# **SI-08 Series**

# **User Manual**



2011 November V2

#### Copyright © 2011 IBASE Technology INC. All Rights Reserved.

No part of this manual, including the products and software described in it, may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means, except documentation kept by the purchaser for backup purposes, without the express written permission of IBASE Technology INC. ("IBASE").

Products and corporate names mentioned in this manual may or may not be registered trademarks or copyrights of their respective companies, and are used for identification purposes only. All trademarks are the property of their respective owners.

Every effort has been made to ensure that the contents of this manual are correct and up to date. However, the manufacturer makes no guarantee regarding the accuracy of its contents, and reserves the right to make changes without prior notice.

# Table of Contents

Safety Information
Acknowledgments
Accessories7
Components
I/O View
Specification9
Mounting SI-08 to the Wall 10
Wall mounting requirements 10
Selecting the location11
Exploded view of the SI-08 assembly 12
Parts description 12
Installation
Installing the memory13
Setting Jumper
Pin Definition
BIOS Setup
BIOS Introduction
BIOS Setup
Main BIOS Setup 17
Advanced Settings19
Chipset Settings 30
Boot Settings
Security Settings
Save & Exit Settings
Driver Installation

# **Safety Information**

Your SI-08 is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

# Setting up your system

- Read and follow all instructions in the documentation before you operate your system.
- Do not use this product near water.
- Set up the system on a stable surface. Do not secure the system on any unstable plane.
- Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
- Slots and openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation.
   Never insert objects of any kind into the ventilation openings.
- This system should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- Use this product in environments with ambient temperatures between 0°C and 45°C.
- If you use an extension cord, make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.
- DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT WHERE THESTORAGE TEMPERATURE MAY GO BELOW -20° C (-4° F) OR ABOVE 80° C (176° F). THIS COULD DAMAGE THE EQUIPMENT. THE EQUIPMENT SHOULD BE IN A CONTROLLED ENVIRONMENT.

# Care during use

- Do not walk on the power cord or allow anything to rest on it.
- Do not spill water or any other liquids on your system.
- When the system is turned off, a small amount of electrical current still flows. Always unplug all power, and network cables from the power outlets before cleaning the system.
- If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
  - > The power cord or plug is damaged.

- > Liquid has been spilled into the system.
- The system does not function properly even if you follow the operating instructions.
- > The system was dropped or the cabinet is damaged.

# Lithium-Ion Battery Warning

**CAUTION**: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

### NO DISASSEMBLY

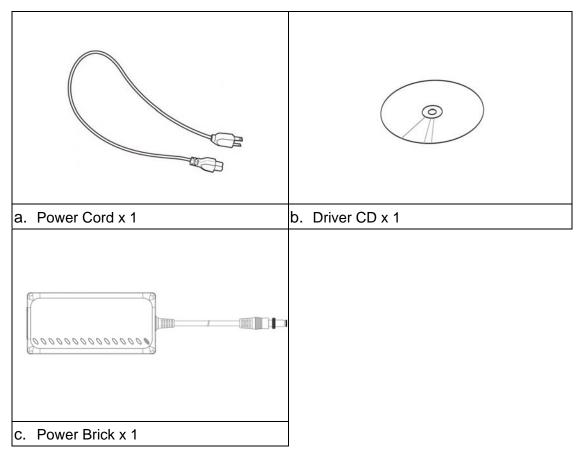
The warranty does not apply to the products that have been disassembled by users

# WARNING HAZARDOUS MOVING PARTS KEEP FINGERS AND OTHER BODY PARTS AWAY

# Acknowledgments

- AMI is a registered trademark of AMI Software International, Inc.
- AMD and ATI are registered trademarks of AMD Corporation.
- Microsoft Windows is a registered trademark of Microsoft Corporation.
- FINTEK is a registered trademark of FINTEK Electronics Corporation.
- REALTEK is a registered trademark of REALTEK Electronics Corporation.
- All other product names or trademarks are properties of their respective owners.

# Accessories



# Components

# I/O View

Refer to the diagram below to identify the components on this side of the system.



#### DVI

The Digital Visual Interface (DVI) port supports a high quality VGA-compatible device such as a monitor or projector to allow viewing on a larger external display.

#### LAN

The eight-pin RJ-45 LAN port supports a standard Ethernet cable for connection to a local network.

#### СОМ

Communication or serial port is compatible with RS-232 interface without RI (ring indicator) signal.

#### USB

The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mouse devices, cameras, and hard disk drives. USB allows many devices to run simultaneously on a single computer, with some peripheral acting as additional plug-in sites or hubs.

#### AUDIO

The stereo audio jack (3.5mm) is used to connect the system's audio out signal to amplified speakers or headphones.

### DC-IN

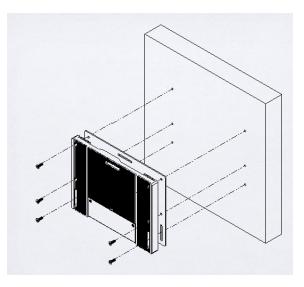
The supplied power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the system. To prevent damage to the system, always use the supplied power adapter.

# **Specification**

System Mainboard	EB-900		
Construction	SGCC 1.0t		
Chassis Color	Black / White		
Storage	2.5″ 160GB SATA HDD x 1		
Mounting	Wall mount		
Dimensions	200(W) x 34.8(H) x 150(D)mm		
Power Supply	60W DC adapter		
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)		
Storage Temperature	-20°C ~ 80°C		
Relative Humidity	5~90% @45°C (non-condensing)		
Vibration	HDD: 0.25 Grms/5~500Hz random operation		
Shock	HDD: 15 Grms peak acceleration (11 msec duration)		
RoHS	Available		

•This specification is subject to change without prior notice.

# Mounting SI-08 to the Wall



You can install SI-08 on plastic (LCD monitor), wood, drywall surface over studs, or a solid concrete or metal plane directly. Ensure the installer uses at least four M3 length 6mm screws to secure the system on wall. *Six M3 length 6mm screws are recommended to secure the system on wall.* 

Fasteners are not included with the unit, and must be supplied by the installer. The types of fasteners required are dependent on the type of wall construction. Choose fasteners that are rated either "Medium Duty" or "Heavy Duty." To assure proper fastener selection and installation, follow the fastener manufacturer's recommendations.

#### Wall mounting requirements

**Note:** Before mounting the system on wall, ensure that you are following all applicable building and electric codes.

When mounting, ensure that you have enough room for power and signal cable routing. And have good ventilation for power adapter. The method of mounting must be able to support weight of the SI-08 plus the suspend weight of all the cables to be attached to the system. Use the following methods for mounting your system:

#### Mounting to hollow walls

Method 1: Wood surface – A minimum wood thickness – 38mm (1.5in.) by 25.4 cm (10in.) – of high, construction – grade wood is recommended. **Note:** This method provides the most reliable attachment of the unit with little risk that the unit will come loose or require ongoing maintenance.

■ Method 2: Drywall walls - Drywall over wood studs is acceptable.

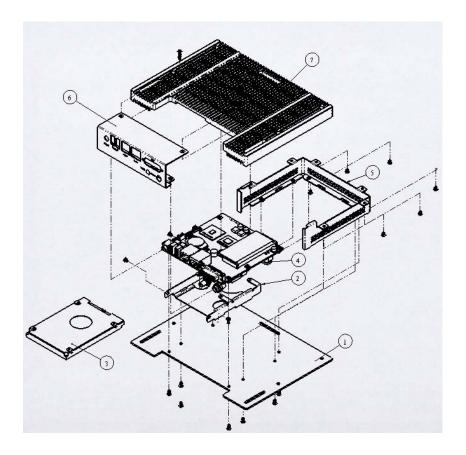
Mounting to a solid concrete or brick wall - Mounts on a flat smooth surface.

### Selecting the location

Plan the mounting location thoroughly. Locations such as walkway areas, hallways, and crowded areas are not recommended. Mount the unit to a flat, sturdy, structurally sound column or wall surface.

The best mounting surface is a standard countertop, cabinet, table, or other structure that is minimally the width and length of the unit. This recommendation reduces the risk that someone may accidentally walk into and damage the device. Local laws governing the safety of individuals might require this type of consideration.

# Exploded view of the SI-08 assembly



# Parts description

Part NO.	Description	Part NO.	Description
1	Cover	2	HDD bracket
3	HDD	4	EB900
5	Body	6	I/O bracket
7	Heatsink		

# Installation

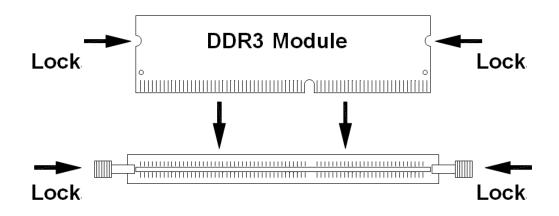
# Installing the memory

The motherboard supports two DDR3 memory socket for a maximum total memory of 4GB in DDR3 memory type.

### Installing and Removing Memory Module (CN1)

To install the DDR3 modules, locate the memory slot on the board and perform the following steps:

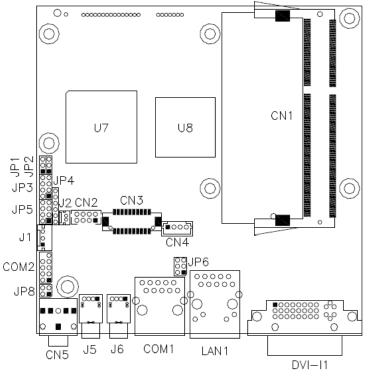
- 1. Hold the DDR3 module so that the key of the DDR3 module align with those on the memory slot.
- Gently push the DDR3 module in SOCKET position until the clips of the slot close to hold the DDR3 module in place when the DDR3 module touches the bottom of the slot.
- 3. To remove the DDR3 module, press the clips with both hands.



# **Setting Jumper**

Jumpers are used on the motherboard to select various settings and features according to your needs and applications. Contact your supplier if you have doubts about the best configuration for your needs. The following lists the connectors and their respective functions.





JP1: Clear CMOS Setting

JP1	Setting
••• 123	Normal
123	Clear CMOS

#### JP2: LCD Panel Power Selection

JP2	LCD Panel Power
••• 123	3.3V
123	5V

# JP6: COM1 RS232 +5V/+12V Power Setting

JP6	Setting	Function
	Pin 1-2	. 12)/
1	Short/Closed	+12V
	Pin 3-4	Normal
5 🗖 🗖 6	Short/Closed	Normai
	Pin 5-6	. 5\/
	Short/Closed	+5V

# **Pin Definition**

COM1	Pin	Signal Name		
	1	DSR, Data set ready		
	2	GND, ground		
	3	GND, ground		
Į (	4	TXD, Transmit data		
	5	RXD, Receive data		
	6	DCD, Data carrier detect		
	7	DTR, Data terminal ready		
	8	CTS, Clear to send		
	9	RTS, Request to send		
	10	RI, Ring indicator		

COM1: COM1 Serial Port

# **BIOS Setup**

This chapter describes the different settings available in the AMI BIOS that comes with the board.

## **BIOS Introduction**

The BIOS (Basic Input/Output System) installed in your computer system's ROM supports Intel processors. The BIOS provides critical low-level support for a standard device such as disk drives, serial ports and parallel ports. It also password protection as well as special support for detailed fine-tuning of the chipset controlling the entire system.

### **BIOS Setup**

The BIOS provides a Setup utility program for specifying the system configurations and settings. The BIOS ROM of the system stores the Setup utility. When you turn on the computer, the BIOS are immediately activated. Pressing the <Del> key immediately allows you to enter the Setup utility. If you are a little bit late pressing the <Del> key, POST (Power On Self-Test) will continue with its test routines, thus preventing you from invoking the Setup. If you still wish to enter Setup, restart the system by pressing the "Reset" button or simultaneously pressing the <Ctrl>, <Alt> and <Delete> keys. You can also restart by turning the system Off and back On again. The following message will appear on the screen:

Press <DEL> to Enter Setup

In general, you press the arrow keys to highlight items, <Enter> to select, the <PgUp> and <PgDn> keys to change entries, <F1> for help and <Esc> to quit.

When you enter the Setup utility, the Main Menu screen will appear on the screen. The Main Menu allows you to select from various setup functions and exit choices.

### **Main BIOS Setup**

This setup allows you to record some basic hardware configurations in your computer system and set the system clock.

Main	Advanced	Chipset	Boot	Security	/ Save & Exit
BIOS INF	ORMATION				
BIOS Ver	ndor		American Megatre	nds	
Core Ver	sion		4.6.6.0		
Complien	ю		UEFI 2.1		
Project V	ersion		0ABVQ 0.10 x64		
Build Dat	e and Time		04/12/2011 11:47:	06	
Memory I	nformation				
Total Me	mory		1008 MB (DDR3)		$\rightarrow \leftarrow \texttt{Select Screen}$
System L	anguage		[English]		↑↓ Select Item Enter: Select +- Change Field
System D	ate		[Tue 09/07/2010		F1: General Help
System T	ïme		[00:08:21]		F2: Previous Values
Access L	evel		Administrator		F3: Optimized Default F4: Save ESC: Exit

Aptio Setup	Utility – Copyright ©	2010 American Megatrends, Inc.
-------------	-----------------------	--------------------------------

Note: If the system cannot boot after making and saving system changes with Setup, the AMI BIOS supports an override to the CMOS settings that resets your system to its default.

Warning: It is strongly recommended that you avoid making any changes to the chipset defaults. These defaults have been carefully chosen by both AMI and your system manufacturer to provide the absolute maximum performance and reliability. Changing the defaults could cause the system to become unstable and crash in some cases.

#### System Language

Choose the system default language.

#### **System Date**

Set the Date. Use Tab to switch between Data elements.

### System Time

Set the Time. Use Tab to switch between Time elements.

# **Advanced Settings**

This section allows you to configure and improve your system and allows you to set up some system features according to your preference.

Main	Advanced	Chipset	Boot	Security	/ Save & Exit
Legac	y OpROM Support				
Launc	h PXE OpROM			Disabled	
Launc	h Storage OpROM			Enabled	
► PCI	Subsystem Settings				
► ACF	PI Settings				
► CPU	J Configuration				
► Auto	o Power On Schedul	е			$\rightarrow$ $\leftarrow$ Select Screen
► IDE	Configuration				
► USE	3 Configuration				↑↓ Select Item
► Sup	er IO Configuration				Enter: Select +- Change Field
► H/W	/ Monitor				F1: General Help
					F2: Previous Values F3: Optimized Default
					F4: Save ESC: Exit

### Launch PXE OpROM

Enable or Disable Boot Option for Legacy Network Devices.

#### Launch Storage OpROM

Enable or Disable Boot Option for Legacy Mass Storage Devices with Option ROM.

# **PCI Subsystem Settings**

This section allows you to configure the PCI, PCI-X and PCI Express settings.

Main Advanced Chipset	Boot Securit	y Save & Exit
PCI Bus Driver Version	V 2.03.00	
PCI ROM Priority	EFI Compatible ROM	
PCI Common Settings PCI Latency Timer VGA Palette Snoop PERR# Generation SERR# Generation	32 PCI Bus Clocks Disabled Disabled Disabled	
PCI Express Device Settings Relaxed Ordering Extended Tag No Snoop Maximum Payload Maximum Read Request PCI Express Link Settings	Disabled Disabled Enabled Auto Auto	<ul> <li>→ ←Select Screen</li> <li>↑ ↓ Select Item</li> <li>Enter: Select</li> <li>+- Change Field</li> <li>F1: General Help</li> <li>F2: Previous Values</li> <li>F3: Optimized Default</li> <li>F4: Save ESC: Exit</li> </ul>
ASPM Support WARNING: Enabling ASPM may cause Some PCI-E devices to fail	Disabled	F4. Save ESC. EALC
Extended Synch	Disabled	

Aptio Setup Utility – Copyright © 2010 American Megatrends, In	c.
--	----

#### **PCIE Configuration**

The fields under PCIE Configuration features settings for *Primary Dual Slot Config*, *GPP Slots Power Limit*, *GFX ports*, *GPPs and NB-SB port features*.

#### **Internal Graphics Mode**

The settings for IB828 are Disabled and UMA; while the IB828 has additional settings of Sideport and UMA+sideport.

#### Init Display First

The default setting is IGX.

#### **NB Power Management**

The default setting is Auto.

#### Memory Hole At 15M-16M

In order to improve performance, certain space in memory can be reserved for ISA cards. This memory must be mapped into the memory space below 16 MB. The choices are *Enabled* and *Disabled*.

#### System BIOS Cacheable

The setting of *Enabled* allows caching of the system BIOS ROM at F000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

#### **PCI ROM Priority**

In case of multiple Option ROMs (Legacy and EFI Compatible), specifies what PCI Option ROM to launch.

#### **PCI Latency Timer**

Value to be programmed into PCI Latency Timer Register.

#### VGA Palette Snoop

Enables or Disables VGA Palette Registers Snooping.

#### **PERR# Generation**

Enables or Disables PCI Device to Generate PERR#.

#### SERR# Generation

Enables or Disables PCI Device to Generate SERR#.

#### **Relaxed Ordering**

Enables or Disables PCI Express Device Relaxed Ordering.

#### **Extended Tag**

If ENABLED allows Device to use 8-bit Tag field as a requester.

#### No Snoop

Enables or Disables PCI Express Device No Snoop option.

#### **Maximum Payload**

Set Maximum Payload of PCI Express Device or allow System BIOS to select the value.

#### **Maximum Read Request**

Launches (Enabled/Disabled) the boot option for legacy network devices.

#### PCI Express Link Settings

Set Maximum Read Request Size of PCI Express Device or allow System BIOS to select the value.

#### **ASPM Support**

Set the ASPM Level: Force L0 – Force all links to L0 State AUTO – BIOS auto configure DISABLE – Disables ASPM

#### **Extended Synch**

If ENABLED allows generation of Extended Synchronization patterns.

#### **ACPI Settings**

This section configures the system ACPI parameters.

Aptio Setup Utility - Copyright © 2010 American Megatrends, Inc.

Main	Advanced	Chipset	Boot	Security	Save & Exit
Enabl	e ACPI Auto Configu	iration	Disabled		
ACPI Lock	e Hibernation Sleep State ∟egacy Resources deo Report		Enabled S3 (Suspend Disabled Disabled	to RAM)	→ ←Select Screen ↑ ↓ Select Item Enter: Select +- Change Field F1: General Help
					F2: Previous Values F3: Optimized Default F4: Save ESC: Exit

#### **Enabled ACPI Auto Configuration**

Enables or Disables BIOS ACPI Auto Configuration.

#### **Enable Hibernation**

Enables or Disables System ability to Hibernate (OS/S4 Sleep State). This option may be not effective with some OS.

#### **ACPI Sleep State**

Select the highest ACPI sleep state the system will enter, when the SUSPEND button is pressed.

# Lock legacy Resources

Enabled or Disabled Lock of Legacy Resources

## S3 Video Repost

Enabled or Disabled S3 Video Repost.

# **CPU Configuration**

This section shows the CPU configuration parameters.

Aptio Setup Utility –	Copyright © 2010	) American I	Megatrends.	Inc.

Main	Advanced	Chipset	Boot	Security	Save & Exit
CPU	Configuration				
PSS S PSTA PPC / SVM NX M C6 M			Disabled Enabled PState 0 PState 0 Enabled Enabled Auto		
					$\rightarrow$ $\leftarrow$ Select Screen
					↑↓ Select Item Enter: Select +- Change Field F1: General Help F2: Previous Values F3: Optimized Default F4: Save ESC: Exit

#### Limit CPUID Maximum

Disabled for Windows XP.

#### **PSS Support**

Enabled /disabled the generation of ACPI\_PPC, and \_PCT objects.

#### **PSTATE Adjustment**

Provide to adjust startup P-state level.

### **PPC** adjustment

Provide to adjust\_PPC object.

#### NX Mode

Enabled/disabled NO-execute page protection Function.

#### SVM Mode

Enabled/disabled CPU Virtualization.

# C6 Mode

Enabled/disabled C6.

### Node 0 Information

View Memory Information related to Node 0.

# Auto Power On Schedule

This section setups the power on time for the system.

Main	Advanced	Chipset	Boot	Security	Save & Exit
	Power on Schedule				
Schee	vare Version dule Slot 1 dule Slot 2		T.B.D. None None		→ ←Select Screen ↑ ↓ Select Item Enter: Select +- Change Field
					F1: General Help F2: Previous Values F3: Optimized Default F4: Save ESC: Exit

Aptio Setup Utility – Copyright © 2010 American Megatrends, Inc.

#### **Schedule Slot 1**

Setup the hou/minute for sytem power on.

#### **Schedule Slot 2**

.

Setup the hou/minute for sytem power on.

## **IDE Configuration**

This section shows the IDE devices configuration.

Aptio Setup Utility – Copyright	© 2010 American Megatrends, Inc.
---------------------------------	----------------------------------

Main Advanced	Chipset	Boot	Security	Save & Exit
SATA Configuration				
SATA Port0 SATA Port1 SATA Port2 SATA Port3 SATA Port4 SATA Port5		Enabled Enabled Enabled Enabled Enabled		<ul> <li>→ ←Select Screen</li> <li>↑ ↓ Select Item</li> <li>Enter: Select</li> <li>+- Change Field</li> <li>F1: General Help</li> <li>F2: Previous Values</li> <li>F3: Optimized Default</li> <li>F4: Save ESC: Exit</li> <li>ESC: Exit</li> </ul>

#### **Serial-ATA Controller**

Enable / Disable Serial ATA Controller.

## **USB** Configuration

Main	Advanced	Chipset	Boot	Security	Save & Exit
USB	Configuration				
	Devices:				$\rightarrow$ $\leftarrow$ Select Screen
	1 Keyboard, 1 Mous				↑↓ Select Item
	r Reyboard, T Mous	e e			Enter: Select
	V LICE Support		Enabled		+- Change Field
-	y USB Support				F1: General Help
EHCI	Hand-off		Disabled		F2: Previous Values F3: Optimized Default
USB	nardware delays and	d time-outs:			F4: Save ESC: Exit
USB t	ransfer time-out		20 sec		
Devic	e reset time-out		20 sec		
Devic	e power-up delay		Auto		

Aptio Setup Utility - Copyright © 2010 American Megatrends, Inc.

#### Legacy USB Support

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.

#### **EHCI Hand-off**

Enabled/Disabled. This is a workaround for Oses without EHCI hand-off support. The EHCI ownership change should be claimed by EHCI driver.

#### **USB transfer time-out**

The time-out value for Control, Bulk, and Interrupt transfers.

#### **Device reset time-out**

USB mass storage device Start Unit command time-out.

#### **Device power-up delay**

Maximum time the device will take before it properly reports itself to the Host Controller. 'Auto' users default value: for a Root port it is 100ms, for a Hub port the delay is taken from Hub descriptor.

# **Super IO Configuration**

Main	Advanced	Chipset	Boot	Security	Save & Exit
Super	IO Configuration				
Super	IO Chip		F81801		→ ←Select Screen ↑↓ Select Item
	ial Port 0 Configurat ial Port 2 Configurat				Enter: Select +- Change Field
Po	wer Failure		Always off		F1: General Help
					F2: Previous Values F3: Optimized Default
					F4: Save ESC: Exit

Aptio Setup Utility – Copyright © 2010 American Megatrends, Inc.

#### Serial Port 0/1 Configuration

Set Parameters of Serial Port 0/1 (COMA/COMB)

#### **Power Failure**

The options: Keep last state, By pass mode, Always on, and Always off.

### H/W Monitor

Aptio Setup Utility - Copyright © 2010 American Megatrends, Inc.

#### **Temperatures/Voltages**

The values are read-only values as monitored by the system and show the PC health status.

### **CPU Shutdown Temperature**

Aside from the Disabled options, this field allows the setting of shutdown temperature from 70C to 95C.

# **Chipset Settings**

This section allows you to configure and improve your system and allows you to set up some system features according to your preference.

Aptio	Setup	Utility -	- Copyright	© 2010	American	Megatrends,	Inc.
		~,					

Main	Advanced	Chipset	Boot	Security	Save & Exit
► No	rth Bridge rth Bridge LVDS uth Bridge	Config Select			<ul> <li>→ ←Select Screen</li> <li>↑ ↓ Select Item</li> <li>Enter: Select</li> <li>+- Change Field</li> <li>F1: General Help</li> <li>F2: Previous Values</li> <li>F3: Optimized Default</li> <li>F4: Save ESC: Exit</li> </ul>

#### North Bridge

This item shows the North Bridge Parameters.

#### North Bridge LVDS Config Select

This item shows the Specify INT15 options for LVDS

#### South Bridge

This item shows the South Bridge Parameters.

# North Bridge

This section allows you to configure the North Bridge Chipset.

Main	Advanced	Chipset	Boot	Security	v Save & Exit
North	Bridge Configurati	on			
NB G	PP Core Config		[GPP_CORE_)	x4x2x1x1]	
Port 4	4 Control		[Enabled]		
Asp	m Mode Control		[Disabled]		
Hot	plug Mode Control		[Hotplug Basic	]	
Port 5	5 Control		[Enabled]		
Port 6	6 Control		[Enabled]		
Port 7	7 Control		[Enabled]		→ ←Select Screen
Port 8	3 Control		[Enabled]		
					↑↓ Select Item
IOMN	IU Mode		Disabled		Enter: Select +- Change Field
Memo	ory Clock		200MHz		F1: General Help
Total	ory Information Memory: 4096 MB	(DDR3)			F2: Previous Values F3: Optimized Default F4: Save ESC: Exit
	X Configuration				
	mory Configuration				
► No	de 0 Information				

Aptio Setup Utility – Copyright © 2010 American Megatrends, Inc.

#### IOMMU Mode

IOMMU is supported on LINUX based systems to convert 32bit I/O to 64bit MMIO.

#### **Memory Clock**

This option allows user to select different memory clock.

# **GFX Configuration**

Main	Advanced	Chipset	Boot	Security	Save & Exit
GFX	Configuration				
PSP	P Policy		Disabled		→ ←Select Screen ↑ ↓ Select Item Enter: Select +- Change Field F1: General Help
					F2: Previous Values F3: Optimized Default F4: Save ESC: Exit

Aptio Setup Utility

### **PSPP** Policy

PCIe speed power policy.

# **Memory Configuration**

		Aptio Setup	Utility	
Main Advanced	Chipset	Boot	Security	Save & Exit
Memory Configuration Integrated Graphics Bank Interleaving		Auto Disabled		<ul> <li>→ ←Select Screen</li> <li>↑ ↓ Select Item</li> <li>Enter: Select</li> <li>+- Change Field</li> <li>F1: General Help</li> <li>F2: Previous Values</li> <li>F3: Optimized Default</li> <li>F4: Save ESC: Exit</li> </ul>

### **Integrated Graphics**

Enable Integrate Graphics controller.

#### Node 0 Information

View memory information related to Node 0.

# North Bridge LVDS Config Select

Main	Advanced	Chipset	Boot	Security	Save & Exit
Spec	fy INT15 options	for LVDS			
DP1	Output Mode Output Mode Panel Config S	elect	Disabled Single Link DVI-D 800x600		<ul> <li>→ ←Select Screen</li> <li>↑ ↓ Select Item</li> <li>Enter: Select</li> <li>+- Change Field</li> <li>F1: General Help</li> </ul>
					F2: Previous Values F3: Optimized Default F4: Save ESC: Exit

#### Aptio Setup Utility

# South Bridge

This section allows you to configure the South Bridge Chipset.

Main	Advanced	Chipset	Boot	Security	Save & Exit
SB C	M Version :		1.1.0.1		
► SB ► SB	SATA Configurati USB Configurati GPP Port Config HD Azalia Config	on Juration			<ul> <li>→ ←Select Screen</li> <li>↑ ↓ Select Item</li> <li>Enter: Select</li> <li>+- Change Field</li> <li>F1: General Help</li> <li>F2: Previous Values</li> <li>F3: Optimized Default</li> </ul>
					F4: Save ESC: Exit

Aptio Setup Utility - Copyright © 2010 American Megatrends, Inc.

# **SB SATA Configuration**

Main	Advanced	Chipset	Boot	Security	save & Exit
OnCh	nip SATA Channel		Enabled		
OnCh	nip SATA Type		Native IDE		
OnCh	nip IDE mode		Legacy mode		
SATA	A IDE Combined Mo	ode	Enabled		$\rightarrow$ $\leftarrow$ Select Screen
Com	bined Mode Option		SATA as primary		↑↓ Select Item Enter: Select
SATA	SP on PORT0		Disabled		+- Change Field
SATA	SP on PORT1		Disabled		F1: General Help
SATA	ESP on PORT2		Disabled		F2: Previous Values
SATA	AESP on PORT3		Disabled		F3: Optimized Default
SATA	AESP on PORT4		Disabled		F4: Save ESC: Exit
SATA	AESP on PORT5		Disabled		
SATA	A Power on PORT0		Enabled		
SATA	Power on PORT1		Enabled		
SATA	Power on PORT2		Enabled		
SATA	Power on PORT3		Enabled		
SATA	Power on PORT4		Enabled		
SATA	Power on PORT5		Enabled		

Aptio Setup Utility – Copyright © 2010 American Megatrends, Inc.

### OnChip SATA Type

Native IDE / n RAID / n AHCI / n AHCI / n Legacy IDE / n IDE->AHCI / n HyperFlash

# **SB USB Configuration**

	Aptio Setup Utility – Copyright © 2010 American Megatrends, Inc.					
Main	Advanced	Chipset	Boot	Security	Save & Exit	
OHCI	HC (Bus 0 Dev 1	8 Fn 0)	Enabled			
OHCI	HC (Bus 0 Dev 1	9 Fn 0)	Enabled			
OHCI	HC (Bus 0 Dev 2	2 Fn 0)	Enabled			
OHCI	HC (Bus 0 Dev 2	0 Fn 5)	Enabled		$\rightarrow$ $\leftarrow$ Select Screen	
	PORT 0 PORT 1		Enabled Enabled		↑↓ Select Item Enter: Select +- Change Field	
USB F	PORT 2		Enabled		F1: General Help	
USB F	PORT 3		Enabled		F2: Previous Values	
USB F	PORT 4		Enabled		F3: Optimized Default	
					F4: Save ESC: Exit	
USB F	PORT 5		Enabled			
USB F	PORT 6		Enabled			
USB F	PORT 7		Enabled			
USB F	PORT 8		Enabled			
USB F	PORT 9		Enabled			
USB F	PORT 10		Enabled			
	PORT 11		Enabled			
USB F	PORT 12		Enabled			
USB F	PORT 13		Enabled			
USB F	ORT FL0		Enabled			
USB F	ORT FL1		Enabled			
USBE	evice Wakeup F	rom S3 or S4				

Aptio Setup Utility – Copyright © 2010 American Megatrends, Inc.

# **SB GPP Port Configuration**

Aptio Setup Utility - Copyright © 2010 American Megatrends, Inc.

Main	Advanced	Chipset	Boot	Security	Save & Exit
SB G	PP Function		Enabled		
GPP	Port Link Configur	ation	1:1:1:1 mode		
hide ı	unused GPP port		Enabled		$\rightarrow$ $\leftarrow$ Select Screen
GF	P Link ASPM		Disabled		↑↓ Select Item
NB-S	B PHY PLL Power	Down	Enabled		Enter: Select
SB G	PP PHY PLL Pow	er Down	Enabled		+- Change Field
SB G	PP LANE REVER	SAL	Disabled		F1: General Help
					F2: Previous Values
					F3: Optimized Default
					F4: Save ESC: Exit

### **SB HD Azalia Configuration**

Main /	Advanced	Chipset	Boot	Security	Save & Exit
HD Onbo	in Config in Config in Config		Enabled Enabled Auto Azalia Azalia Azalia Azalia Disabled		<ul> <li>→ ←Select Screen</li> <li>↑ ↓ Select Item</li> <li>Enter: Select</li> <li>+- Change Field</li> <li>F1: General Help</li> <li>F2: Previous Values</li> <li>F3: Optimized Default</li> <li>F4: Save ESC: Exit</li> </ul>

#### Aptio Setup Utility

### **Boot Settings**

This section allows you to configure the boot settings according to your preference.

Main	Advanced	Chipset	Boot	Security	v Save & Exit
Boot C	Configuration				
Setup	Prompt Timeout		1		
Bootu	NumLock State		On		
Quiet	Boot		Disabled		
CSM1	6 Module Version		07.63		$\rightarrow$ $\leftarrow$ Select Screen
Option	20 Active ROM Messages pt 19 Canture Boot		Upon Requ Force BIOS Disabled [Disabled		↑↓ Select Item Enter: Select +- Change Field F1: General Help F2: Previous Values E2: Optimized Default
Boot C	Option Priorities				F3: Optimized Default F4: Save ESC: Exit

Aptio Setup Utility – Copyright © 2010 American Megatrends, Inc.

#### Setup Prompt Timeout

Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.

#### **Bootup NumLock State**

Select the keyboard NumLock state.

# **Quiet Boot**

Enables/Disables Quiet Boot option.

# **GateA20 Active**

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 Messages

Set display mode for Option ROM. Options are Force BIOS and Keep Current.

## Interrupt 19 Canture

Enable: Allows Option ROMs to trap Int 19.

## **UEFI** Option Priorities

Enables/Disables UEFI boot from disks.

# **Security Settings**

Main	Advanced	Chipset	Boot	Security	Save & Exit
Passv	vord Description				
this or for wh If ONI power or ent Admir The p	LY the Administrato only limits accesss to len entering Setup. LY the User's passw on password and i er Setup. In Setup nistrator rights. assword must be 3	o Setup and is or vord is set, then must be entered the User will hav	this is a to boot ve		<ul> <li>→ ←Select Screen</li> <li>↑ ↓ Select Item</li> <li>Enter: Select</li> <li>+- Change Field</li> <li>F1: General Help</li> <li>F2: Previous Values</li> <li>F3: Optimized Default</li> </ul>
User	Password				F4: Save ESC: Exit

Aptio Setup Utility - Copyright © 2010 American Megatrends, Inc.

#### Administrator Password

Set Setup Administrator Password.

## **User Password**

Set User Password.

# Save & Exit Settings

Main	Advanced	Chipset	Boot	Security	Save & Exit
Save	Changes and Exit				
Disac	ard Changes and Ex	xit			
Save	Changes and Reset	:			
Disca	rd Changes and Re	set			$\rightarrow$ $\leftarrow$ Select Screen
Save	Options Changes rd Changes				↑↓ Select Item Enter: Select +- Change Field F1: General Help
Save	re Defaults as User Defaults re User Defaults				F2: Previous Values F3: Optimized Default F4: Save ESC: Exit
Boot (	Override				
Launo	ch EFI Shell from file	esystem device			

Aptio Setup Utility - Copyright © 2010 American Megatrends, Inc.

#### Save Changes and Exit

Exit system setup after saving the changes.

## **Disacard Changes and Exit**

Exit system setup without saving any changes.

#### 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 Defaults 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.

# **Boot Override**

Pressing ENTER causes the system to enter the OS.

#### Launch EFI Shell from filesystem device

Attempts to launch EFI Shell application (Shellx64.efi) from one of the available filesystem devices.

# **Driver Installation**

This section describes the installation procedures for software and drivers. The software and drivers are included with the motherboard. If you find the items missing, please contact the vendor where you made the purchase.

# AMD A55E Chipset Family Graphic Driver Installation

Follow the steps below to install the AMD A55E chipset family graphics drivers.
1. Insert the CD that comes with the system. Click *AMD*, then *AMD A55E Chipset Drivers*, and then *AMD A55E Series Graphics Drivers*.

	side <b>T</b>	his CD
	Intel	AMD A55E Chipset Drivers
0000	AMD	
무의	LAN Card	
<b>\$</b>	Tools	
1	8	Support AMD A55E Chipset Drivers

	side T	his CD Version : 8.7.2D @4
	Intel AMD LAN Card	AMD A55E Series Graphics Drivers Realtek High Definition Audio Driver
<b>*</b>	Tools	
	8	ATI AMD A55E Series Graphics Drivers

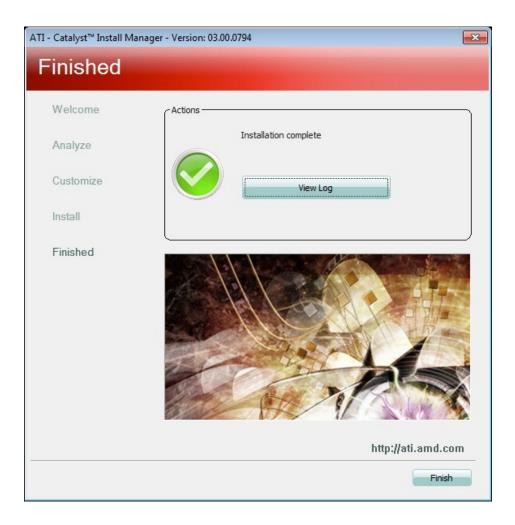
2. When the welcome screen to the ATI – Catalyst<sup>™</sup> Install Manager appears, click *Next*. Now, click *Install* to allow the installation of the software components.

ATI - Catalyst™ Install Mana	ger - Version: 03.00.0794	×
Welcome		
Welcome	Welcome         Catalyst™ Install Manager is used to install and update the software for your graphics products         Language Support         Which language would you like Catalyst™ Install Manager to display?         English	
	http://ati.amd.co	m
	Next > Cancel	

ATI - Catalyst™ Ins	stall Manager - Version: 03.00.0794	×
Select I	Installation Operation	
What do you w	vant to do?	)
<b>%</b>	Install Allow users to install ATI software components	
	Uninstall Remove ATI software components	
		)
	http://ati.amd.com	
	Cancel	

3. Select *Express* and click *Next* to proceed with the installation. On the following screen, click *Finish* to complete the installation process.

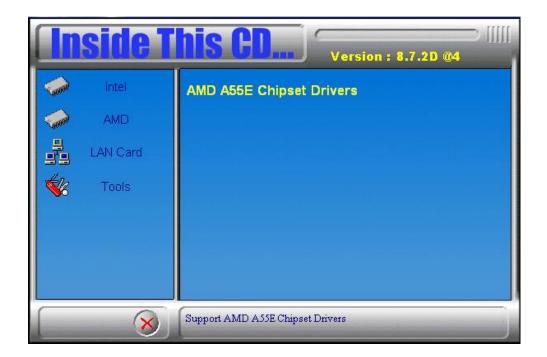
ATI - Catalyst™ Install Ma	anager - Version: 03.00.0794
Installer W	/elcome
Welcome	(Welcome
Analyze	Select Express or Custom Install and then click Next:  Express
Customize	Custom
Install	Default Installation Location: C:\Program Files\ATI Technologies Browse
Finished	http://ati.amd.com
	Back Next > Cancel



# **Realtek High Definition Audio Driver Installation**

Follow the steps below to install the Realtek HD audio drivers.

1. Insert the CD that comes with the system. Click *AMD* and click *Realtek High Definition Audio Driver.* 



side <b>T</b>	his CD Version : 8.7.2D @4	
Intel AMD LAN Card Tools	AMD A55E Series Graphics Drivers Realtek High Definition Audio Driver	
8	Realtek High Definition Audio Driver	

2. When the welcome screen to the Audio Driver Setup appears, click *Next* to start the software installation. Once the InstallShield Wizard is complete, click *Finish* to restart the computer.

Realtek High Definition Audio Driver Setup (2.67) R2.08						
		/izard will install F		altek High Definition Audio inition Audio Driver on your con		
Install Shield		< <u>B</u> ack	Next >		Cancel	
Instantisticiu		C Door	(Hoav)		Carlos	
Realtek High Definition Audio D	Priver Setup (3.06) R2.51					
	InstallShield Wi	zard Complete				
				zaltek High Definition Audio Dri	ver. Before	
		The InstallShield Wizard has successfully installed Realtek High Definition Audio Driver. Before you can use the program, you must restart your computer.				
	Yes, I want to restart my computer now.					
	No, I will restart my computer later.					
	Remove any disks from their drives, and then click Finish to complete setup.					

# **Realtek LAN Controller Drivers Installation**

Follow the steps below to install the Realtek LAN drivers.

1. Insert the CD that comes with the system. Click *Intel*, then *LAN Card*, and then *Realtek Lan Controller Drivers*..



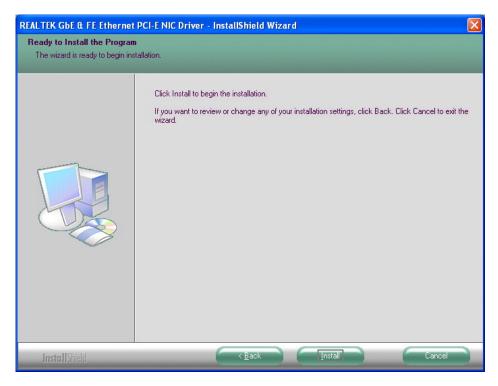
2. Click Realtek RTL8111E LAN Drivers.



3. When the Welcome screen of the **InstallShield Wizard** appears, click **Next** to continue.

REALTEK GbE & FE Ethernet PCI-E NIC Driver - InstallShield Wizard					
REALTEK GDE & FE Ethernet	PCI-E NIC Driver - InstallShield Wizard         Welcome to the InstallShield Wizard for REALTEK GbE & FE Ethernet PCI-E NIC Driver         The InstallShield Wizard will install REALTEK GbE & FE Ethernet PCI-E NIC Driver on your computer. To continue, click Next.				
InstallShield	Cancel				

4. When the InstallShieldWizard has finished installing the Realtek LAN drivers, click *Finish*.



# Appendix

~This page is intentionally left blank~