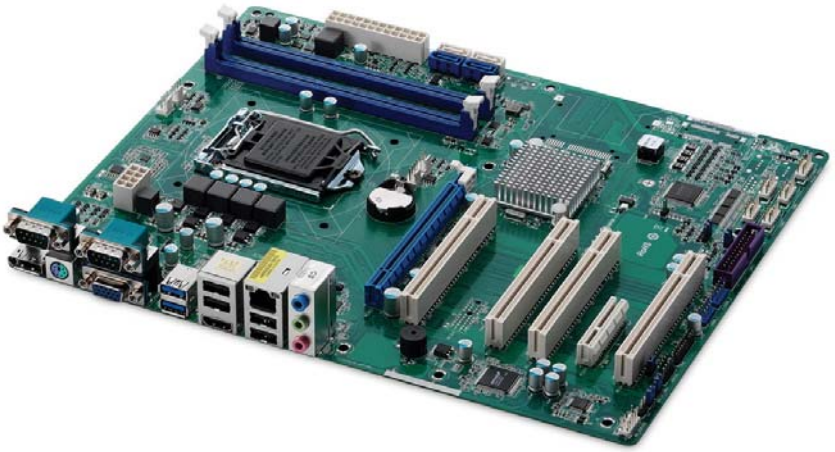
IMB-M42H

ATX Intel® Core™ i7/i5/i3
Industrial Motherboard

User's Manual



Manual Rev.:	2.00
Revision Date:	Sept. 30, 2014
Part No:	50-1X010-1000

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Revision History

Revision	Release Date	Description of Change(s)
2.00	Sept. 30, 2014	Initial Release

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Preface

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Conventions

Take note of the following conventions used throughout this manual to make sure that users perform certain tasks and instructions properly.



Additional information, aids, and tips that help users perform tasks.



Information to prevent ***minor*** physical injury, component damage, data loss, and/or program corruption when trying to complete a task.



Information to prevent ***serious*** physical injury, component damage, data loss, and/or program corruption when trying to complete a specific task.

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1 Introduction

NOTE:

With specification and BIOS updates, the content of this manual is subject to change without notice. Updated versions, as well as the latest CPU support lists are available at http://www.adlinktech.com
For technical support, please visit http://askanexpert.adlinktech.com/AAE/Answers.aspx for model-specific information.

1.1 Features

- ATX form factor (305 mm x 244 mm)
- 4th Generation Intel® Core™ i7/i5/i3/Pentium/Celeron processors in LGA1150 package support
- Dual-Channel DDR3 1600MHz, 2x 240-pin DIMM sockets, up to 16GB non-ECC unbuffered DIMMs support
- 1x PCIe x16 Gen2, 1x PCIe x4 Gen2, 4x PCI slots
- Single Intel Gigabit Ethernet (Intel® I217V Gigabit Ethernet PHY)
- 8x USB 2.0 ports/pin headers (4x faceplate, 4x onboard pin headers), 2x USB 3.0 ports (front panel)
- 2x SATA 6 Gb/s, 2x SATA 3 Gb/s ports
- VGA/Display Port/HDMI dual display
- 6x COM ports/pin headers (2x front panel, 4x onboard pin headers), COM1/2 support RS232/422/485, COM1 support RS-485 auto flow control
- Watchdog Timer, Hardware Monitor
- 1x 10-pin/2.54mm GPIO pin header: 4 in and 4 out, one ground pin and one power pin (5V/12V, jumper selected), API sample code ready
- 1x 25-pin/2.54mm printer port pin header
- 1x Mini-DIN for PS/2 keyboard/mouse
- RoHS compliant

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1.2 Specifications

System	
CPUs	• Intel® Core™ i7-4790S, 3.2GHz, 8MB Cache, 22nm, 65W TDP, LGA1150(4C/8T) • Intel® Core™ i7-4770S, 3.1GHz, 8MB Cache, 22nm, 65W TDP, LGA1150(4C/8T) • Intel® Core™ i5-4590S, 3.0GHz, 6MB Cache, 22nm, 65W TDP, LGA1150(4C/4T) • Intel® Core™ i5-4570S, 2.9GHz, 6MB Cache, 22nm, 65W TDP, LGA1150(4C/4T) • Intel® Core™ i3-4360, 3.7GHz, 4MB Cache, 22nm, 54W TDP, LGA1150(2C/4T) • Intel® Core™ i3-4330, 3.5GHz, 4MB Cache, 22nm, 54W TDP, LGA1150(2C/4T) • Intel® Core™ G3420, 3.2GHz, 3MB Cache, 22nm, 53W TDP, LGA1150(2C/2T) • Intel® Core™ G1820, 2.7GHz, 2MB Cache, 22nm, 53W TDP, LGA1150(2C/2T)
Chipset	H81
Memory	2 x Long-DIMM sockets support dual channel DDR3 1600 MHz SDRAM (up to 16GB)
BIOS	UEFI
Watch Dog Timer	Output from super I/O to drag RESETCON#, interval of 256 Segments, 0,1,2…255 Sec/Min.
Power Requirements	• ATX PWR (8 + 24) • AT : Direct PWR on as power input ready • ATX : Press button to PWR on after power input ready
I/O Interfaces	
SATA	Max transfer rates: • SATA2 (3.0Gb/S) • SATA3 (6.0Gb/S)

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Internal I/O	• 2x USB 2.0 pin headers (4 ports) • 4x RS-232 pin headers • 1x parallel port • 1x HD Audio pin header • 1x TPM pin header • 1x 10-pin/2.54mm GPIO pin header: 4 in and 4 out, one ground pin and one power pin (5V/12V, jumper selected), API sample code ready
Rear I/O	• VGA • HDMI • DisplayPort • Ethernet • 2 x USB 3.0, 4 x USB 2.0 • Mic-In • Line-Out • Line-In • 2 x RS-232/422/485 • Combo PS/2 • COM1 support for RS-485 auto flow control
Expansion Slots	• 1x PCI x4 • 1x PCIe x16 Gen2 • 1x PCIe x4 Gen2
Display	
Controller	Intel® HD Graphics
VRAM	Shared Memory
VGA	Max resolution 2048 x1536
HDMI	HDMI 1.4a, max resolution 1920x1200
DisplayPort	Max resolution 2560x1600
Multi-display	Dual display supported
Ethernet	
Controller	10/100/1000 Mbps via Intel® I217V
Ports	1 x RJ-45
Mechanical and Environment	
Form Factor	ATX Industrial Motherboard
Dimensions	305 L x 244 W mm (12 x 9.6 “)
Operating Temp.	0ºC to 60ºC

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1.3 Motherboard Topography

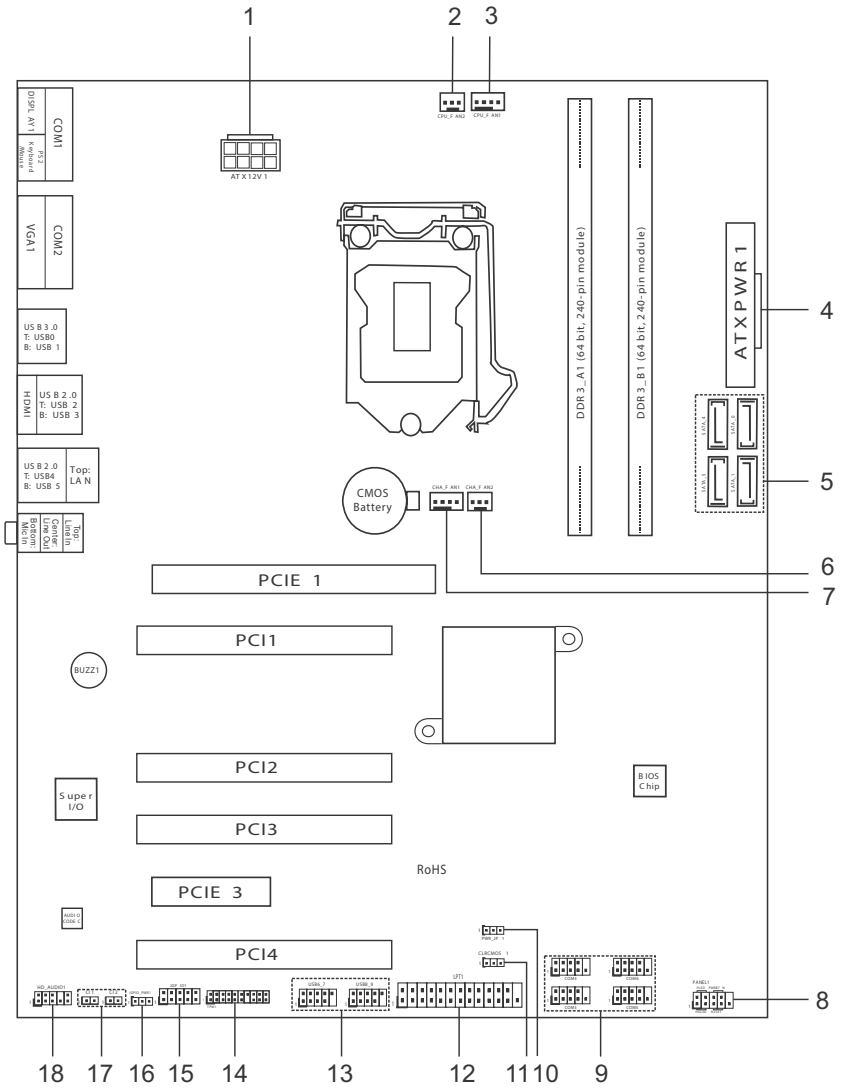


Figure 1-1: IMB-M42H Motherboard

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1	ATX 12V Power Connector
2	3-Pin CPU FAN Connector
3	4-Pin CPU FAN Connector
4	24-pin ATX Power Input Connector
5	SATA3 Connectors (SATA_0, SATA_1) SATA2 Connectors (SATA_4, SATA_5)
6	3-Pin Chassis FAN Connector
7	4-Pin Chassis FAN Connector
8	System Panel Header
9	COM3, 4, 5, 6 Headers (RS232)
10	ATX/AT mode Selection
11	Clear CMOS Header
12	Printer Port Header
13	USB2.0 Headers
14	TPM Header
15	Digital Input / Output Pin Header
16	Digital Input / Output Power Select
17	Chassis Intrusion Headers
18	Front Panel Audio Header

Table 1-1: IMB-M42H Motherboard Legend

1.4 I/O Panel

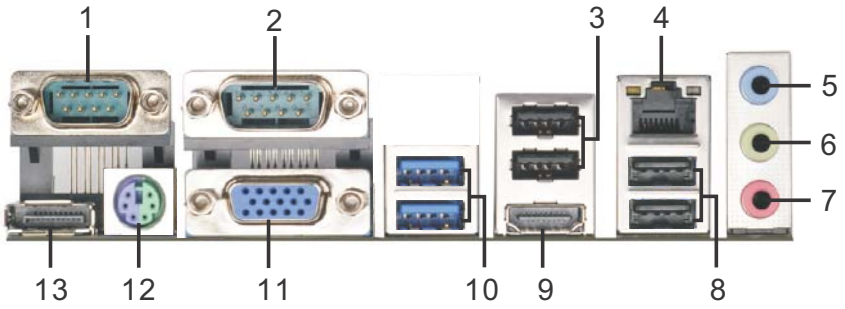


Figure 1-2: IMB-M42H I/O Panel

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1	COM Port (COM1)
2	COM Port (COM2)
3	USB 2.0 Ports (USB2_3)
4	LAN RJ-45 Port
5	Line In
6	Line Out
7	Mic In
8	USB 2.0 Ports (USB4_5)
9	HDMI Port (HDMI1)
10	USB 3.0 Ports (USB0_1)
11	D-Sub Port (VGA1)
12	PS/2 Mouse/Keyboard Port
13	DisplayPort (DP1)

Table 1-2: IMB-M42H I/O Legend

The IMB-M42H supports RS232/422/485 on COM ports 1 and 2, with pin definitions as follows, with both COM ports configurable in BIOS setup. See Appendix A, Super IO Configuration for details.

Pin	RS232	RS422	RS485
1	DCD, Data Carrier Detect	TX-	RTX-
2	RXD, Receive Data	RX+	N/A
3	TXD, Transmit Data	TX+	RTX+
4	DTR, Data Terminal Ready	RX-	N/A
5	GND	GND	GND
6	DSR, Data Set Ready	N/A	N/A
7	RTS, Request To Send	N/A	N/A
8	CTS, Clear To Send	N/A	N/A
9	No Power/+5V/+12V	N/A	N/A

Table 1-3: COM Port Pin Definitions

Two LEDs on either side of the RJ-45 LAN port indicate activity and speed as follows.

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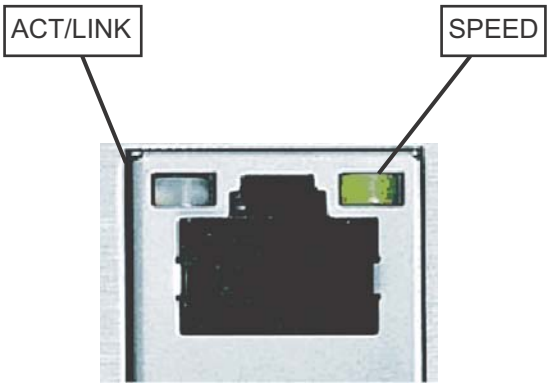


Figure 1-3: LAN Port LED Indicators

ACT/LINK	
Off	No Link
Blinking	Transmission Underway
Lit	Link

SPEED	
Off	10 Mb/s
Orange	100 Mb/s
Green	1 Gb/s

Table 1-4: LAN Port LED Legend

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2 Getting Started

2.1 Package Contents

Before unpacking, check the shipping carton for any damage. If the shipping carton and/or contents are damaged, inform your dealer immediately. Retain the shipping carton and packing materials for inspection. Obtain authorization from the dealer before returning any product to ADLINK.

- IMB-M42H ATX industrial motherboard
- I/O shield



- The IMB-M42H must be protected from static discharge and physical shock. Never remove any of the socketed parts except at a static-free workstation.
- Ensure the power supply is disconnected before installing or removing the motherboard to avoid physical injury and device damage
- To avoid damage from static electricity, never place the motherboard directly on carpet or similar surfaces
- Wear a grounded wrist strap when handling components
- Hold components by the edges and do not touch ICs
- Place uninstalled components on a grounded antistatic pad or the antistatic bag shipped with the component

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2.2 Mounting the motherboard

Mount the motherboard to the chassis with screws through the provided screw holes.

CAUTION:

Avoid over-tightening screws to prevent PCB damage.

2.3 Installing Memory Modules (DIMM)

The IMB-M42H provides two 240-pin DDR3 DIMM slots supporting Dual Channel Memory technology.

NOTE:

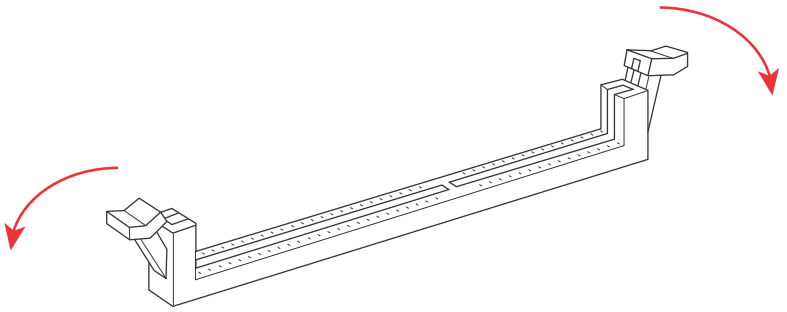
- Dual channel configuration requires installation of DDR3 DIMM pairs of identical brand, speed, size, and chip type.
- Dual Channel Memory technology is disabled when only one memory module is installed.

CAUTION:

- DDR or DDR2 memory modules cannot be installed in a DDR3 slot; motherboard and DIMM damage may result.
- Permanent damage to the motherboard and DIMM will result if the DIMM is forced into the slot in an incorrect orientation.

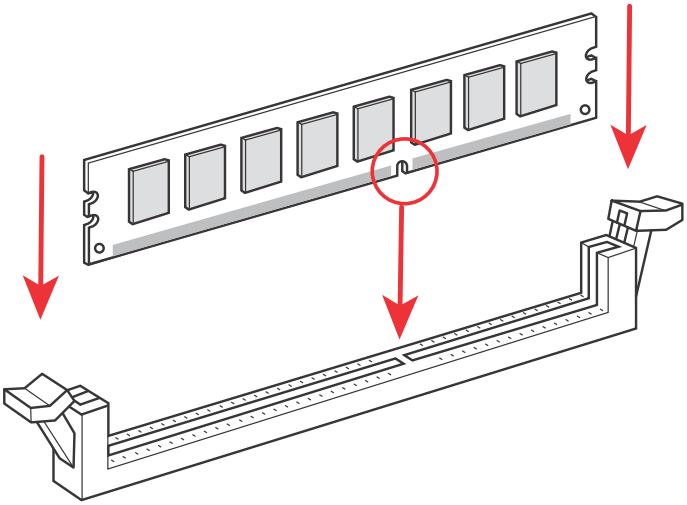
To install a memory module:

1. Locate the DIMM slots on the motherboard.
2. Press the slot's retaining clips outward to unlock.

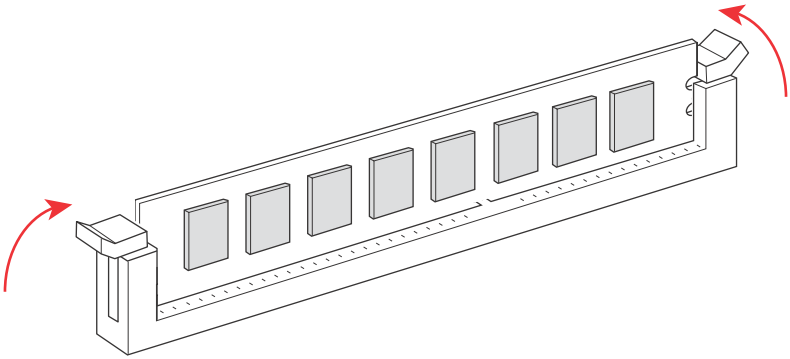


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3. Align the memory module on the socket, making sure that the module notch matches the slot rail.



4. Insert the module firmly into the slot until the retaining clips snap back inwards and the module is securely seated.



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2.4 Installing Expansion Cards (PCI and PCI Express)

The IMB-M42H provides:

- 4x PCI slots receiving expansion cards with 32-bit PCI interface
- 2x PCIE (PCI Express) slots, PCIE1 (PCIE x16 slot; blue) for PCI Express x16 lane width graphics cards, and PCIE3 (PCIE x4 slot; white) for PCI Express x4 lane width I/O cards

Before installing expansion cards, ensure the power supply is switched off or disconnected. Check the card's documentation and perform requisite system configurations before installation.

1. Remove the system unit cover (if the motherboard is installed in a chassis).
2. Remove the bracket facing the destination slot.
3. Align the card connector with the slot and press firmly until the card is securely seated.
4. Fix the card to the chassis with screws.
5. Replace the system cover.

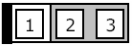
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2.5 Jumpers

Clear CMOS (CLCMOS)

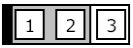
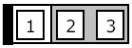
The CMOS RAM data contains the Date/Time and BIOS setting information. CMOS is powered by an onboard button cell battery. To erase the CMOS RAM data:

1. Power down and disconnect power from the system.
2. Short pins 2-3 on JP1.
3. Reconnect power and power up the system.
4. After power up, remove the jumper cap from pins 2-3 and reinstall it to pins 1-2.

RTC status	Connection	CLCMOS
Normal	1 – 2	
Clear CMOS	2 – 3	

AT/ATX Mode Jumper (PSON1)

Pin #	Signal
1	PSON_AT
2	FRP_PANSWUN
3	NC

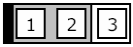
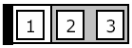
Status	Connection	JCLRT_C2
AT Mode	1 – 2	
ATX Mode	2 – 3 (default)	

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NOTE:

When setting "Resume from AC power lost " to "on" in BIOS, or setting jumper to "AT mode", short PWR_LOSS1 pin next to the PWR_JP1 if the power supply unit has slow electrical discharge.

Digital I/O Power Select (3-pin JGPIO_PWR1)

Status	Connection	JCLRT_C2
+12V	1 – 2	
+5V	2 – 3 (default)	

2.6 Onboard Headers and Connectors

CAUTION:

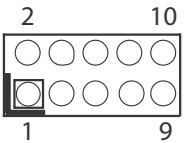
Do not place jumper covers over headers and connectors to avoid permanent damage.

NOTE:

For location on board, see Section 1.3 Motherboard Topography

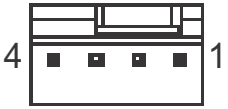
Digital I/O Pin Header (10-pin JGPIO1)

Pin	Signal	Pin	Signal
1	SIO_24	2	SIO_20
3	SIO_25	4	DSIO_21
5	SIO_26	6	SIO_22
7	SIO_27	8	SIO_23
9	JGPIO_PWR1	10	GND



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CPU Fan Connectors (4-pin CPU_FAN1)

Connect the CPU fan cable to the connector and match the black wire to the ground pin.	

Both 4-Pin (Quiet Fan) and 3-Pin CPU fan support are available, with or without fan speed control function. For 3-Pin CPU fan connection, use Pins 1-3, as shown.

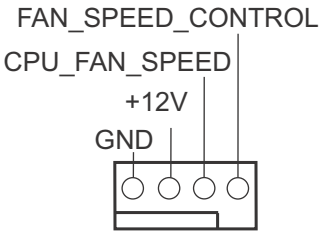
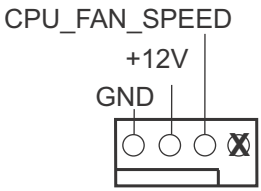
4-Pin Connection (CPU_FAN1)	3-Pin Connection (CPU_FAN2)
	

Table 2-1: CPU Fan Connection Options

System Fan Connectors

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Connect the fan cable to the fan connector and match the black wire to the ground pin.

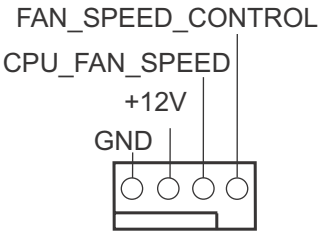
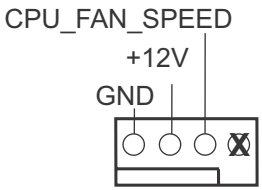
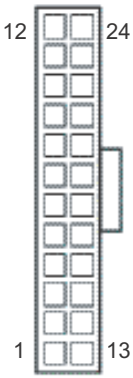
4-Pin Connection (CHA_FAN1)	3-Pin Connection (CHA_FAN2)
	

Table 2-2: System Fan Connection Options

ATX Power Input Connector (24-pin ATXPWR1)



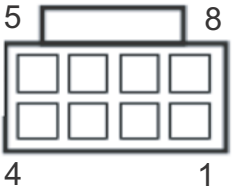
Please connect an ATX power supply to this connector.

NOTE: While a 24-pin ATX power connector is provided, conventional 20-pin ATX power supply is also supported.

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ATX 12V Power Input Connector (8-pin ATX12V1)

Please connect an ATX power supply to this connector.

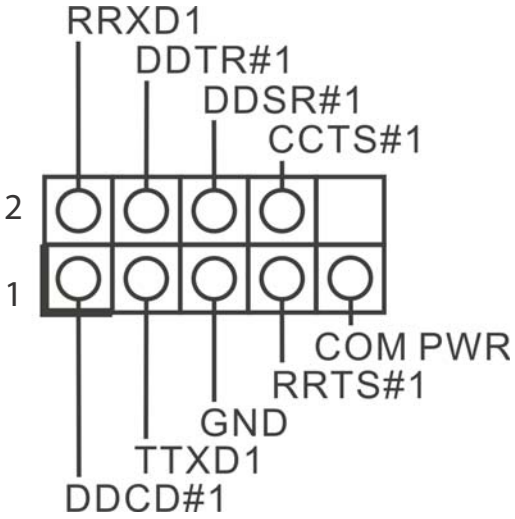


NOTE:

While an 8-pin ATX 12V power connector is provided, conventional 4-pin ATX power supply is also supported.

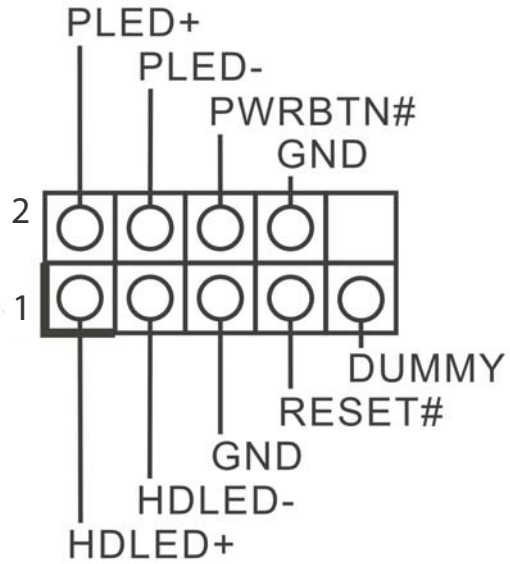
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COM3, 4, 5, 6 Headers (9-pin COM3/COM4/COM5/COM6)



System Panel Header (9-pin PANEL1)

Accommodates multiple front panel system functions.



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Connect the power switch, reset switch and system status indicator on the chassis to the header as follows. Note positive and negative pins positions before connecting the cables.

PWRBTN (Power Switch)	Connect to the power switch on the chassis front panel and configure as desired.
RESET (Reset Switch)	Connect to the reset switch on the chassis front panel.
PLED (System Power LED)	Connect to the power status indicator on the chassis front panel. The LED is lit when the system is operating, blinks when the system is in S1/S3 sleep state, and is unlit when the system is in S4 sleep state or powered off (S5).
HDLED (Hard Drive Activity LED)	Connect to the hard drive activity LED on the chassis front panel. The LED is lit when the hard drive is reading or writing data.

Table 2-3: Front Panel Connections

While front panel design and layout may differ by chassis, the panel conventionally has at least a power switch, reset switch, power LED, hard drive activity LED, and speaker. When connecting, ensure cable and pin assignments are matched correctly.

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SATA2 Connectors (SATA_4/SATA_5)



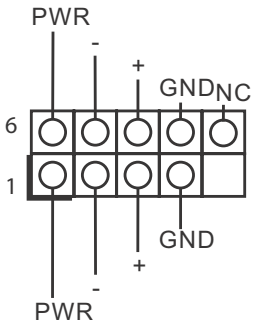
Enable Serial ATA2 data input at up to 3.0 Gb/s.

SATA3 Connectors (SATA_0/SATA_1)

Enable Serial ATA3 data input at up to 6.0 Gb/s.



USB 2.0 Headers (9-pin USB6_7/USB8_9))

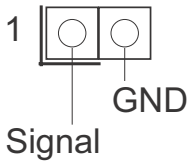


In addition to the four on the I/O panel, two USB 2.0 headers on the board each support two USB 2.0 ports.

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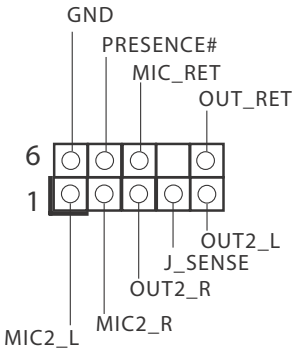
Chassis Intrusion Headers (2-pin CI1/CI2)

The motherboard supports CASE OPEN notification if the chassis is equipped with intrusion detection capability.



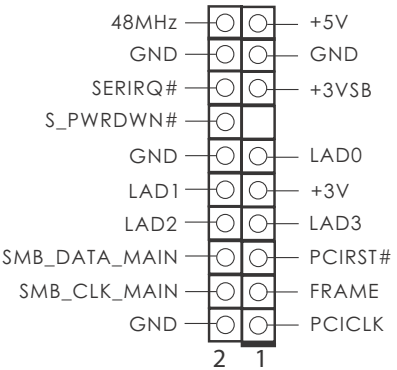
Front Panel Audio Header (9-pin HD_AUDIO1)

Provides front audio cable connection.



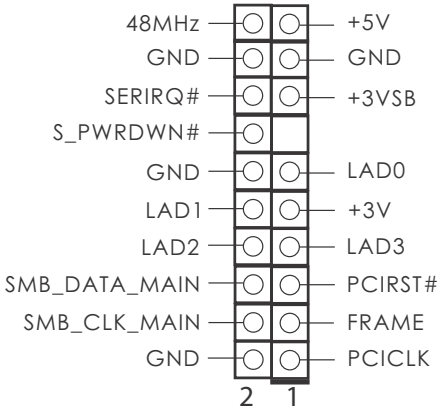
TPM Header (19-pin TPM1)

Supports the Trusted Platform Module (TPM) system storing keys, digital certificates, passwords, and data, enhancing network security, protecting digital identity, and ensuring platform integrity.



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Print Port Header (25-pin LPT1)



Enables convenient front panel connection of printer devices.

2.7 Driver Installation

Download the requisite drivers for your system from http://www.adlinktech.com and install.

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Appendix A - UEFI Setup Utility

A.1 Introduction

This section explains how to use the UEFI Setup Utility to configure 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. Select <F2> or <Del> during the Power-On-Self-Test (POST) to enter the UEFI Setup Utility, otherwise, POST will continue with its test routines.

To enter the UEFI Setup Utility after POST, restart the system by pressing <Ctl> + <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.



Because the UEFI software is frequently updated, the setup screens and descriptions provided are for reference only, and may not conform exactly with those displayed.

A.2 UEFI Menu Bar

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

Main	Configures system time/date information
Advanced	Sets up advanced UEFI features
H/W Monitor	Displays current hardware status
Boot	Sets default system device to locate and load OS
Security	Sets up security features
Exit	Exits the current screen or UEFI Setup Utility

Use arrow keys to choose among the selections on the menu bar, and select Enter to access the sub screen. The mouse can also be used to select items

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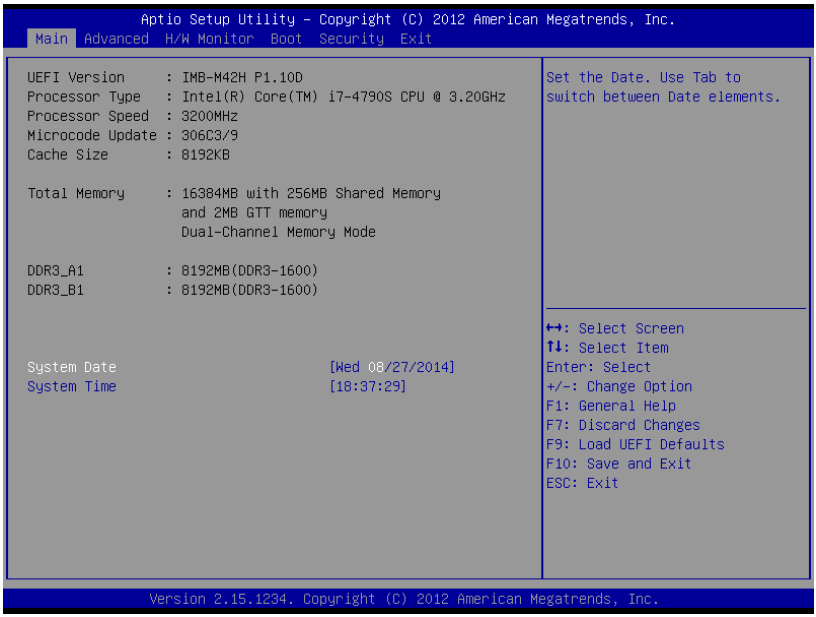
A.3 Navigation Keys

Key(s)	Function
R/L Arrow	Moves cursor left or right to select Menus
U/D Arrow	Moves cursor up or down to select items
+/-	Changes option for the selected item
Enter	Opens the selected Menu
F1	Displays General Help
F7	Discards changes
F9	Loads default values for all settings
F10	Saves changes and exits Setup
F12	Prints screen
ESC	Opens the Exit Menu or exits the current screen

Table A-1: Navigation Key Functions

A.4 Main Menu

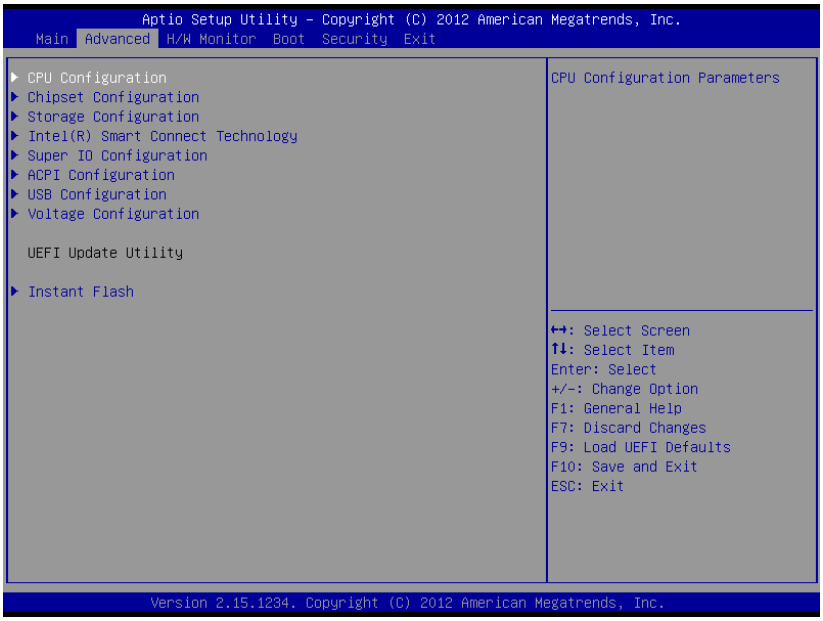
When UEFI Setup is started, the Main menu appears, displaying system overview.



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A.5 Advanced Menu

Accesses CPU Configuration, Chipset Configuration, Storage Configuration, Intel® Smart Connect Technology, Super IO Configuration, ACPI Configuration, USB Configuration, Voltage Configuration and Instant Flash settings.





Incorrect settings in this menu can cause serious malfunction

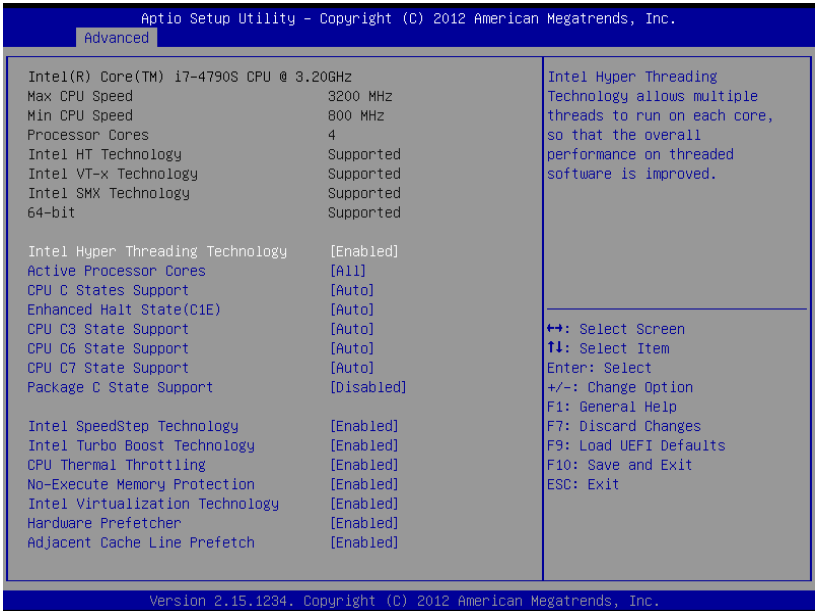
Instant Flash

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 launch this tool and save the new UEFI file to your USB flash drive, floppy disk or hard drive, 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

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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 UEFI update process completes.

A.6 CPU Configuration



Active Processor Cores

Selects the number of cores enabled in each processor package.

CPU C States Support

Enables CPU C States Support for power conservation, with C3, C6 and C7 recommended enabled for best results.

Enhanced Halt State (C1E)

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

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CPU C3 State Support

Enables C3 sleep state for lower power consumption.

CPU C6 State Support

Enables C6 deep sleep state for lower power consumption.

CPU C7 State Support

Enables C7 deep sleep state for lower power consumption.

Package C State Support

Enables CPU, PCIe, memory, graphics C State Support for power conservation.

Intel SpeedStep Technology

Intel's power saving technology, under which processors can switch between multiple frequencies and voltage points to conseve power saving, with default value Enabled. If you Windows® 7 / 8 is installed, to enableset to Enabled. Hidden if the current CPU does not support Intel SpeedStep technology.

Intel Turbo Boost Technology

Enables or disables Intel Turbo Boost Mode, which allows processor cores to run faster than marked frequency in specific conditions, with default Enabled.

CPU Thermal Throttling

Enables CPU internal thermal control to prevent CPU overheating.

No-Execute Memory Protection

Enhancement to the IA-32 Intel Architecture, preventing data page use by malicious software to execute codes, hidden if the current CPU does not support No-Excute Memory Protection.

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Intel Virtualization Technology

When enabled, VMM (Virtual Machine Architecture) utilizes additional hardware capabilities provided by Vanderpool Technology, hidden if the installed CPU does not support Intel Virtualization Technology.

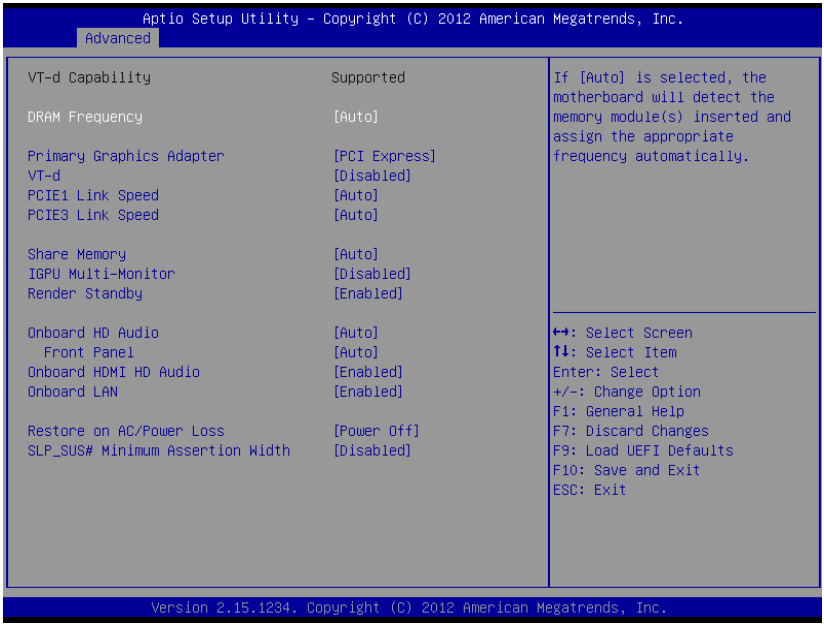
Hardware Prefetcher

Turns MLC streamer prefetcher on and off.

Adjacent Cache Line Prefetch

Turns prefetching of adjacent cache lines on and off.

A.7 Chipset Configuration



DRAM Frequency

If Auto is selected, installed memory module(s) are detected and assigned appropriate frequency.

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Primary Graphics Adapter

Onboard, PCI, or PCI Express can be selected as boot graphic adapter priority, with default PCI Express.

VT-d

Enables/disables Intel® VT-d technology (Intel® Virtualization Technology for Directed I/O), with default Disabled.

PCIE1 Link Speed

Selects link speed for PCIE1.

PCIE3 Link Speed

Selects link speed for PCIE3.

Share Memory

Configure the size of memory allocated to the integrated graphics processor when the system boots.

IGPU Multi-Monitor

Disable deactivates integrated graphics when an external graphics card is installed, Enable maintains integrated graphics function at all times.

Render Standby

Enables/disables Render Standby by Internal Graphics Device, default is Enabled.

Onboard HD Audio

Auto disables onboard HD Audio when a PCI Sound Card is installed.

Front Panel

Auto enables or disables onboard Front Panel HD Audio.

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Onboard HDMI HD Audio

Enables/disables onboard HDMI HD Audio.

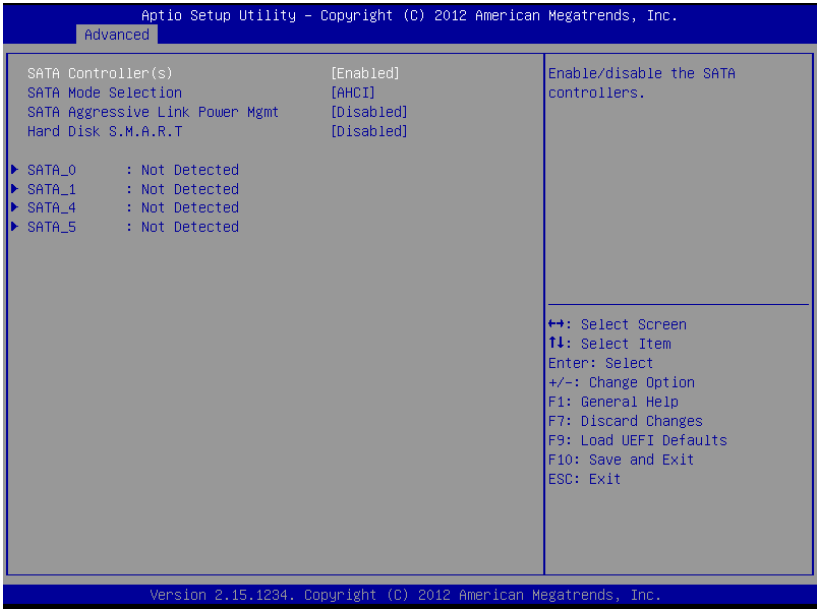
Onboard LAN

Enables/disables onboard LAN feature.

Restore on AC/Power Loss

Sets power resume state after AC power loss, with Power Off maintaining power off on resume, Power On booting the system upon resume.

A.8 Storage Configuration



SATA Controller(s)

Enables/disables SATA Controller.

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SATA Mode Selection

Selects SATA mode, from IDE, AHCI (default), and Disabled.

AHCI (Advanced Host Controller Interface) supports NCQ and other features to improve SATA disk performance, IDE mode does not.

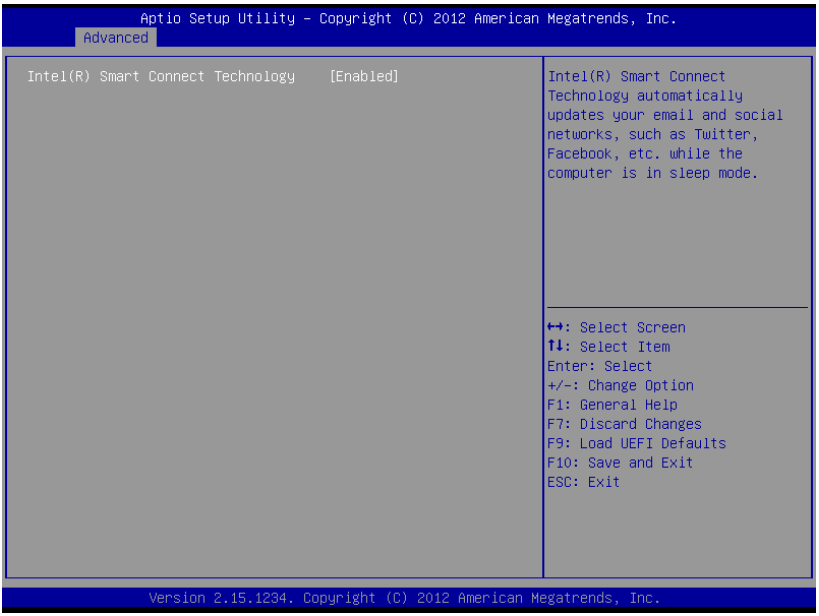
SATA Aggressive Link Power Mgmt

Configures SATA Aggressive Link Power Management.

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

Enables/disables S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) feature.

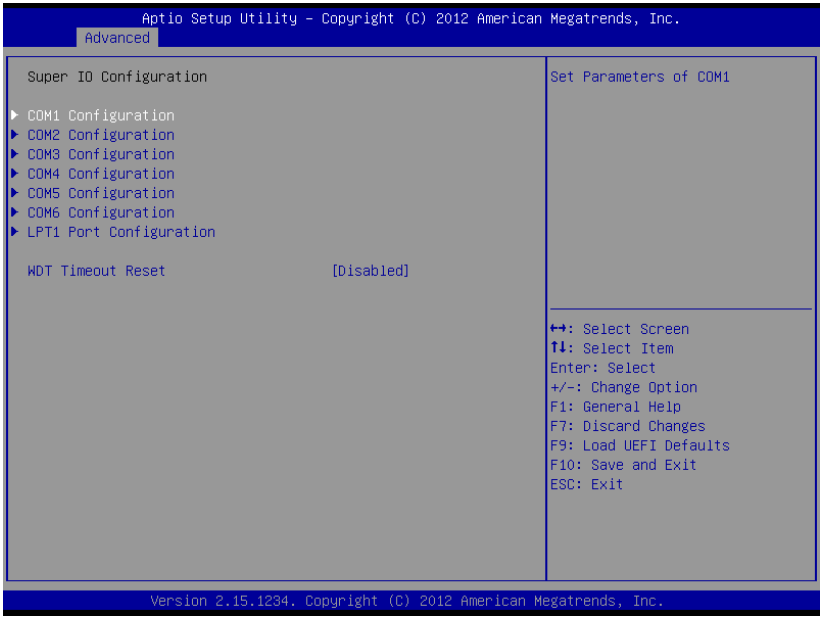
A.9 Intel® Smart Connect Technology



Enables/disables Intel® Smart Connect Technology, for auto-updates of email and social network applications, while in sleep mode, with default is Enabled.

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A.10 Super IO Configuration



COM1 Configuration

Sets parameters for COM1, from port type [RS232], [RS422] or [RS485].

COM2 Configuration

Sets parameters for COM2, from port type [RS232], [RS422] or [RS485].

COM3 Configuration

Sets parameters for COM3.

COM4 Configuration

Sets parameters for COM4.

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COM5 Configuration

Sets parameters for COM5.

COM6 Configuration

Sets parameters for COM6.

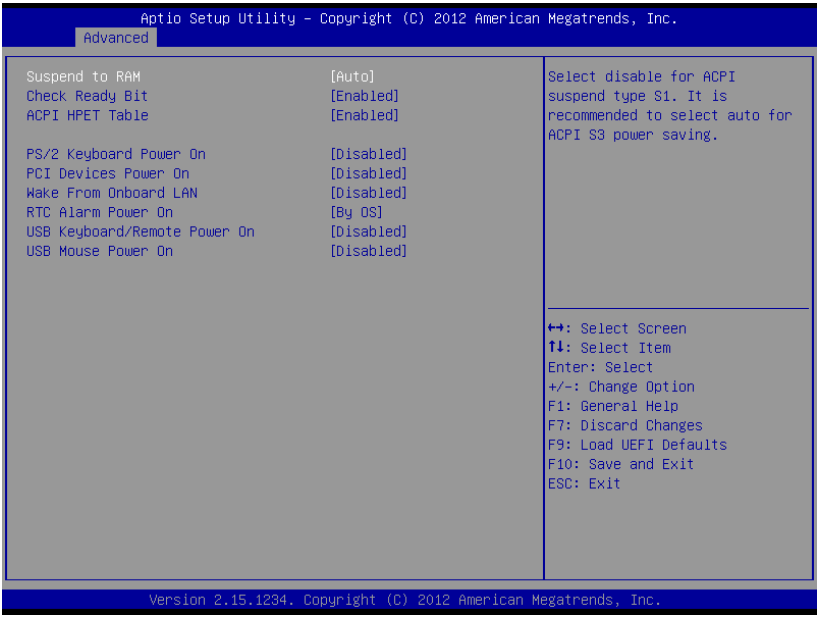
LPT1 Port Configuration

Sets parameters for the onboard parallel port.

WDT Timeout Reset

Enables/disables Watch Dog Timer timeout to reset system, with default Disabled.

A.11 ACPI Configuration



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Suspend to RAM

Selects auto-detect or disable for Suspend-to-RAM, with default of Auto, if OS supports.

Check Ready Bit

Enables/disables Check Ready Bit.

ACPI HPET Table

Enables/disables ACPI HPET Table, with default Enabled, to be set when Windows® certification is to be submitted.

PS/2 Keyboard Power On

Enables/disables PS/2 keyboard power on when in power-soft-off mode.

PCI Devices Power On

Enables/disables PCI device power on from power-soft-off mode.

Wake From Onboard LAN

Enables/disables Wake From Onboard LAN.

RTC Alarm Power On

Enables/disables RTC (Real Time Clock) power on.

USB Keyboard/Remote Power On

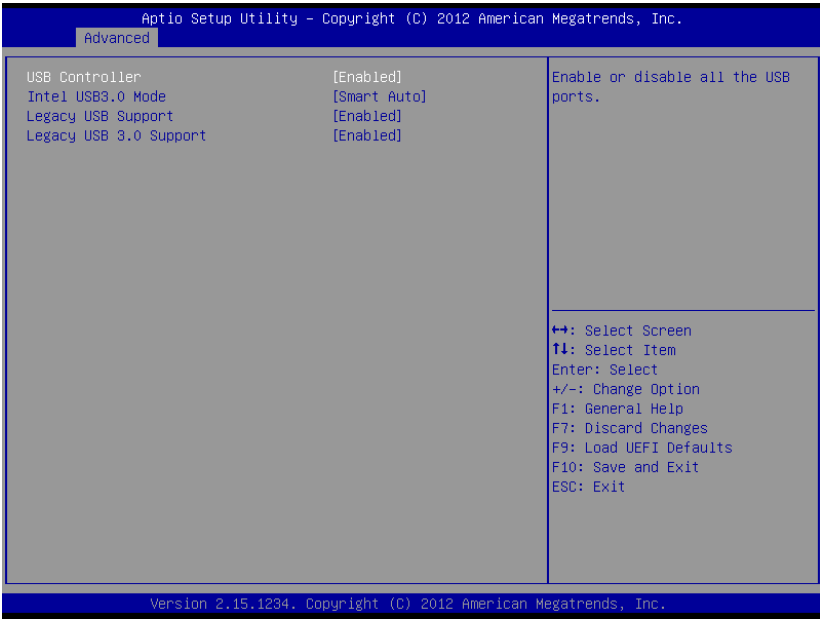
Enables/disables USB keyboard/remote power on.

USB Mouse Power On

Enables/disables USB mouse power on.

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A.12 USB Configuration



USB Controller

Enables/disables the USB controller.

Intel USB 3.0 Mode

Enables/disables Intel USB 3.0 mode.

Legacy USB Support

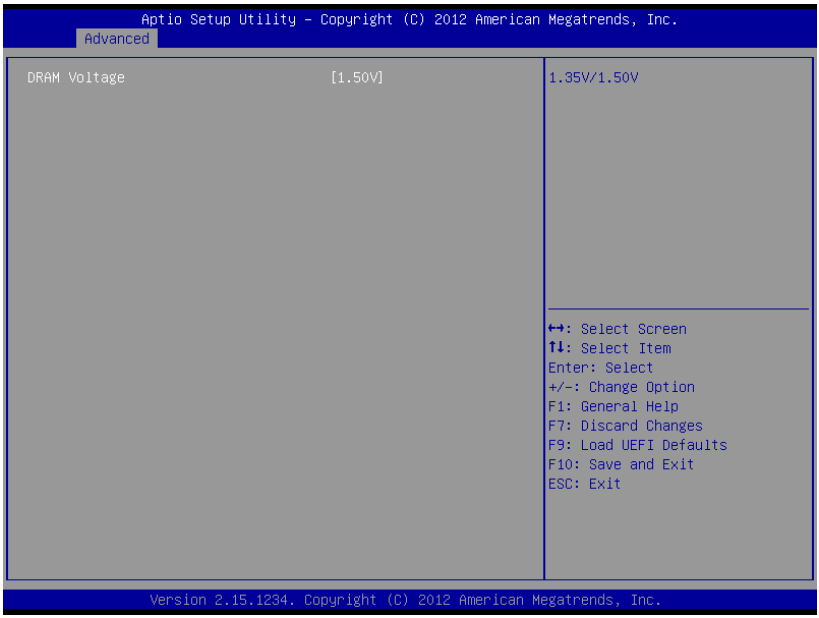
Selects legacy support for USB devices, from default Enabled, supporting legacy USB, Auto, supporting legacy USB when devices are connected, and Disabled (if USB compatibility issues occur, it is recommended to select Disabled to enter OS), and UEFI Setup Only, in which USB devices are allowed only under UEFI setup and Windows/Linux OS.

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Legacy USB 3.0 Support

Enables/disables legacy support for USB 3.0 devices, with default Enabled.

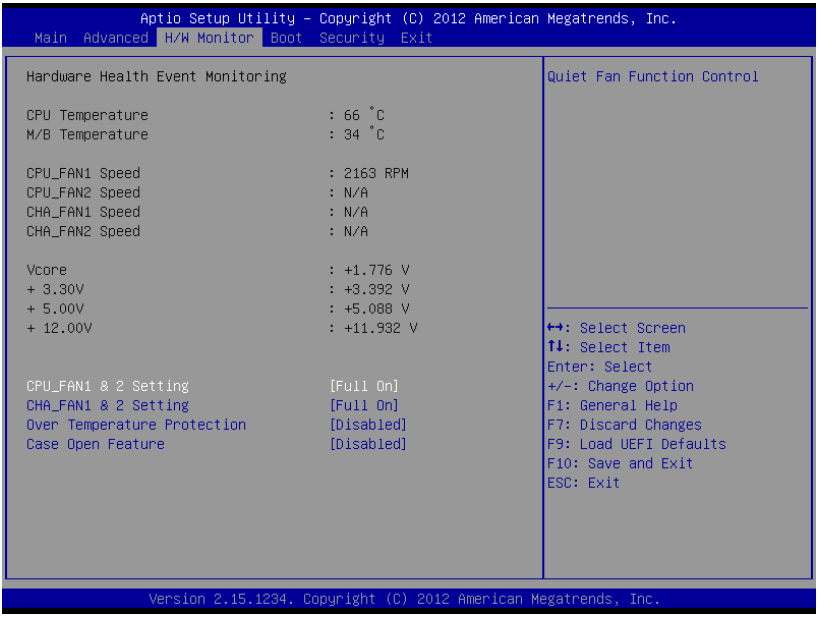
A.13 Voltage Configuration



Selects DRAM Voltage, with default 1.50V.

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A.14 Hardware Health Event Monitoring



In addition to monitoring current CPU, fan(s), and voltage status, the following settings can be configured.

CPU_FAN1 & 2 Setting

Sets speed for CPU fans 1 & 2, from Full On (default) and Automatic.

CHA_FAN1 & 2 Setting

Sets speed for chassis fans 1 & 2, from Full On (default) and Automatic.

Over Temperature Protection

Enables/disables Over Temperature Protection, with default Enabled.

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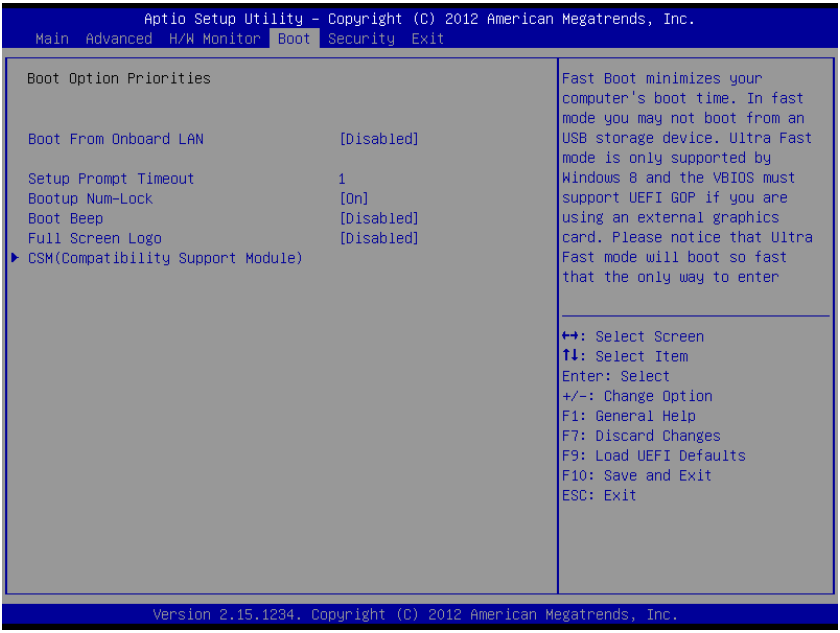
Case Open Feature

Enables/disables case open detection with default Disabled.

Clear Status

Appears only when a case opening has been detected. Clears the record of previous chassis intrusion notifications.

A.15 Boot



Boot From Onboard LAN

Enables/disables Boot From Onboard LAN.

Setup Prompt Timeout

Displays the number of seconds to wait for setup activation key, with 65535(0XFFFF) indicating indefinite wait.

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Bootup Num-Lock

When set to [On], automatically activates Num Lock keypad following boot.

Boot Beep

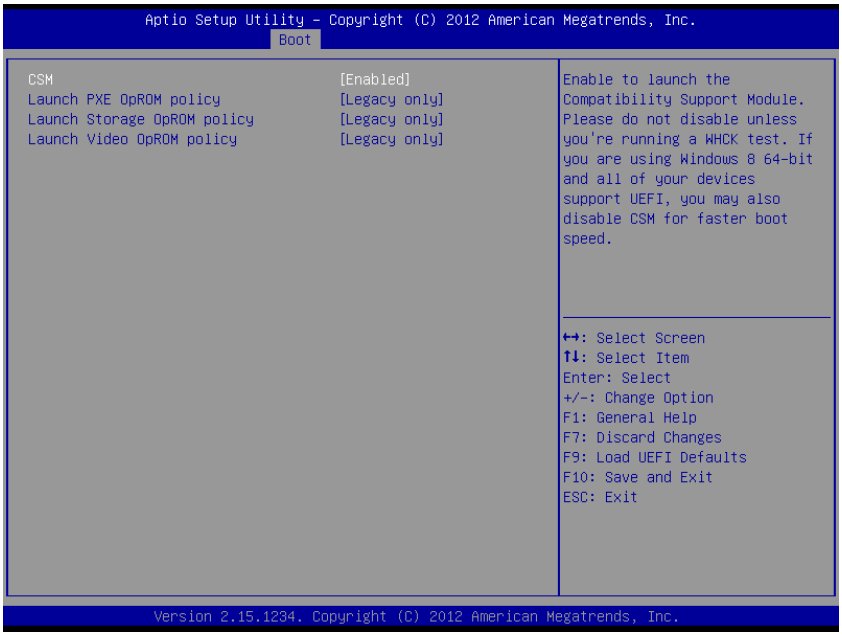
Enables/disables Boot Beep, available only when a chassis buzzer is installed.

Full Screen Logo

Enables/disables OEM Logo, with default Enabled.

CSM

Must be disabled when Fast Boot is enabled, with default Enabled. When Enabled, opens CSM submenu.



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Enable to launch the Compatibility Support Module. Only disable when running a WHCK test. If OS is Windows® 8 64-bit and all devices support UEFI, CSM can be disabled for faster boot.

Launch PXE OpROM Policy

Enables UEFI to run those devices that support UEFI option ROM only. Selecting Legacy enables only devices that support legacy option ROM only.

Launch Storage OpROM Policy

Enables UEFI to run those devices that support UEFI option ROM only. Selecting Legacy enables only devices that support legacy option ROM only.

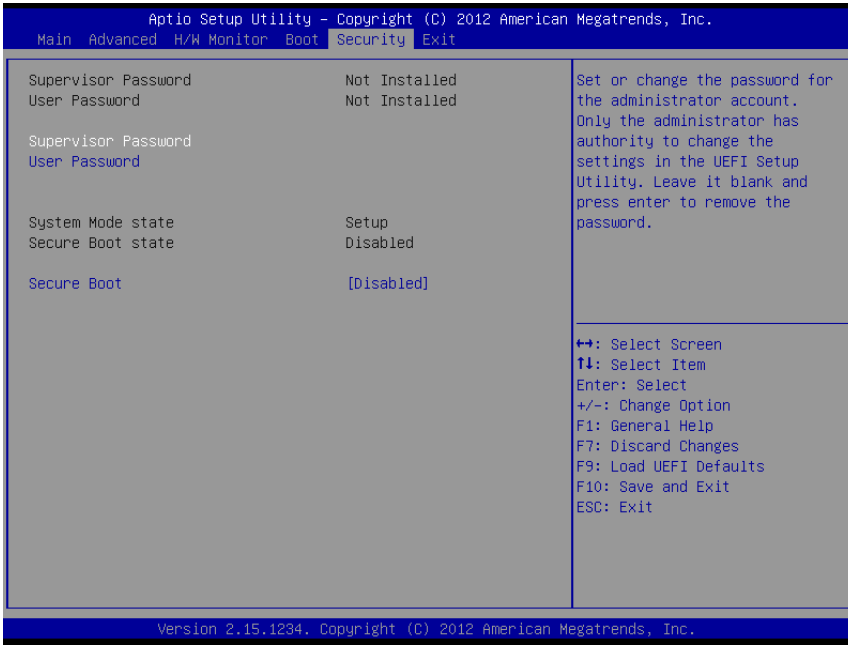
Launch Video OpROM Policy

Enables UEFI to run those devices that support UEFI option ROM only. Selecting Legacy enables only devices that support legacy option ROM only.

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A.16 Security

In addition to setting, changing, or clearing supervisor/user password for the system, this menu provides the following settings.

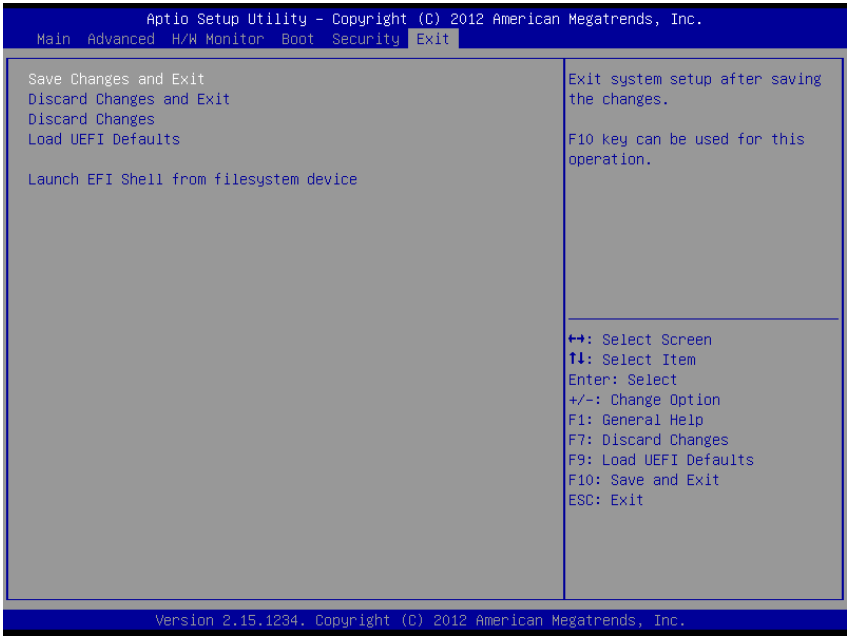


Secure Boot

Enables/Disables Secure Boot, with default Disabled.

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A.17 Exit



Save Changes and Exit

Generates confirmation prompt. Selecting OK saves changes and exits.

Discard Changes and Exit

Generates confirmation prompt. Selecting OK exits without saving any changes.

Discard Changes

Generates confirmation prompt. Selecting OK discards all changes.

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Important Safety Instructions

For user safety, please read and follow all **instructions**, **WARNINGS**, **CAUTIONS,** and **NOTES** marked in this manual and on the associated equipment before handling/operating the equipment.

- Read these safety instructions carefully.
- Keep this user's manual for future reference.
- Read the specifications section of this manual for detailed information on the operating environment of this equipment.
- When installing/mounting or uninstalling/removing equipment:
  - Turn off power and unplug any power cords/cables.
- To avoid electrical shock and/or damage to equipment:
  - Keep equipment away from water or liquid sources;
  - Keep equipment away from high heat or high humidity;
  - Keep equipment properly ventilated (do not block or cover ventilation openings);
  - Make sure to use recommended voltage and power source settings;
  - Always install and operate equipment near an easily accessible electrical socket-outlet;
  - Secure the power cord (do not place any object on/over the power cord);
  - Only install/attach and operate equipment on stable surfaces and/or recommended mountings; and,
  - If the equipment will not be used for long periods of time, turn off and unplug the equipment from its power source.

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- Never attempt to fix the equipment. Equipment should only be serviced by qualified personnel.

A Lithium-type battery may be provided for uninterrupted, backup or emergency power.



Risk of explosion if battery is replaced with one of an incorrect type. Dispose of used batteries appropriately.

- Equipment must be serviced by authorized technicians when:
  - The power cord or plug is damaged;
  - Liquid has penetrated the equipment;
  - It has been exposed to high humidity/moisture;
  - It is not functioning or does not function according to the user's manual;
  - It has been dropped and/or damaged; and/or,
  - It has an obvious sign of breakage.

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Getting Service

Contact us should you require any service or assistance.

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Email: info@adlinktech.com

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