UEFI Update Utility Instant Flash	CPU Configuration Parameters ↔: Select Screen 14: Select Item Enter: Select +/-: Change Option F1: General Help F7: Discard Changes F9: Load UEFI Defaults F10: Save and Exit ESC: Exit
Vancion 2 17 1254 Conunight (C) 2015 American Ma	

3.9 CPU Configuration

Advanced		
Intel(R) Xeon(R) CPU E3-1270 v5 @	3.60GHz	Spread Spectrum
Microcode Revision	2E	percentage.AUTO - Keep hw
Max CPU Speed	3600 MHz	default, no BIOS override.
Min CPU Speed	800 MHz	Range is 0.0%-2.0%.
Processor Cores	4	
Hyper Threading Technology	Supported	
Intel VT-x Technology	Supported	
Intel SMX Technology	Supported	
Intel Hyper Threading Technology	[Enabled]	
Active Processor Cores	[A11]	
CPU C States Support	[Enabled]	
Enhanced Halt State(C1E)	[Enabled]	++: Select Screen
Package C State Support	[Auto]	11: Select Item
		Enter: Select
No-Execute Memory Protection	[Enabled]	+/-: Change Option
Intel Virtualization Technology	[Enabled]	F1: General Help
Hardware Prefetcher	[Enabled]	F7: Discard Changes
Adjacent Cache Line Prefetch	[Enabled]	F9: Load UEFI Defaults
CPU AES	[Enabled]	F10: Save and Exit
Intel SpeedStep Technology	[Enabled]	ESC: Exit
Intel Turbo Boost Technology	[Enabled]	
Energy Performance Gain	[Disabled]	
	[Disabled]	¥

Spread Spectrum

Use this to enable and disable Spread Spectrum.

Intel Hyper Threading Technology

Intel Hyper Threading Technology allows multiple threads to run on each core, so that the overall performance on threaded software is improved.

Active Processor Cores

Select the number of cores to enable in each processor package.

CPU C States Support

Enable CPU C States Support for power saving. It is recommended to keep C3, C6 and C7 all enabled for better power saving.

Enhanced Halt State (C1E)

Enable Enhanced Halt State (C1E) for lower power consumption.

Package C State Support

Enable CPU, PCIe, Memory, Graphics C State Support for power saving.

No-Execute Memory Protection

Processors with No-Execution Memory Protection Technology may prevent certain classes of malicious buffer overflow attacks.

Intel Virtualization Technology

Intel Virtualization Technolog y allows a platform to run multiple operating systems and applications in independent partitions, so that one computer system can function as multiple virtual systems.

Hardware Prefetcher

Automatically prefetch data and code for the processor. Enable for better performance.

Adjacent Cache Line Prefetch

Automatically prefetch the subsequent cache line while retrieving the currently requested cache line. Enable for better performance.

CPU AES

Use this to enable or disable CPU Advanced Encryption Standard instructions.

Intel SpeedStep Technology

Intel SpeedStep technology is Intel's new power saving technology. Processors can switch between multiple frequencies and voltage points to enable power saving. The default value is [Enabled]. Configuration options: [Enabled] and [Disabled]. This item will be hidden if the current CPU does not support Intel SpeedStep technology.

Intel Turbo Boost Technology

Use this item to enable or disable Intel Turbo Boost Mode Technology. Turbo Boost Mode allows processor cores to run faster than marked frequency in specific conditions. The default value is [Enabled].

Energy Performance Gain

Use this item to configure Energy Performance Gain.

Intel TXT(LT) Support

Use this to enable or disable Intel Trusted Execution Technology.

CPU Thermal Throttling

Enable CPU internal thermal control mechanisms to keep the CPU from overheating.

3.10 Chipset Configuration

Primary Graphics Adapter

If PCI Express graphics card is installed on the motherboard, you may use this option to select PCI Express or Onboard as the primary graphics adapter.

Onboard VGA

Use this to enable or disable the Onboard VGA function. The default value is [Auto].

V T- d

Intel Virtualization Technology for Directed I/O helps your virtual machine monitor better utilize hardware by improving application compatibility and reliability, and providing additional levels of manageability, security, isolation, and I/O performance.

PCIE 6 Link Speed

This allows you to select PCIE 6 Link Speed. The default value is [Auto].

PCIE 4 Link Speed

This allows you to select PCIE 4 Link Speed. The default value is [Auto].

PCI-E ASPM Support

This option enables or disables the ASPM support for all CPU downstream devices.

PCH PCI-E ASPM Support

This option enables or disables the ASPM support for all PCH downstream devices.

DMI ASPM Support

This option enables/disables the control of ASPM on CPU side of the DMI Link.

PCH DMI ASPM Support

This option enables/disables the ASPM support for all PCH DMI devices.

Onboard LAN1

This tem allows you to enable or disable the Onboard LAN 1 feature.

Onboard LAN2

This allows you to enable or disable the Onboard LAN 2 feature.

Restore on AC/Power Loss

This allows you to set the power state after an unexpected AC/power loss. If [Power Off] is selected, the AC/power remains off when the power recovers. If [Power On] is selected, the AC/power resumes and the system starts to boot up when the power recovers. If [Last State] is selected, it will recover to the state before AC/power loss.

3.11 Storage Configuration

SATA Dontroller(s) [Er SATA/M.2_SATA Mode Selection [AH SATA Aggressive Link Power Mgmt [Di Hard Disk S.M.A.R.T [Di SATA_0/M2_1(SATA) : Not Detected SATA_1 : Not Detected SATA_2 : Not Detected	abled] Cl] sabled] sabled]	Enable/disable the SATA controllers.
 SATA_3 : Not Detected SATA_4 : Not Detected SATA_5 : Not Detected SATA_6 : Not Detected SATA_7 : Not Detected 		H+ Salert Screen
M2_I(PCIE) : NUL Detected		11: Select Item Enter: Select +/-: Change Option F1: General Help F7: Discard Changes F9: Load UEFI Defaults F10: Save and Exit ESC: Exit

SATA Controller(s)

Use this item to enable or disable SATA Controllers.

SATA/M.2_SATA Mode Selection

Identify the SATA/M.2_SATA port is connected to Solid State Drive or Hard Disk Drive. Press <Ctrl+I> to enter RAID ROM during UEFI POST process.

SATA Aggressive Link Power Mgmt

Use this item to enable or disable SALP.

Hard Disk S.M.A.R.T.

Use this item to enable or disable the S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) feature. Configuration options: [Disabled] and [Enabled].

3.12 ACPI Configuration

Aptio Setup Util Advanced	ity – Copyright (C) 2015 A	American Megatrends, Inc.
POIE Devices Power On Ring-In Power On RTC Alarm Power On	(Disabled) (Disabled) (By OS)	Allow the system to be waked up by a PCIE device and enable wake on LAN.
Vension 0, 47, 49	Et Convolubt (C) 2015 And	n ican Nagataanda. Taa

PCIE Devices Power On

Use this item to enable or disable PCIE devices to turn on the system from the power-soft-off mode.

Ring-In Power On

Use this item to enable or disable Ring-In signals to turn on the system from the power-soft-off mode.

RTC Alarm Power On

Use this item to enable or disable RTC (Real Time Clock) to power on the system.

3.13 H/W Monitor

In this section, it allows you to monitor the status of the hardware on your system, including the parameters of the CPU temperature, motherboard temperature, CPU fan speed, chassis fan speed, and the critical voltage.

ATX+5VSB	; +5.13 V	 Fan Speed Control.
+3.3VSB	: +3.38 V	
CPU_Vcone	: +1.18 V	
VCCSA	: +1.07 V	
VECM	: +1.21 V	
+V1.0M	: +1.01 V	
+VCCI0	: +0.97 V	
VCCST_SFR	: +1.01 V	
VPPM	: +2.50 V	
+3V	: +3.36 V	
+5V	: +5.19 V	
+12V	: +12.1 V	
BAT	: +3.06 V	
CPU_FAN1	: N/A	++: Select Screen
REAR_FAN1	: N/A	11: Select Item
REAR_FAN2	: N/A	Enter: Select
FRNT_FAN1	: N/A	+/-: Change Option
FRNT_FAN2	: 2100 RPM	F1: General Help
FRNT_FAN3	: N/A	F7: Discard Changes
MB Temp	: 34.0 °C	F9: Load UEFI Defaults
Card Side Temp	: 32.0 °C	F10: Save and Exit
CPU1 Temp	: 57.0 °C	ESC: Exit
TR1 Temp	: N/A	
PCH Thermal	: 45.0 °C	
		×

CPU_FAN1

This allows you to set the CPU fan1's speed. The default value is [Smart Fan].

REAR_FAN1

This allows you to set the rear fan 1's speed. The default value is [Smart Fan]. **REAR FAN2**

This allows you to set the rear fan 2's speed. The default value is [Smart Fan].

FRNT_FAN1

This allows you to set the front fan 1's speed. The default value is [Smart Fan]. **FRNT FAN2**

This allows you to set the front fan 2's speed. The default value is [Smart Fan].

FRNT_FAN3

This allows you to set the front fan 3's speed. The default value is [Smart Fan].

Smart Fan Control

(For E3C236D4U only)

This allows you to set the Smart fan's level speed.

Smart Fan Duty Control

Smart Fan Duty x (x means 1 to 11 stage)

This allows you to set duty cycle for each stage.

Smart Fan Temp Control

Smart Fan Temp x (x means 1 to 11 stage)

This allows you to set temperature for each stage.

Watch Dog Timer

This allows you to enable or disable the Watch Dog Timer. The default value is [Disabled].

3.14 Trusted Computing



Security Device Support

Use this item to enable or disable BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available.

TPM State

Use this item to enable or disable Security Device.

NOTE: Your computer will reboot during restart in order to change State of the Device.

Pending Operation

Schedule an Operation for the Security Device.

NOTE: Your computer will reboot during restart in order to change State of the Device.

Platform Hierarchy

Use this item to enable or disable Platform Hierarchy.

Storage Hierarchy

Use this item to enable or disable Storage Hierarchy.

Endorsement Hierarchy

Use this item to enable or disable Endorsement Hierarchy.

Hash Policy

Select the Hash policy to use. SHA-2 is most secure but might not be supported by all Operating Systems.

Device Select

Use this item to select the TPM device to be supported.

3.15 Instant Flash

Instant Flash is a UEFI flash utility embedded in Flash ROM. This convenient UEFI update tool allows you to update system UEFI without entering operating systems first like MS-DOS or Windows[®]. Just save the new UEFI file to your USB flash drive, floppy disk or hard drive and launch this tool, then you can update your UEFI only in a few clicks without preparing an additional floppy diskette or other complicated flash utility. Please be noted that the USB flash drive or hard drive must use FAT32/16/12 file system. If you execute Instant Flash utility, the utility will show the UEFI files and their respective information. Select the proper UEFI file to update your UEFI, and reboot your system after the UEFI update process is completed.

3.16 Boot Screen

In this section, it will display the available devices on your system for you to configure the boot settings and the boot priority.

Aptic Setup Utili Main Advanced Boot Security	ty – Copyright (C) 2015 Americ Event Logs Server Mgmt Exi	an Megatrends, Inc. t
Boot Option Priorities Boot Option #1 Boot Option #2 Boot Option #3	(USB) (UEFI: KingstonDataTraveler 2.01.00, Partition 1] (UEFI: Bullt-in EFI Sheil]	Sets the system boot order
Boot From Onboard LAN Setup Prompt Timeout Bootup Num-Lock Boot Beep Full Screen Logo AddOn ROM Display CSM Parameters	[Disabled] 1 [On] [Disabled] [Enabled] [Enabled]	↔: Select Screen 11: Select Item Enter: Select +/-: Change Option F1: General Help F7: Discard Changes F9: Load UEFI Defaults F10: Save and Exit ESC: Exit
Version 2.17.125	4. Copyright (C) 2015 American	Megatrends, Inc.

Boot Option #1

Use this item to set the system boot order.

Boot Option #2

Use this item to set the system boot order.

Boot Option #3

Use this item to set the system boot order.

Boot From Onboard LAN

Use this item to enable or disable the Boot From Onboard LAN feature.

Setup Prompt Timeout

This shows the number of seconds to wait for setup activation key. 65535(0XFFFF) means indefinite waiting.

Bootup Num-Lock

If this item is set to [On], it will automatically activate the Numeric Lock function after boot-up.

Boot Beep

Select whether the Boot Beep should be turned on or off when the system boots up. Please note that a buzzer is needed.

Full Screen Logo

Use this item to enable or disable OEM Logo. The default value is [Enabled].

AddOn ROM Display

Use this option to adjust AddOn ROM Display. If you enable the option "Full Screen Logo" but you want to see the AddOn ROM information when the system boots, please select [Enabled]. Configuration options: [Enabled] and [Disabled]. The default value is [Enabled].

3.17 Securety

In this section, you may set or change the supervisor/user password for the system. For the user password, you may also clear it.

Supervisor Password

Set or change the password for the administrator account. Only the administrator has authority to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

User Password

Set or change the password for the user account. Users are unable to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

Main Advanced Boot Securit	y Event Logs Server Mgmt	Exit
Supervisor Password User Password Supervisor Password User Password	Not Installed Not Installed	Set or change the password for the administrator account. Only the administrator has authority to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.
		<pre> ++: Select Screen 11: Select Item Enter: Select +/-: Change Option F1: General Help F7: Discard Changes F9: Load UEFI Defaults F10: Save and Exit ESC: Exit</pre>

3.18 Event Logs

Change Smbios Event Log Settings

This allows you to configure the Smbios Event Log Settings.

When entering the item, you will see the followings:

Smbios Event Log

Use this item to enable or disable all features of the SMBIOS Event Logging during system boot.

Erase Event Log

The options include [No], [Yes, Next reset] and [Yes, Every reset]. If Yes is selected, all logged events will be erased.

When Log is Full

Use this item to choose options for reactions to a full Smbios Event Log. The options include [Do Nothing] and [Erase Immediately].

MECI (Multiple Event Count Increment)

Use this item to enter the increment value for the multiple event counter. The valid range is from 1 to 255.

METW (Multiple Event Time Window)

Use this item to specify the number of minutes which must pass between duplicate log entries which utilize a multiple-event counter. The value ranges from 0 to 99 minutes.

View Smbios Event Log

Press <Enter> to view the Smbios Event Log records.

3.19 BMC

Aptio Setup Ut Main Advanced Boot Secur	ility – Copyright (C) 2015 American ity Event Logs Server Mgmt Exit	Megatrends, Inc.
 BMC Self Test Status Hait For BMC System Event Log BMC Network Configuration	PASSED [Enabled]	Nait For BMC response for specified time out. In PILOTII, BMC starts at the same time when BIOS starts during AC power ON. It takes around 30 seconds to initialize Host to BMC interfaces.
		<pre>++: Select Screen fl: Select Item Enter: Select +/-: Change Option F1: General Help F7: Discard Changes F9: Load UEFI Defaults F10: Save and Exit ESC: Exit</pre>
Version 2.17.	1254. Copyright (C) 2015 American M	egatrends, Inc.

Wait For BMC

Wait For BMC response for specified time out. In PILOTII, BMC starts at the same time when BIOS starts during AC power ON. It takes around 30 seconds to initialize Host to BMC interfaces

3.20 System Event Log

SEL Components

Change this to enable or disable all features of System Event Logging during boot.

Erase SEL

Use this to choose options for erasing SEL.

When SEL is Full

Use this to choose options for reactions to a full SEL.

Log EFI Status Codes

Use this item to disable the logging of EFI Status Codes or log only error code or only progress or both.

3.21 BMC Network Configuration

April Setup Utilit	Server Mgmt	itan Megatrenus, inc.
BMC Network Configuration Lan channel 1 (Failover) Manual setting IPMI LAN Configuration address source Station IP address Current subnet mask Current MAC address Current router IP address	[N0] [DHCP] 0.0.0.0 0.0.0.0 00-00-00-00-00 0.0.0.0	<pre>When "Manual Setting IPMI LAN Configuration" is set to default "No", the IP address will follow DHCP. If you would like to set it as Static IP, please toggle the settings to "Yes", and the changes for IPMI LAN configuration will take place after rebooting. +→: Select Screen 11: Select Item Enter: Select +/-: Change Option F1: General Help F7: Discard Changes F9: Load UEFI Defaults F10: Save and Exit ESC: Exit</pre>

Lan Channel (Failover)

Manual setting IPMI LAN

If [No] is selected, the IP address is assigned by DHCP. If you prefer using a static IP address, toggle to [Yes], and the changes take effect after the system reboots. The default value is [No].

Configuration Address Source

Select to configure BMC network parameters statically or dynamically(by BIOS or BMC). Configuration options: [Static] and [DHCP].

Static: Manually enter the IP Address, Subnet Mask and Gateway Address in the BIOS for BMC LAN channel configuration.

DHCP: IP address, Subnet Mask and Gateway Address are automatically assigned by the network's DHCP server.

When [DHCP] or [Static] is selected, do NOT modify the BMC network settings on theIPMI web page.The default login information for the IPMI web interface is:Username:adminPassword:admin

3.22 Exit Screen

Save Changes and Exit

When you select this option, the following message "Save configuration changes and exit setup?" will pop-out. Press <F10> key or select [Yes] to save the changes and exit the UEFI SETUP UTILITY.

Discard Changes and Exit

When you select this option, the following message "Discard changes and exit setup?" will pop-out. Press <ESC> key or select [Yes] to exit the UEFI SETUP UTILITY without saving any changes.

Discard Changes

When you select this option, the following message "Discard changes?" will pop-out. Press <F7> key or select [Yes] to discard all changes.

Load UEFI Defaults

Load UEFI default values for all the setup questions. F9 key can be used for this operation.



3.23 RAID Configurations Precautions

- Please use two new drives if you are creating a RAID 0 (striping) array for performance. It is recommended to use two SATA drives of the same size. If you use two drives of different sizes, the smaller capacity hard disk will be the base storage size for each drive. For example, if one hard disk has an 80GB storage capacity and the other hard disk has 60GB, the maximum storage capacity for the 80GB-drive becomes 60GB, and the total storage capacity for this RAID 0 set is 120GB.
 - 2. You may use two new drives, or use an existing drive and a new drive to create a RAID 1 (mirroring) array for data protection (the new drive must be of the same size or larger than the existing drive). If you use two drives of different sizes, the smaller capacity hard disk will be the base storage size. For example, if one hard disk has an 80GB storage capacity and the other hard disk has 60GB, the maximum storage capacity for the RAID 1 set is 60GB.
 - 3. Please verify the status of your hard disks before you set up your new RAID array.

WARNING!!

Please backup your data first before you create RAID functions. In the process you create RAID, the system will ask if you want to "Clear Disk Data" or not. It is recommended to select "Yes", and then your future data building will operate under a clean environment.

3.24 Installing Windows® OS With RAID Functions

If you want to install Windows[®] OS on your SATA HDDs with RAID functions, please follow the procedures below.

STEP 1: Set up UEFI.

- A. Enter UEFI SETUP UTILITY Advanced screen Storage Configuration.
- B. Set "SATA Mode Selection" to [RAID].

STEP 2: Set RAID configuration.

- Please refer to p.8 -11 of this document for instructions on how to set RAID configuration.
- STEP 3: Install Windows® OS on your system

3.25 Configuring a RAID array Using Intel RAID BIOS

Reboot your computer. Wait until you see the RAID software prompting you to press <Ctrl+I>.

Intel(R) Application Accelerator RAID Option ROM v4.0.6180 Copyright(C) 2003-04 Intel Corporation. All Rights Reversed.					
RAID None I	RAID Volumes : None Defined.				
Physic	al Disks :				
Port	Driver Model	Serial #	Size	Type/Status(Vol ID)	
0	ST3120026AS	3JT354CP	111.7GB	Non-RAID Disk	
1	ST3120026AS	3JT329JX	111.7GB	Non-RAID Disk	
Press <					

Press <Ctrl+I>. Then, the Intel RAID Utility - Create RAID Volume window appears.

	Intel(R) Application Accelerator RAID Option ROM v4.0.6180 Copyright(C) 2003-04 Intel Corporation. All Rights Reversed.				
Γ			[MAIN M	IENU]	
			1. Create RAID) Volume	
			2. Delete KAID 3. Reset Disks (to Non-RAID	
			4. Exit		
				NEORMATION 1	
	RAID	Volumes .	LEARCH OF CAME I		
	NoneI	Defined.			
	Physic	al Disks :	~		-
	Port	Driver Model	Serial #	Size	Type/Status(Vol ID)
	1	ST3120026AS ST3120026AS	3J1334CP 3JT320IX	111./GB	Non-RAID Disk
	1	515120020AS	531323JA	111./ GB	NOI-KAID DISK
		[↑↓]-Select	[ESC]-	Exit	[ENTER]-Select Menu

In the Create Volume Menu, under Name item, please key-in a unique name with 1-16 letters for your RAID volume then press <Enter>.

Intel(R) Application Accelerator RAID Option ROM v4.0.6180 Copyright(C) 2003-04 Intel Corporation. All Rights Reversed.			
RAII Str Ci	[CREAT Name: Vo DLevel: R4 Disks: Se ip Size: 12 apacity: 22	TE VOLUME MENU] Iume0 AID0(Stripe) lect Disks 8KB 3.5 GB	
Enter a string to uniquely id	g between 1 a lentify the RA can not c	ate Volume = [HELP] nd 16 characters in length that can to JD volume. This name is case sensi ontain special characters.	be used tive and
[↑↓]-Change [1	[AB]-Next	[ESC]-Previous Menu	[ENTER]-Select

Use the up or down arrow keys to select your desired RAID Level. You may select RAID 0 (Stripe), RAID 1 (Mirror), RAID 5 or RAID 10 for your RAID level. Press <Enter>, and then you can select Strip Size.

Intel(R) Application Accelerator RAID Option ROM v4.0.6180 Copyright(C) 2003-04 Intel Corporation. All Rights Reversed.			
[CF	REATE VOLUME MENU]		
Name :	Volume0		
RAID Level :	RAID0(Stripe)		
Disks :	Select Disks		
Strip Size :	128KB		
Capacity :	223.5 GB		
	Create Volume		
	[HELP]		
Choose the RA	ID level best suited to your usage model		
RAID0(Stripe)- Creates a vol	ume where equal portions of the volume		
are spread act	ross all the disks. This creates a volume		
with higher p	erformance by accessing all disks at once.		
RAID1(Stripe)- Creates a vol	ume where a redundant copy of the data is		
stored on eac	h disk. This creates a volume protected		
from a single	hard disk failure.		
[↑↓]-Change [TAB]-Nex	tt [ESC]-Previous Menu	[ENTER]-Select	

Intel(R) Application Accelerator RAID Option ROM v4.0.6180 Copyright(C) 2003-04 Intel Corporation. All Rights Reversed.			
	= [CREATE VOLUME MENU]	
N RAID L D Strip S Capa	ame : Volume0 evel : RAID0(Stripe) isks : Select Disks Size : 128KB acity : 223.5 GB		
	Create Volume		
Choose t	HELP]	usage model	
	The following are typical value	es:	
	16KB - Best for sequential tra	nsfers	
	54KB - Good general purpose	strip size	
	128KB - Best performance for	most desktops and workstations	
[↑↓]-Change [TAI	B]-Next [ESC]-Previou	is Menu [ENTER]-Select	

If you selected RAID 0 (Stripe), use the up or down keys to select the stripe size for your RAID 0 array then press <Enter>. The available values range from 8 KB to 128 KB. The default selection is 128 KB. The strip value should be chosen based on the planned drive usage.

- 8/16 KB low disk usage
- 64 KB typical disk usage
- 128 KB performance disk usage
- •

After you set disk block size, press <Enter> to set disk Capacity.

	Intel(R) Application Acc Copyright(C) 2003-04 In	elerator RAID Option ROM v4.0.61 htel Corporation. All Rights Reverse	80 ed.	
	[CREATI Name : Voli RAID Level : RAI Disks : Sele Strip Size : 128 Capacity : 223 Cree	E VOLUME MENU] ume0 (D0(Stripe) ect Disks KB 5GB ate Volume		
Enter the volume capacity. The default value indicates the maximum volume capacity using the selected disks. If less than the maximum capacity is chosen, creation of a second volume is needed to utilize the remaining space.				
[↑↓]-Change	[TAB]-Next	[ESC]-Previous Menu	[ENTER]-Select	

Intel(R) Application Copyright(C) 2003	n Accelerator RAID Option ROM v4.0.6 -04 Intel Corporation. All Rights Revers	180 sed.
[CR	EATE VOLUME MENU]	
Name :	Volume0	
RAID Level :	RAID0(Stripe)	
Disks :	Select Disks	
Strip Size :	128KB	
Capacity :	223.5 GB	
	Create Volume	
	[HELP]	
Press "ENI	ER" to Create the specified volume	
[↑↓]-Change [TAB]-Nex	tt [ESC]-Previous Menu	[ENTER]-Select

After setting up Capacity, please press <Enter>.

Press <Enter> under the Create Volume item. The utility prompts a confirmation message as below.

Intel(R) Applicatio Copyright(C) 2003	n Accelerator RAID Option ROM v4.(-04 Intel Corporation. All Rights Rev	0.6180 rersed.
[CF Name : RAID Level : Disks : Strip Size : Capacity :	EATE VOLUME MENU] Volume0 RAID0(Stripe) Select Disks 128KB 223.5 GB	
WARNING : ALL DA Are you sure y	TA ON SELECTED DISKS WILL BE ou want to creat this volume? (Y/N) :	LOST.
Press "ENT	TER" to Create the specified volume	
[↑↓]-Change [TAB]-Nex	tt [ESC]-Previous Menu	[ENTER]-Select

Press <Y> to complete the setup of RAID.

Intel(R) Application Accelerator RAID Option ROM v4.0.6180 Copyright(C) 2003-04 Intel Corporation. All Rights Reversed.											
[MAIN MENU] 1. Create RAID Volume 2. Delete RAID Volume 3. Reset Disks to Non-RAID 4. Exit											
		= [DISK/VOLUM	E INFORMA	TION]							
RAID Volumes :											
ID	Name	Level	Strip	Size	Status	Bootable					
0	RAID_Volume0	RAID(Stripe)	128KB	223.5GB	Normal	Yes					
Physic	al Disks :										
Port	Driver Model	Serial #		Size	Type/Stat	tus(Vol ID)					
0	ST3120026AS	3JT354CP		111.7GB	Member l	Disk(0)					
1	ST3120026AS	3JT329JX		111.7GB	Member I	Disk(0)					
	[↑↓]-Select	[ES	C]-Exit		[ENTER]	-Select Menu					

After the completion, you will see the detailed information about the RAID that you set up.

Please note that you are only allowed to create one RAID partition at a time under BIOS RAID environment. If you want to create an extra RAID partition, please use the RAID utility under Windows environment to configure RAID functions after you install OS.

If you want to delete a RAID volume, please select the option Delete RAID Volume, press <Enter>, and then follow the instructions on the screen.

	Intel(R) Application Accelerator RAID Option ROM v4.0.6180 Copyright(C) 2003-04 Intel Corporation. All Rights Reversed.											
	[MAIN MENU]											
	1. Create RAID Volume 2. Delete RAID Volume 3. Reset Disks to Non-RAID 4. Exit											
	[DISK/VOLUME INFORMATION]											
RAID	RAID Volumes :											
ID	Name	Level	Strip	Size	Status	Bootable						
0	RAID_Volume0	RAID(Stripe)	128KB	223.5GB	Normal	Yes						
Physic	al Disks :											
Port	Driver Model	Serial #		Size	Type/Stat	tus(Vol ID)						
0	ST3120026AS	3JT354CP		111.7GB	Member 1	Disk(0)						
1	ST3120026AS 3JT329JX 111.7GB Member Disk(0)											
	[↑↓]-Select [ESC]-Exit [ENTER]-Select Menu											

4 IPMI Configuration4.1 Login

Username:	admin	
Password:	•••• Forgot Password?	۰
	Login	

The default username and password are both "admin". It is recommended to change the username and password after your first login.

4.2 Dashboard

						• admin (Administrator)	🗆 🖂 Refresh 🕺 Print 📑 Logout
Dashboard FRU Information Server Health	Configuration	Remote Control	Auto Video Re	cording	Maintenance	Firmware Update	HELF
Dashboard							· · · · · · · · · · · · · · · · · · ·
Dashboard gives the overall information about the status of	the device and remo	te server.					
Device Information		Sensor M	onitoring			Event Log	s
Firmware Revision: 0.7.0						_	Unknown (0.22%)
Firmware Build Time: Feb 27 2014 17:32:44 CST	Stat	us Sensor	Reading				FRNT_FAN3 (0.14%)
Network Information (Edit)	•	ATX+5VSB	5.069 Volts	م	(
MAC Address: BC:5F:F4:E9:FF:EF		+3VSB	3.48 Volts	a,	(
V4 Network Mode: DHCP		Vcore	1.74 Volts	a,			
IPv4 Address: 192.168.30.44		VCCM	1.52 Volts	م	1		
For Hearding mode. Disable		+1.05V	1 079 Volts	٩			
Power Supply Information:	~	NOCIO OUT	1.01 \/etta				
ID:			1.01 VOID	~	Desire Com		6
Model: Revision:	•	BAT	3.1 Volts	4	Remote Con	troi	a Launch
Location:	•	+3V	3.36 Volts	م	Refresh 800	×600	
Date:	•	+5V	5.16 Volts	u,		HILLS IN THE REPORT OF THE REPORT	ender der i Freiten De Steller, under Tall für
Serial:		+12V	12.3 Volts	R	BE WESTER 1.0,1,3 Processor ture 1.85580.00 Processor local 1.85580.00	DIGNERI DIJ KR-12208. VO B	Retweet Lone allowers:
Location LED Status :	•	CPU_FAN1	1000 RPM	R	Reconstruction and the second	Turrel Newsy Mode	
		REAR_FAN1	Not Available	R	EDAD, FS. 1 - 4076/4813 EDAD, AD - Rever EDAD, AD - Rever EDAD, AD - Rever	DID-12023 sk//r EC2	Anote increases
		FRNT FAN1	Not Available	R	Darrow Tax	ELLANDALUM ELLANDALUM PROVINCIAL PROVINCIAL	range nya kan Narah 1962 Jacob Granges
		ERNT EAN2	Not Available			100	
			Not Available	~	A111-00		
	•	FRN1_FAN3	Not Available	~			

The dashboard displays overall information about the status of the device.

Device Information

Displays the Firmware Revision and Firmware Build Time (Date and Time).

Network Information

Shows network settings for the device. Click on the link Edit to view the Network Settings Page.

Remote Control

Start remote redirection of the host by launching the console from this page. Clicking on the 'Launch' button of the 'Remote Control' will cause the jviewer.jnlp file to be downloaded. Once the file is downloaded and launched, a Java redirection window will be displayed.

Remote Console Preview Box

It will show the console preview of the remote server by using a java application. Click on the 'Refresh' button to reload the console preview.

Sensor Monitoring

It lists all available sensors on the device, with information such as status, name, reading, and status icon, as well as a link to that sensor's page. There are 3 possible states for a Sensor:

- Green dot denotes a Normal state.
- Yellow exclamation mark denotes a Warning state.
- Red x denotes a Critical state.

The magnifying glass allows access to the Sensor details page for that sensor.

Event Logs

A graphical representation of all events incurred by the various sensors and %occupied/available space in logs. If you click on the color-coded rectangle in the Legend for the chart, you can view a list of those specific events only.

4.3 Field Replaceable Unit (FRU)



This page displays the BMC FRU file information. On selecting a particular FRU Device ID its corresponding FRU information will be displayed.

Basic Information

It displays the FRU device ID and device name for the selected FRU device ID.

Chassis Information

It displays the following Chassis information fields.

- Area Format Version
- Chassis Type
- Chassis Part Number
- Chassis Serial Number
- Chassis Extra

Board Information

It displays the following Board information fields.

- Area Format Version
- Language
- Manufacture Date Time
- Board Manufacturer Board Product Name
- Board Serial Number
- Board Part Number
- FRU File ID
- Board Extra

Product Information

It displays the following Product information fields.

- Area Format Version
- Language
- Manufacturer Name
- Product Name
- Product Part Number
- Product Version
- Product Serial Number
- Asset Tag
- FRU File ID
- Product Extra

4.4 Server Health

4.4.1 Sensor Readings

ashboard	FRU Information	Server Health	Configuration	Remote Contr	ol Auto Video Ree	cording	Maintenance	Firmware Update		
ensor	Readings									
	touunigo									
sensor relat	ted information will be d	splayed here. Doub	le click on a record to	toggle (ON / OFF) the live widget for that	particular si	ansor.			
Sensors	~								Sensor Co	ount: 18 sensor
10010010										
ensor Nam	e → Status	4	Current Reading	2						
TX+5VSB	Normal		5.069 Volts	ATV	EVED. E OGO V	alite.				NORMAL
3088	Normal		3.5 Volts	AIAT	5V36: 5.009 V	JILS				NORMAL
/core	Norma		1.74 Volts	Threshol	ds for this sensor				LIVE WIDE	ET OFF ON
/CCM	Norma		1.52 Volts							
-1.05V	Norma		1.069 Volts	Lower N	on-Recoverable (LNR):	4.049 Vol	ts	Upper Non-Recover	able (UNR):	6.029 Volts
CCI0_001	F Normal		1.01 Volts	Lower C	ritical (LC):	4.259 Vol	ts	Upper Critical (UC):		5.759 Volts
AI	Norma		3.1 Volts	Lower N	on-Critical (LNC):	4.5 Volts		Upper Non-Critical (UNC):	5.49 Volts
-3V	Norma		3.36 V005							
-5V	Norma		5.16 V005	Oranhia			-			
-12V	Norma		12.3 Volts	Graphic	al view of this sens	ors even	IS			
CPU_FAN1	Normal		1000 RPM	- I						
REAR_FAN	1 Normal		Not Available	LNR	(0)					
-RNI_FAN	1 Norma		Not Available		<i>(</i> -)					
-RNT_FAN	2 Normal		Not Available	LC	(0)					
RNT_FAN	3 Normal		Not Available	LNC	(0)					
IB Tempera	ature Normal		40 * 0							
R1 Temper	rature Normal		0.C	UNR	(0)					
PU Tempe	rature Normal	1	3810	UC	(0)					
				UNC	(0)					
				Other	(0)					
				Discrete	(0)					
				Discrete	(9)					

A list of sensor readings will be displayed here. Click on a record to show more information about that particular sensor, including thresholds and a graphical representation of all associated events. Double click on a record to toggle (ON / OFF) the live widget for that particular sensor. You can filter the list to view particular sensors only using the drop-down listbox.

Live Widget

Turn On or Off the live widget for this sensor. This widget gives a dynamic representation of the readings for the sensor.

View this Event Log

Click this button to go the event log page for the viewed sensor.

4.4.2 Event Log

							• admin (Administrator)	🗆 Refresh Print	🛛 🖛 Logou
Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update		HEL
Event L	og								
Events genera	ated by the system will b	e logged here. Doui	ble-click on a record t	o see description.					
All Events			V filter by: All Se	nsors 🗸			Event L	og: 13 event entries,	1 page(s)
BMC Tin	mezone 🔿 Client Time:	zone UTC Offset:	(GMT+/-0)				<<	< 1 >	>>
Event ID 🔺	Time Stamp △	Ser	nsor Name 🔺		Sensor Type 🗅	Description 🔺			
13	03/03/2014 11:44:	15	Unknown		System Event	System Recor System Hardw Asserted	figured,OEM System Boot are Failure,Entry Added to	Event, Undetermined Auxiliary Log, PEF A	ction - 🔨
12	03/03/2014 11:44:	15	Unknown		System Event	System Recor System Hardw Asserted	figured,OEM System Boot vare Failure,Entry Added to	Event, Undetermined Auxiliary Log, PEF A	ction -
11	03/03/2014 03:44:	49	Unknown		System Event	System Recor System Hardw Asserted	figured,OEM System Boot rare Failure,Entry Added to	Event, Undetermined Auxiliary Log, PEF A	ction -
10	03/03/2014 03:44	49	Unknown		System Event	System Recor System Hardw Asserted	figured,OEM System Boot rare Failure,Entry Added to	Event, Undetermined Auxiliary Log, PEF A	ction -
9	02/27/2014 18:22:	21	FRNT_FAN3		Fan	Lower Non-Cr	itical - Going Low - Asserte	d	
8	02/27/2014 18:22:	18	FRNT_FAN3		Fan	Lower Non-Cr	itical - Going Low - Deasse	rted	
7	02/27/2014 18:21:	04	FRNT_FAN3		Fan	Lower Non-Cr	itical - Going Low - Asserte	d	
6	02/27/2014 18:20	59	FRNT_FAN3		Fan	Lower Non-Cr	itical - Going Low - Deasse	rted	
5	02/27/2014 18:20:	58	FRNT_FAN3		Fan	Lower Non-Cr	itical - Going Low - Asserte	d	
4	02/27/2014 18:20:	09	Unknown		System Event	System Recor System Hardw Asserted	figured,OEM System Boot are Failure,Entry Added to	Event, Undetermined Auxiliary Log, PEF A	ction -
-					- · - ·	System Recor	figured,OEM System Boot	Event, Undetermined	

Clear All Event Logs

This page displays the list of events incurred by different sensors on this device. Double click on a record to see the details of that entry. You can also sort the list of entries by clicking on any of the column headers. You can use the sensor type or sensor name filter options to view those specific events logged in the device.

BMC Timezone

Check this option to display the event log entries logged with the BMC Timezone value.

Client Timezone

Check this option to display the event log entries logged with the Client (user's) Timezone value.

UTC Offset

Displays the current UTC Offset value based on which event Time Stamps will be updated. Navigational arrows can be used to selectively access different pages of the Event Log.

Clear All Event Logs

Clear All Event Logs option will delete all existing records for all sensors.

4.4.3 System and Audit Log

							admin (Administrator)	🗢 🖸 Refresh 🛛 🕅 Print	🛛 🖃 Logout
Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update		HELP
Sustam	9 Audit Logo								
System	& Audit Logs	•							
This page disp	plays logs of system and	d audit events for this	s device (if the option	s have been configured	1).				
Systen	n Log Au	dit Log						UTC Offset:	(GMT+/-0)
Filter by:	Alert	~						This Filter: 2 even	nt entries
Event ID	∆ Time Sta	mp 🛆	Host	lame 🗅	Description ()				
1	Mar 3	03:16:48	AMI	BC5FF4E9FFEF	kernel: Helper Mod	Jule Driver Version	1.2		
2	Mar 3	03:16:48	AMI	3C5FF4E9FFEF	kernel: Copyright (c) 2006 American N	legatrends inc.		

If configured, these logs will display all the system and audit events that occurred on this device

System Log

Click the System Log tab to view all system events. Entries can be filtered based on their classification levels.

4.5 DNS Server Settings

							admin (Administrator)	🗢 🖸 Refresh 🕺 Print 📑 Logout
Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update	HELP
DNS Se	rver Settings							
Manage DNS	settings of the device.							
Host Configu	ration							
Host Set	tings	Autom	atic 🔽					
Host Nar	ne	AMIBO	SFF4E9FFEF					
Register BM(-							
bond0	-	☑ Rej ●	gister BMC Direct Dynamic DNS	DHCP Client F	2DN			
Domain Nam	e Configuration							
Domain	Settings	bond0	_v4 🗸					
Domain	Name							
Domain Nam	e Server Configuration							
DNS Ser	ver Settings	bond0	~					
IP Priorit	ty	IFv	4 🔍 IPv6					
DNS Ser	ver1	168.95	i.1.1					
DNS Ser	ver2	168.95	5.192.1					
DNS Ser	ver3	::						

Save Reset

This page is used to configure the Host name and Domain Name Server configuration of the device.

Host configuration

Host Settings

Choose either Automatic or Manual settings.

Host Name

It displays the hostname of the device if Auto is selected. If the Host setting is chosen as Manual, then specify the hostname of the device.

Register BMC

Choose the BMC's network port to register with the DNS settings. Check the option 'Register BMC' to register with the DNS settings. Choose the option 'Direct Dynamic DNS' to register with direct dynamic DNS or choose 'DHCP Client FQDN' to register through a DHCP server.

Domain Name Configuration

Domain Settings

It lists the options for the domain interface as Manual, v4 or v6 for multi LAN channels.

Domain Name

It displays the domain name of the device if Auto is selected. If the Domain setting is chosen as Manual, then specify the domain name of the device.

Domain Name Server Configuration

DNS Server Settings

It lists the options for the DNS interface, Manual and available LAN interfaces.

IP Priority

If the IP Priority is IPv4, it will have 2 IPv4 DNS servers and 1 IPv6 DNS server. If the IP Priority is IPv6, it will have 2 IPv6 DNS servers and 1 IPv4 DNS server.

NOTE: This is not applicable for Manual configuration.

DNS Server 1, 2 & 3

Specify the DNS (Domain Name System) server address to be configured for the BMC.

- An IPv4 Address is made of 4 numbers separated by dots as in "xxx.xxx.xxx".
- Each number ranges from 0 to 255.
- The first number must not be 0. DNS Server Address will support the following:
- IPv4 Address format.
- IPv6 Address format. **Save**

Click 'Save' to save any changes made. You will be logged out of current UI session and will need to log back in.

Reset

Reset the modified changes

4.6 System Event Log

This page is used to configure the System Event log information.

Current Event Log Policy

It will display the configured Event Log Policy. Linear Event Log Policy Check this option to enable the Linear System Event Log Policy for the Event Log.

Circular Event Log Policy

Check this option to enable the Circular System Event Log Policy for the Event Log.

Save

Click 'Save' to save the configured settings.

Reset

Click 'Reset' to reset the modified changes.

4.7 Images Redirection

							📑 admin (Administrator)	🗆 🖸 Refresh 😽	Print 📑 Logout
Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update		HELP
Images Remote Media	Redirection	nages from remote sy	/stem and perform r	edirection. Remote Me	dia is currently disabled. To co	nfigure Remote Me	dia Settings, Click on	Adva	need Settings
'Advanced Se	attings' button.				,	,		Adva	nced Settings
								Number of ava	llable images: 0
# A	1	Image Type	Δ		Image Name 斗		Redire	ction Status 🔺	
1		Floppy			-			-	
2		CD/DVD			~			~	
2		CD/DVD Harddisk			~			~	
2		CD/DVD Harddisk			~			~	

The displayed table shows configured images on BMC. You can add or replace the images from here to the remote media. Only one image can be configured for each image type. To configure the image, You need to enable Remote Media support using 'Advanced Settings'. To add or replace an image, you must have Administrator Privileges.

NOTE: Free slots are denoted by "~".

Start/Stop Redirection

Select a configured slot and click 'Start Redirection' to start the remote media redirection. It is a toggle button, if the image is successfully redirected, then click the 'Stop Redirection' button to stop the remote media redirection.

Add Image

Select a free slot and click 'Add Image' to configure a new image to the device. Alternatively, double click on a free slot to add an image.

Replace Image

Select a configured slot and click 'Replace Image' to replace the existing image. Alternatively, double click on the configured slot.

Delete Image

Select the desired image to be deleted and click 'Delete Image'.

4.8 Network Settings

This page is used to configure the network settings for available LAN channels.

LAN Interface

Select the LAN interface to be configured.

LAN Settings

Check this option to enable LAN support for the selected interface.

MAC Address

This field displays the MAC address of the selected interface (read only).

IPv4 Configuration

It lists the IPv4 configuration settings.

Obtain an IP address automatically

Enable 'Use DHCP' to dynamically configure the IPv4 address using Dynamic Host Configuration Protocol (DHCP).

IPv4 Address, Subnet Mask, Default Gateway

If DHCP is disabled, specify a static IPv4 address, Subnet Mask and 21 Default Gateway to be configured for the selected interface.

- An IP Address consists of 4 sets of numbers separated by dots as in "xxx.xxx.xxx.xxx".
- Each set ranges from 0 to 255.
- The first Number must not be 0.

IPv6 Configuration

It lists the IPv6 configuration settings.

IPv6 Settings

Check this option to enable IPv6 support for the selected interface.

Obtain an IP address automatically

Enable 'Use DHCP' to dynamically configure the IPv4 address using Dynamic Host Configuration Protocol (DHCP).

IPv6 Address

Specify a static IPv6 address to be configured for the selected interface.

Subnet Prefix length

Specify the subnet prefix length for the IPv6 settings.

• Value ranges from 0 to 128.

Default Gateway

Specify the v6 default gateway for IPv6 settings.

VLAN Configuration

It lists the VLAN configuration settings.

VLAN Settings

Check this option to enable VLAN support for the selected interface.

VLAN ID

Specify the Identification for VLAN configurations.

• Value ranges from 2 to 4094. NOTE: VLAN ID cannot be changed without resetting the VLAN configuration. VLAN ID 0, 1, 4095 are reserved VLAN ID's.

VLAN Priority

Specify the priority for VLAN configurations.

• Value ranges from 1 to 7.

NOTE: 7 is the highest priority for VLAN.

Save

Click 'Save' to save any changes made. You will be prompted to log out of the current UI session and log back in at the new IP address.

Reset

Click 'Reset' to reset the modified changes.

4.9 Network Bonding Configuration

Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	admin (Administrator) Firmware Update	C Refresh	🖗 Print	Logout 🔮
Network	Bonding Cor	nfiguration								
The following Network	options are to configure Bonding	networking bonding t	for the device.							
Default l	nterfaces		both V							
Auto Co	nfiguration		Enable							

Save Reset

This page is used to configure the network bonding configuration for network interfaces.

NOTE: A minimum of 2 network interfaces are required to enable Network bonding for the device.

Network Bonding

Check this option to enable network bonding for network interfaces.

NOTE: If VLAN is enabled for slave interfaces, then Bonding cannot be enabled. VLAN can be disabled under Configuration -> Network -> VLAN.

Default Interfaces

Choose any one of the bonding interfaces for configuring active slave(s).

Auto Configuration

Enable this option to configure the interfaces in service configuration automatically.

NOTE: If Auto configuration is disabled, then interfaces in services can be configured via IPMI command. If Auto configuration is enabled, then all the services will be restarted automatically.

Save

Click "Save" to save the current changes.

NOTE: Disabling bonding will disable the Bonding-VLAN configuration

Reset

Click "Reset" to reset the modified changes.

4.10 Network Link Configuration

Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update	HELP
Network	Link Configu	Iration						
Manage netw	ork link settings of the de	WICe.						
LAN Inte	rface	[eth0 🗸					
Auto Neg	potiation		ON OFF					
Link Spe	ed		100 Mbps	\sim				
Duplex N	lode		Full Duplex	\sim				

Save Reset

This page is used to configure the network link configuration for available network interfaces.

LAN Interface

Select the required network interface from the list to which the Link speed and duplex mode is to be configured.

Auto Negotiation

This option is enabled to allow the device to perform automatic configuration to achieve the best possible mode of operation (speed and duplex) over a link.

Link Speed

Link speed will list all the supported capabilities of the network interface. It can be 10/100/1000 Mbps.

Duplex Mode

Select any one of the following Duplex Modes.

- Half Duplex
- Full Duplex

Save

Click 'Save' to save the settings.

Reset

Click 'Reset' to reset the modified changes.

4.11 NTP Settings

This page displays the device's current Date & Time Settings. It can be used to configure either Date & Time or NTP (Network Time Protocol) server settings for the device.

Date

Specify the current Date for the device.

Time

Specify the current Time for the device.

NOTE: As a year 2038 problem exists, the acceptable date range is from 01-01-2005 to 01-18-2038.

NTP Server

Specify the NTP Server for the device. Check the 'Automatically synchronize' option to configure the NTP Server. The NTP Server will support the following:

- IP Address (Both IPv4 and IPv6 format).
- FQDN (Fully qualified domain name) format.

UTC Offset

UTC Offset list contains the UTC offset values for the NTP server, which can be used to display the exact local time.

NOTE: Use the correct UTC offset after adjusting for DST.

Automatically synchronize

Check this option to automatically synchronize Date and Time with the NTP Server.

Refresh

Click 'Refresh' to reload the current date & time settings.

Save

Click 'Save' to save any changes made.

Reset

Click 'Reset' to reset the modified changes

4.12 PAM Ordering

Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	admin (Administrator) Firmware Update	⊂ Refresh	😵 Print	Logout HELP
PAM Or	dering									
This page is u	sed to configure the PA	M Ordering for the u	ser authentication.							
	IPMI									
	LDAP	↑								
		¥								
Act	tive Directory									

Save Reset

This page is used to configure the PAM order for user authentication into the BMC.

PAM Module

It shows the list of available PAM modules supported in BMC.

Move Up

Click on the required PAM module, it will be selected. Click on the 'Move Up' option to move the selected PAM module one step before the existing PAM module.

Move Down

Click on the required PAM module, it will be selected. Click on the 'Move Down' option to move the selected PAM module one step after the existing PAM module.

Save

Click 'Save' to save any changes made.

NOTE: Whenever the configuration is modified, the web server will be restarted automatically. The logged session will be logged out.

Reset

Click 'Reset' to reset the modified changes.

4.13 PEF Management

Dashboard FRU Information Server Health Configuration Remote Control Auto Video Recording Maintenance Firmware Update HE

PEF Management

Use this page to configure Event Filter, Alert Policy and LAN Destination. To delete or modify a entry, select it in the list and press "Delete" or "Modify". To add a new entry, select an unconfigured slot and press

Event Filter	Alert Policy LAN De	stination		
				Configured Event Filter count:
PEF ID 🔺	Filter Configuration →	Event Filter Action	Event Severity 🗅	Sensor Name 🗅
1	~	~	~	~
2	~	~	~	~
3	Enabled	[Alert]	Unspecified	Any
4	Enabled	[Alert]	Unspecified	Any
5	Enabled	[Alert]	Unspecified	Any
6	Enabled	[Alert]	Unspecified	Any
7	Enabled	[Alert]	Unspecified	Any
8	Enabled	[Alert]	Unspecified	Any
9	Enabled	[Alert]	Unspecified	Any
10	Enabled	[Alert]	Unspecified	Any
11	Enabled	[Alert]	Unspecified	Any
12	Enabled	[Alert]	Unspecified	Any
13	Enabled	[Alert]	Unspecified	Any
14	Enabled	[Alert]	Unspecified	Any
15	Enabled	[Alert]	Unspecified	Any
16	~	~	~	~
13				Add Modify Delete

This page is used to configure the Event Filter, Alert Policy and LAN Destination. To view the page, the user must at least be an Operator. To modify or add a PEF, the user must be an Administrator.

NOTE: Free slots are denoted by '~' in all columns for the slot. For more information, refer the Platform Event Filtering (PEF) section in IPMI Specification.

Event Filter

Click the Event Filter tab to show configured Event filters and available slots. You can modify or add new event filter entries here. A maximum of 40 slots are available and include the default of 15 event filter configurations.

Alert Policy

Click the Alert policy tab to show configured Alert policies and available slots. You can modify or add new alert policy entries here. A maximum of 60 slots are available.

LAN Destination

Click the LAN Destination tab to show configured LAN destinations and available slots. You can modify or add new LAN destination entries here. A maximum of 15 slots are available. 30

Send Test Alert

Select a configured slot in the LAN Destination tab and click 'Send Test Alert' to send a sample alert to the configured destination.

NOTE: Test alerts can be sent only with SMTP configurations set to enabled. SMTP support can be enabled under Configuration->SMTP.

Add

Select a free slot and click 'Add' to add a new entry to the device. Alternatively, double click on a free slot.

Modify

Select a configured slot and click 'Modify' to modify that entry. Alternatively, double click on the configured slot.

Delete

Select the desired configured slot to be deleted and click 'Delete'.

4.14 RADIUS Settings

							🕴 admin (Administrator) 🛛 🗁 Refi	resh 🐼 Print 🖃 Logout
Dashboa	rd FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update	HELP
RADI Check the	US Settings	IS authantication and	l enter the required i	information to access th	ne RADIUS server. Press the S	ave button to save	your changes.	
F	ADIUS Authentication	Enabl	e					
F	ort	1812						
т	ïme Out	3	seconds					
5	erver Address							
5	iecret							
								Save Reset

To enable/disable RADIUS, check or uncheck the "RADIUS Authentication" Enable checkbox respectively.

NOTE: Generic FreeRADIUS alone is supported.

RADIUS Authentication

Check the option 'Enable' to enable RADIUS authentication.

Port

Specify the RADIUS Port.

- The default Port is 1812.
- Port value ranges from 1 to 65535.

Time Out

Specify the Time out value.

- The default Time out value is 3 seconds.
- Time out value ranges from 3 to 300.

Server Address

Enter the 'IP address' of the RADIUS server

- An IP Address is made of 4 numbers separated by dots as in "xxx.xxx.xxx.xxx".
- Each Number ranges from 0 to 255.
- The first Number must not be 0 The server address will support the following:
- IPv4 Address format.
- IPv6 Address format.

Secret

Enter the 'Authentication Secret' for RADIUS server

- Secret must be at least 4 characters long.
- Space is not allowed.

NOTE: This field will not allow more than 31 characters.

Save

Click 'Save' to save the settings.

Reset

Click 'Reset' to reset the modified changes.

4.15 SMTP Settings

Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update	C Reliesh	as Phile	HEL	P
SMTRS	Settings										~
omiti c	Jetting5										
Manage SMT	P settings of the device.										
LAN Ch	annel Number	1	\mathbf{v}								
Sender	Address										
Machine	e Name]							
Primary SM1	IP Server										
SMTP S	upport	🗹 Ena	ble								
Server A	Address]							
SM1	IP Server requires Autr	nentication									
User Na	me]							
Passwo	rd										
Secondary 5	MTP Server										
SMTP S	upport	🗹 Eng	ble								
Server /	Address]							
SM1	IP Server requires Auth	nentication									
User Na	me]							
Passwo	rd										
											~

This page is used to configure the SMTP settings.

LAN Channel Number

Select the LAN channel to which the SMTP information needs to be configured.

Sender Address

Enter the 'Sender Address' valid on the SMTP Server.

Machine Name

Enter the 'Machine Name' of the SMTP Server.

- Machine Name is a string of maximum 15 alpha-numeric characters.
- Space, special characters are not allowed.

Primary SMTP Server

It lists the Primary SMTP Server configuration.

SMTP Support

Check this option to enable SMTP support for the BMC.

Server Address

Enter the 'IP address' of the SMTP Server. It is a mandatory field.

• An IP Address is made of 4 numbers separated by dots as in "xxx.xxx.xxx.xxx".

- Each Number ranges from 0 to 255.
- The first Number must not be 0.

The server address will support the following:

- IPv4 Address format.
- IPv6 Address format.

SMTP Server requires Authentication

Check the option 'Enable' to enable SMTP Authentication.

Note: SMTP Server Authentication Types supported are:

- CRAM-MD5
- LOGIN
- PLAIN

If the SMTP server does not support any one of the above authentication types, the user will get an error message stating, "Authentication type is not supported by SMTP Server"

Username

Enter the username to access SMTP Accounts.

- The User Name can be 4 to 64 alpha-numeric characters.
- It must start with an alphabet.
- Special characters ',' (comma), ':' (colon), ';' (semicolon), ' (space) and '\' (backslash) are not allowed.

Password

Enter the password for the SMTP User Account.

- Passwords must be at least 4 characters long.
- Space is not allowed.

NOTE: This field will not allow more than 64 characters.

Secondary SMTP Server

It lists the Secondary SMTP Server configuration. It is an optional field. If the Primary SMTP server is not working, then it tries the Secondary SMTP Server configuration.

Save

Click 'Save' to save the new SMTP server configuration.

Reset

Click 'Reset' to reset the modified changes

4.16 User Management

				🗘 admin (Administrator) 🤇 Refresh 🔗 Print 📑 Logou
Dashboard	FRU Information Server Health	Configuration Remote Control	Auto Video Recording Maintenance	Firmware Update HELI
User Ma	inagement			
The list below "Add User".	shows the current list of available users.	To delete or modify a user, select their name	in the list and press "Delete User" or "Modify Use	r". To add a new user, select an unconfigured slot and press
				Number of configured users: 2
UserID	د Username د	User Access 🗅	Network Privilege 🗳	د Email ID
1	anonymous	Disabled	Administrator	~
2	admin	Enabled	Administrator	~
3	~	~	~	~
4	~	~	~	~
5	~	~	~	~
6	~	~	~	~
7	~	~	~	~
8	~	~	~	~
9	~	~	~	~
10	~	~	~	~
				Add User Modify User Delete User

The displayed table shows any configured Users and available slots. You can modify or add new users from here. A maximum of 10 slots are available, including the default admin and anonymous. It is advised that the anonymous user's privilege and password should be modified as a security measure. To view the page, you must have Operator privileges. To modify or add a user, You must have Administrator privileges.

NOTE: Free slots are denoted by "~" in all columns for the slot.

Add User

Select a free slot and click 'Add User' to add a new user to the device. Alternatively, double click on a free slot to add a user.

Modify User

Select a configured slot and click 'Modify User' to modify that user. Alternatively, double click on the configured slot.

Delete User

Select the desired user to be deleted and click 'Delete User

4.17 Power Control and Status

Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	 admin (Administrator) Firmware Update 	C Refresh 🕏 Print	Logout
Power	Control and St	tatus							
The current s	erver power status is sho	own below. To perfor	m a power control op	peration, select one of t	the options below and press "F	erform Action".			
Host	is currently on								
• F	leset Server								
	ower Off Server - Immed	liate							
0 F	ower Off Server - Orderi	y Shutdown							
0 F	ower On Server								
	ower Cycle Server								

Perform Action

This page helps you to view or perform any host power cycle operations.

Reset Server

Select this option to reboot the system without powering off (warm boot).

Power Off Server - Immediate

Select this option to immediately power off the server.

Power Off Server - Orderly Shutdown

Select this option to initiate operating system shutdown prior to the shutdown.

Power On Server

Select this option to power on the server.

Power Cycle Server

Select this option to first power off, and then reboot the system (cold boot).

Perform Action

Click 'Perform Action' to perform the selected option.

4.18 Restore Factory Defaults

							admin (Administrator)	🗢 Refresh 🛛 🕅 Print	📑 Logout			
Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update		HELP			
Restore	Factory Defa	ults										
This page will	I restore the device to de	fault configuration. F	ress " Restore Facto	ry Defaults" to restore	the device default configuration	1.						
WARNING within few	G: Please note that after / minutes.	entering into restore	factory defaults, wid	gets, other web pages	and services will not work. All	open widgets will b	e closed automatically. Th	e device will reset and r	eboot			
This section li	ists the configuration iter	ns, that will be prese	rved during restore fa	actory default configura	ation. Click "Preserve Configura	ition" to modify the	preserve configuration ite	ms.				
# A			Preserve Configura	tion item 🔺			Preserve Status	<u>A</u>				
Data Not Available												
						Enter Pre	eserve Configuration	Restore Factory D	efaults			

This page helps to restore the factory defaults of the device. Please note that after entering restore factory widgets, other web pages and services will not work. All open widgets will be closed automatically. The device will reset and reboot within a few minutes.

Preserve Configuration

Click this to redirect to Preserve configuration page, which is used to preserve the particular configurations not to be overwritten by the default configuration.

Restore Factory Defaults

Click this to restore the firmware with default configurations.

4.19 System Administrator

							admin (Administrator)	C Refresh	🔗 Print	📑 Logout
Dashboard	FRU Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update			HELP
System	Administrato	r								
This page allo	ws the user to enable/di	sable access and ch	ange the password	for the System Adminis	trator account.					
Usernam	ie	sysadmin								
User Acc	cess	Enable								
		Change P	assword							
Passwor	ď									
Confirm	Password									

Save Reset

This page is used to configure the System Administrator configurations.

Username

Username of the System Administrator is displayed (read only).

User Access

Check this option to enable user access for the system administrator.

Change Password

To change the user's password, check the 'Change Password' option. This will enable the password fields.

Password, Confirm Password

Enter and confirm the new password here.

- Passwords must be at least 8 characters long.
- Space is not allowed.

NOTE: This field will not allow more than 64 characters.

Save

Click 'Save' to save the new configuration for the system administrator.

Reset

Click 'Reset' to reset the modified changes

4.20 Firmware Update

							admin (Administrator)	🗢 Ċ Refresh 🛛 🕏 Print	🕒 Logout
Dashboard FRU	J Information	Server Health	Configuration	Remote Control	Auto Video Recording	Maintenance	Firmware Update		HELP
Firmware U	pdate								
Upgrade firmware of	the device. Press	"Enter Update Mod	le" to put the device i	n update mode.					
The protocol infor	mation to be used	1 for firmware image	transfer during this	update is as follows. To	o configure, choose 'Image Tra	Insfer Protocol' unde	er Configuration menu.		
Protocol Type	: HTTP/HTTPs	-	-				-		
WARNING: Please	note that after ent	tering update mode	widgets, other web p	ages and services will	not work. All open widgets will	be closed automati	ically. If upgrade process	is cancelled in the midd	e of the
wizard, the device w	vill reset.								
Preserve all Co	nfiguration This w	ill preserve all the c	onfiguration settings	during the firmware ur	ndate - irrespective of the indiv	idual items marked a	as preserve/overwrite in t	the table below	
All configuration item	s below will be pr	eserved by default of	luring a restore facto	ry default operation. C	lick "Enter Preserve Configura	tion" to modify the P	reserve status settings.		
# \			Preserve Configura	tion Item			Preserve Statu	5 A	
1			SDR				Overwrite	_	
2			FRU				Overwrite		
3			SEL				Overwrite		
4			IPMI				Overwrite		
5			Network				Overwrite		
6			NTP				Overwrite		
7			SNMP				Overwrite		
8			SSH				Overwrite		
9			KA/M				Overwrite		
			E V IVI				Overwrite		

Enter Preserve Configuration Enter Update Mode

This wizard takes you through the process of firmware upgrades. A reset of the box will automatically follow whether the upgrade is completed or cancelled. An option to Preserve configuration will be presented. Enable the option, if you wish to preserve configured settings through the upgrade.

Enter Preserve Configuration

Click this to redirect to the Preserve configuration page, which is used to preserve the particular configurations not to be overwritten by the default configuration.

Enter Update Mode

Click 'Enter Update Mode' to upgrade the current device firmware.

4.21 Image Transfer Protocol

Protocol Type

Protocol type to transfer the firmware image into the BMC.

Server Address

The Server IP address of the firmware image is stored.

- An IP Address is made of 4 numbers separated by dots as in "xxx.xxx.xxx.xxx".
- Each number ranges from 0 to 255.
- The first number must not be 0.

Source Path

Full Source path with filename of where the firmware image is stored.

Retry Count

Number of time(s) to be retried when transfer failure occurs. Retry count ranges from 0 to 255.

Save

Click 'Save' to save the configured settings.

Reset

Click 'Reset' to reset the modified changes