AEMNM10-876

Intel® Atom D2550

Mini-ITX Motherboard

User's Manual

Version 1.2

Date: 2012.11

Nematron®

Open minds. Open systems. Real solutions.

Contents

Copyright Notice

Trademarks

Revision History

Revision	Revision History	Date
V1.2	For PCB v1.x	2012/11

Safety Instructions

- Always read the safety instructions carefully.
- Keep this User's Manual for future reference.
- Keep this equipment away from humidity.

- Lay this equipment on a reliable flat surface before setting it up.
- The openings on the enclosure are for air convection hence protects the equipment from overheating. DO NOT COVER THE OPENINGS.
- Make sure the voltage of the power source and adjust properly 110/220V before connecting the equipment to the power inlet.
- Place the power cord such a way that people can not step on it. Do not place anything over the power cord.
- Always Unplug the Power Cord before inserting any add-on card or module.
- All cautions and warnings on the equipment should be noted.
- Never pour any liquid into the opening that could damage or cause electrical shock.
- If any of the following situations arises, get the equipment checked by service personnel:
  - The power cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment does not work well or you can not get it work according to User's Manual.
  - The equipment has dropped and damaged.
  - The equipment has obvious sign of breakage.
- DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT UNCONDITIONED, STORAGE TEMPERATURE ABOVE 60℃ (140℃), IT MAY DAMAGE THE EQUIPMENT.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

警告使用者: 这是甲类信息产品，在居住的环境中使用时，可能会造成无线电干扰，在这种情况下，使用者会被要求采取某些适当的对策。

废电池请回收

For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

CE Conformity

Hereby, we declare that this device is in compliance with the essential safety requirements and other relevant provisions set out in the European Directive.

FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the measures listed below:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2

Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

VOIR LANOTICE D'INSTALLATION AVANT DE RACCORDER AU RESEAU.

This device complies with Part 15 of the FCC Rules. Operation is subject to

the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

WEEE Statement

Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.

Chapter 1 Overview

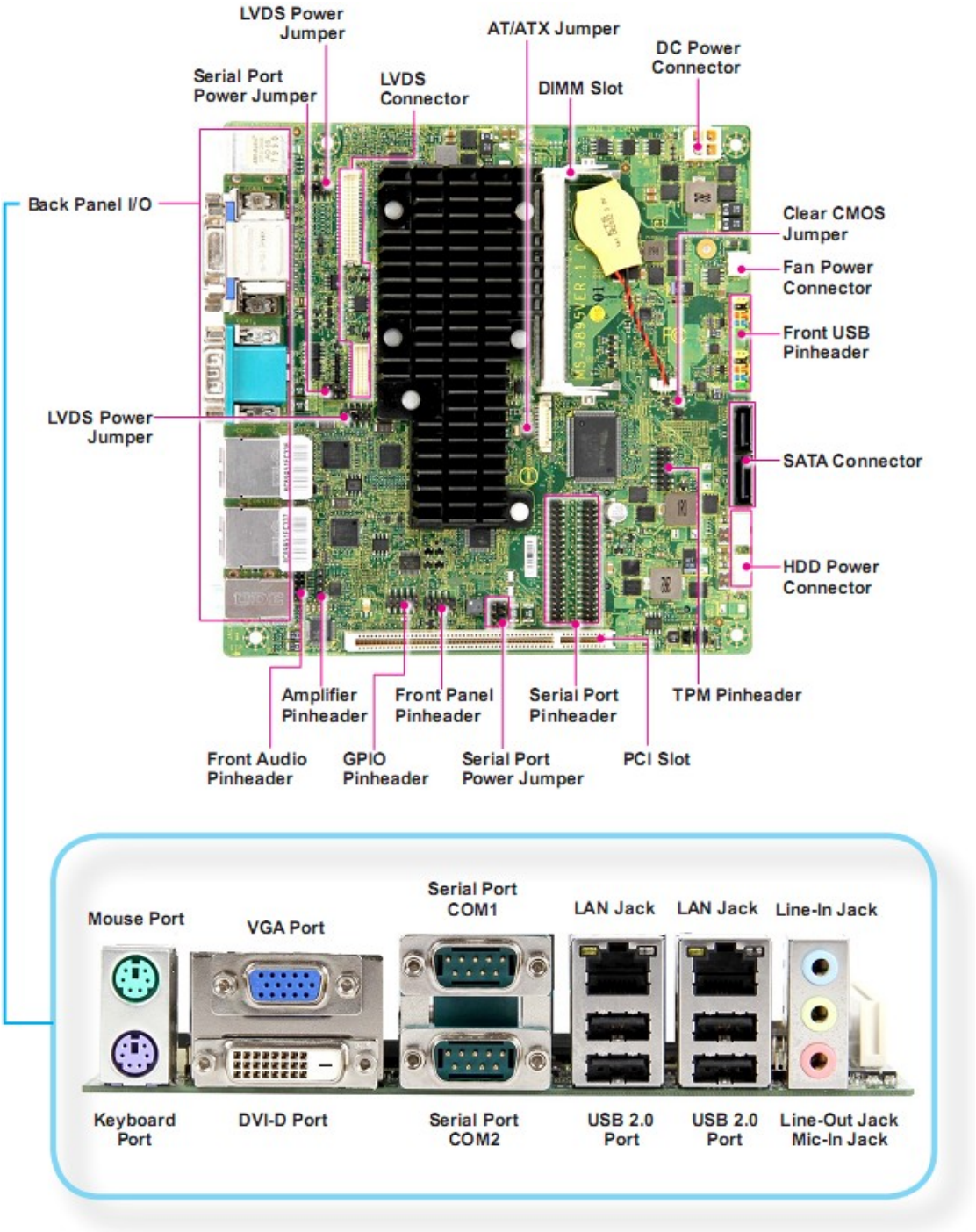
Thank you for choosing the AEMNM10-876, an excellent industrial computer board.
Based on the innovative **Intel® NM10** chipset for optimal system efficiency, the AEMNM10-876 accommodates the **Intel® Cedarview-M / Cedarview-D** processor and supports up to 1 DDR3 1066MHz Non-ECC SO- DIMM slot to provide the maximum of 4GB memory capacity.
In the advanced-level and mid-range market segment, the AEMNM10-876 provides a high-performance solution for today's front-end and general purpose workstation, as well as in the future.

Mainboard Specifications

CPU Chipset	● Intel Cedarview-D D2550 / Cedarview-M N2800 / Cedarview-M N2600 processor
	● North Bridge: integrated with CPU ● South Bridge: Intel NM10 chipset
Memory	● 1 DDR3 1066MHz Non-ECC SO-DIMM slot ● Supports the maximum of 4GB for D2550 / N2800 ● Supports the maximum of 2GB for N2600
LAN	● 2 Intel 82574L GbE controllers for D2550 / N2800 ● 1 Intel 82574L GbE controller for N2600
Storage	● 2 SATA 3Gb/s ports by Intel NM10 chipset ● 1 Mini-PCIe slot for mSATA
Audio	● HDA Codec by Realtek® ALC887 or ALC886 ● Compliant with Azalia 1.0 specs ● With amplifier
Graphics	● Intel 3650 series / 3600 series integrated Graphics Engine ● Resolution up to 1920 x 1200 pixels
Back Panel I/O	● 1 PS/2 mouse port ● 1 PS/2 keyboard port ● 1 VGA port ● 1 DVI-D port ● 2 serial ports

	● 2 Gigabit LAN jacks ● 4 USB 2.0 ports for D2550 / N2800 ● 2 USB 2.0 ports for N2600 ● 1 Line-In audio jack ● 1 Line-Out audio jack ● 1 Mic-In audio jack
Onboard Connectors / Pinheaders / Jumpers	● 2 USB 2.0 pinheaders (4 ports) ● 1 amplifier pinheader ● 8 serial port pinheaders for D2550 ● 4 serial port pinheaders for N2800 / N2600 ● 1 GPIO pinheader ● 2 LVDS connectors ● 1 front audio pinheader ● 1 TPM pinheader ● 1 clear CMOS jumper ● 1 AT/ATX select jumper ● 4 serial port power jumpers ● 2 backlight pinheader & LVDS power jumpers
Slot	● 1 PCI slot (supports -12V) ● 1 Mini-PCIe slot
Form Factor	● Mini-ITX: 170mm x 170mm
Environ- mental	● Operating Temperature: 0oC to 60oC ● Storage Temperature: -20oC to 80oC ● Humidity: 0% ~ 90% RH, non-condensing

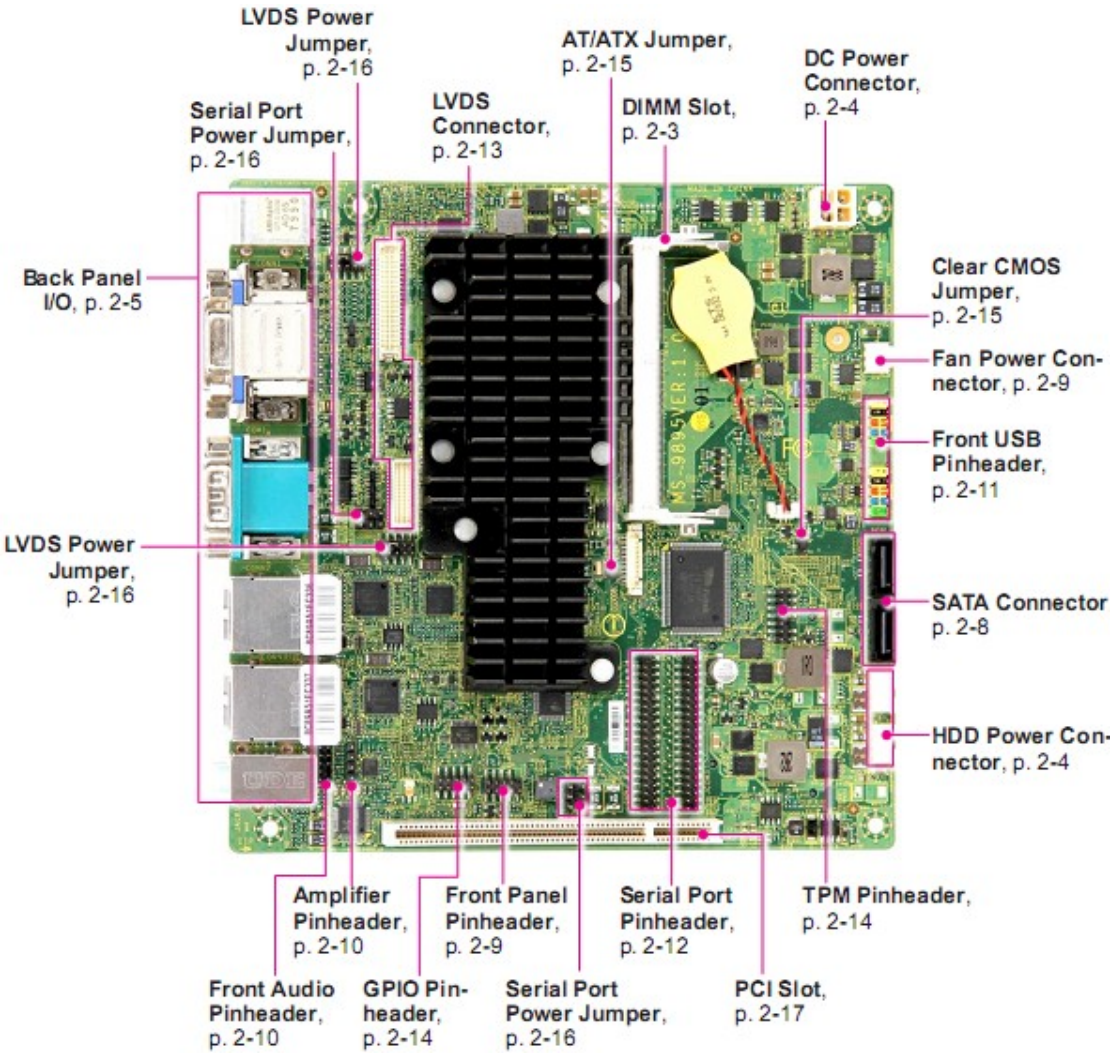
Mainboard Layout



Chapter 2 Hardware Setup

This chapter provides you with the information on mainboard hardware configurations. Incorrect setting of jumpers and connectors may damage your mainboard. Please pay special attention not to connect these headers in wrong direction. DO NOT adjust any jumper while the mainboard is powered on.

Quick Components Guide



Memory

Installing Memory Modules

1. Locate the SO-DIMM slot. Align the notch on the DIMM with the key on the slot and insert the DIMM into the slot.
2. Push the DIMM gently downwards until the slot levers click and lock the DIMM in place.
3. To uninstall the DIMM, flip the slot levers outwards and the DIMM will be released instantly.

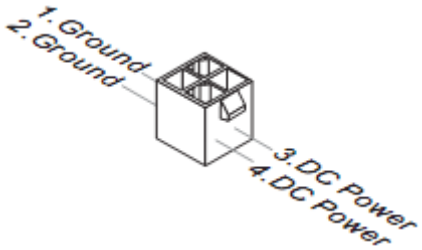
Important

You can barely see the golden finger if the memory module is properly inserted in the DIMM slot.

Power Supply

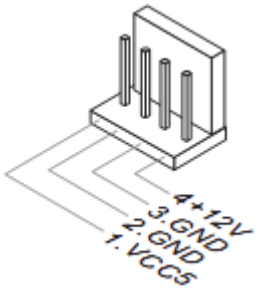
DC Power Connector: JPWR1

This connector provides 12/19/24V DC power input.



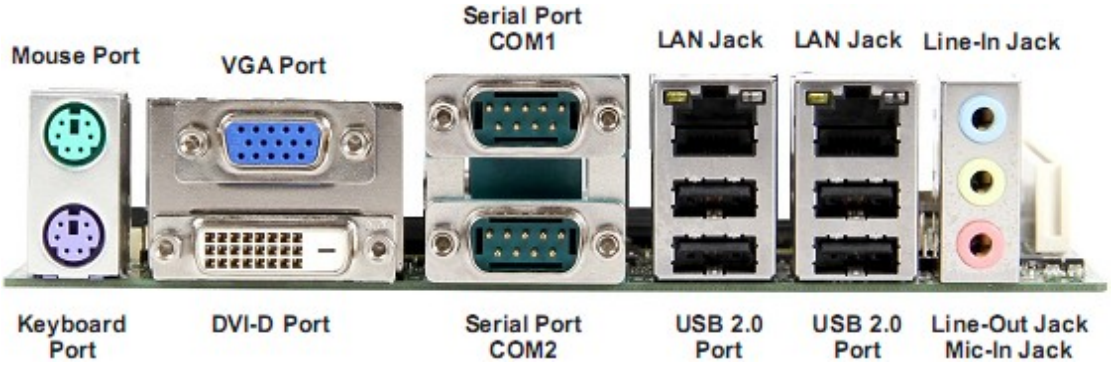
HDD Power Connector: JHDDPWR1, JHDDPWR2

This connector provides power to SATA hard drives.

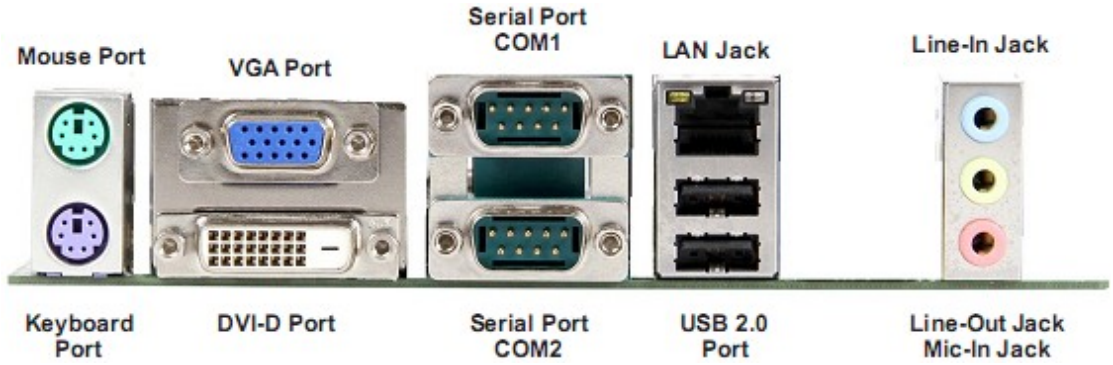


Back Panel I/O

D2550 / N2800



N2600



- **Mouse/Keyboard Port**

The standard PS/2 mouse/keyboard DIN connector is for a PS/2 mouse / keyboard.

- **VGA Port**

The DB15-pin female connector is provided for monitor.

- **DVI-D Port**

The DVI-D (Digital Visual Interface-Digital) connector allows you to connect an LCD monitor. It provides a high-speed digital interconnection between the computer and its display device. To connect an LCD monitor, simply plug your monitor cable into the DVI connector, and make sure that the other end of the cable is properly connected to your monitor (refer to your monitor manual for more information.)

- **COM1: RS-232/422/485 Serial Port (Optional)**

The serial port is a 16550A high speed communications port that sends / receives 16 bytes FIFOs. You can attach a serial mouse or other serial devices directly to the connector.

RS-232

PIN	SIGNAL	DESCRIPTION
1	DCD	Data Carrier Detect
2	RXD	Receive Data
3	TXD	Transmit Data
4	DTR	Data Terminal Ready
5	GND	Signal Ground
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	VCC_COM1	Voltage select setting by jumper

RS-422

PIN	SIGNAL	DESCRIPTION
1	422 TXD-	Transmit Data, Negative
2	422 RXD+	Receive Data, Positive
3	422 TXD+	Transmit Data, Positive
4	422 RXD-	Receive Data, Negative
5	GND	Signal Ground
6	NC	No Connection
7	NC	No Connection
8	NC	No Connection
9	NC	No Connection

RS-485

PIN	SIGNAL	DESCRIPTION
1	485 TXD-	Transmit Data, Negative
2	NC	No Connection
3	485 TXD+	Transmit Data, Positive
4	NC	No Connection
5	GND	Signal Ground
6	NC	No Connection
7	NC	No Connection
8	NC	No Connection

9	NC	No Connection

➢ **COM2: RS-232 Serial Port**

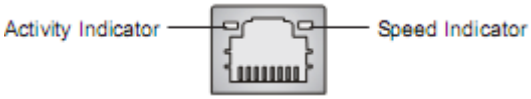
The serial port is a 16550A high speed communications port that sends/ receives 16 bytes FIFOs. You can attach a serial mouse or other serial devices directly to the connector.

➢ **USB 2.0 Port**

The USB 2.0 port is for attaching USB devices such as keyboard, mouse, or other USB compatible devices. It supports data transfer rate up to 480Mbit/s (Hi-Speed).

➢ **LAN**

The standard RJ-45 LAN jack is for connection to the Local Area Network (LAN). You can connect a network cable to it.



		Left LED (Active LED)	**Right LED (100M/1000M Speed LED)**
LED Color		**Yellow**	**Green/Orange**
10M Cable Plug-in	**No Transmission**	Yellow (Lighting)	OFF
	Transmission	Yellow (Blinking)	OFF
100M Cable Plug-in	**No Transmission**	Yellow (Lighting)	Green (Lighting)
	Transmission	Yellow (Blinking)	Green (Lighting)
1000M Cable Plug-in	**No Transmission**	Yellow (Lighting)	Orange (Lighting)
	Transmission	Yellow (Blinking)	Orange (Lighting)
In S3/S4/S5 Standby State		Yellow (Lighting)	OFF

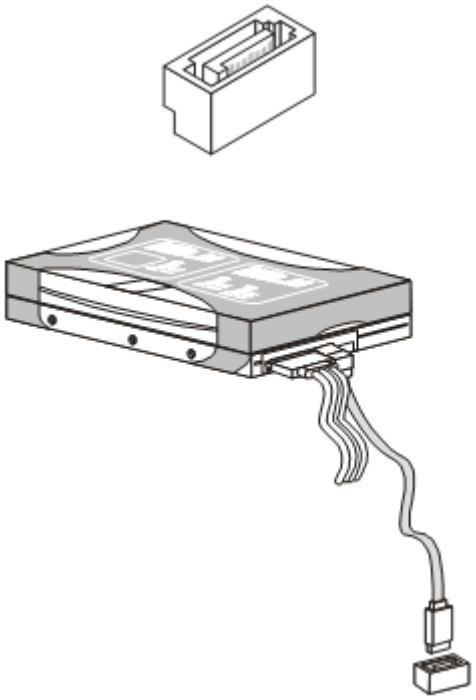
➢ **Audio Jack**

- Line-In (Blue) - for external CD player or other audio devices
- Line-Out (Green) - for speakers or headphones
- Mic-In (Pink) - for microphones

Connector

Serial ATA Connector: SATA1 ~ SATA2

This connector is a high-speed Serial ATA interface port. Each connector can connect one Serial ATA device.

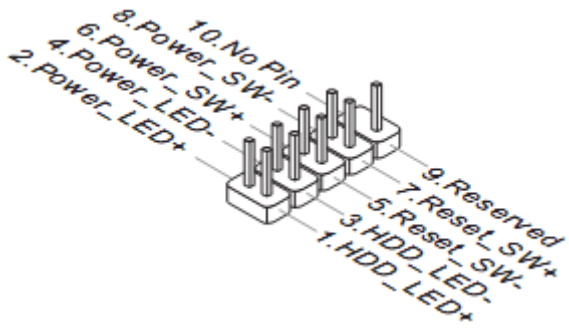


Important

Please do not fold the Serial ATA cable into a 90-degree angle. Otherwise, data loss may occur during transmission.

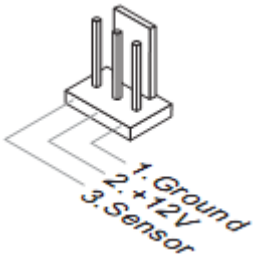
Front Panel Pinheader: JFP1

This front panel connector is provided for electrical connection to the front panel switches & LEDs and is compliant with Intel Front Panel I/O Connectivity Design Guide.



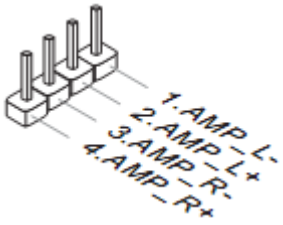
Fan Power Connector: SYSTEM_FAN1

The fan power connector supports system cooling fan with +12V. When connecting the wire to the connectors, always note that the red wire is the positive and should be connected to the +12V; the black wire is Ground and should be connected to GND. If the mainboard has a System Hardware Monitor chipset onboard, you must use a specially designed fan with speed sensor to take advantage of the fan control.



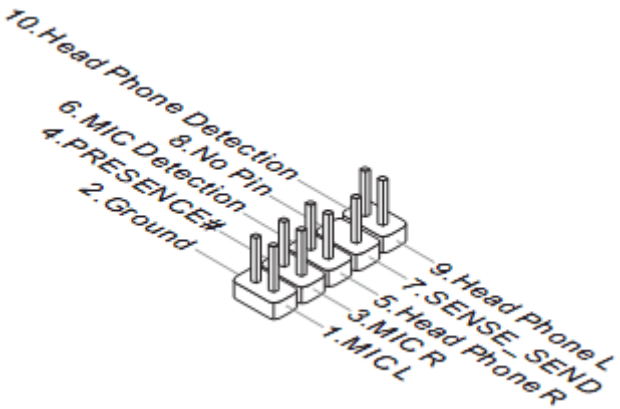
Audio Amplifier Pinheader: JAMP1

The JAMP1 is used to connect audio amplifiers to enhance audio performance.



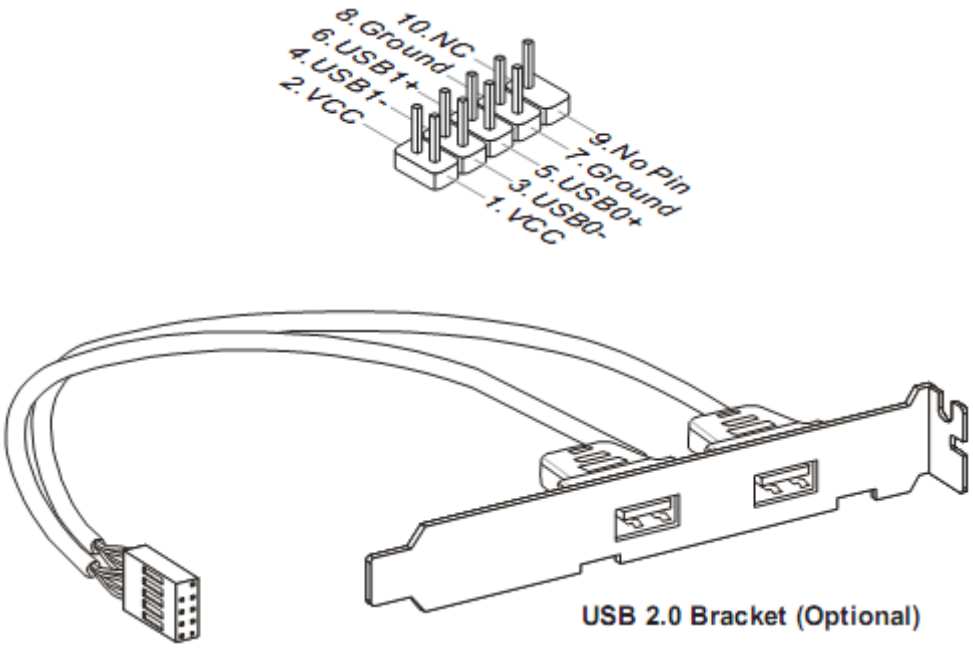
Front Audio Pinheader: JAUD1

This connector allows you to connect the front panel audio and is compliant with Intel Front Panel I/O Connectivity Design Guide.



Front USB Pinheader: JUSB1, JUSB2

This connector, compliant with Intel I/O Connectivity Design Guide, is ideal for connecting high-speed USB interface peripherals such as USB HDD, digital cameras, MP3 players, printers, modems and the like.

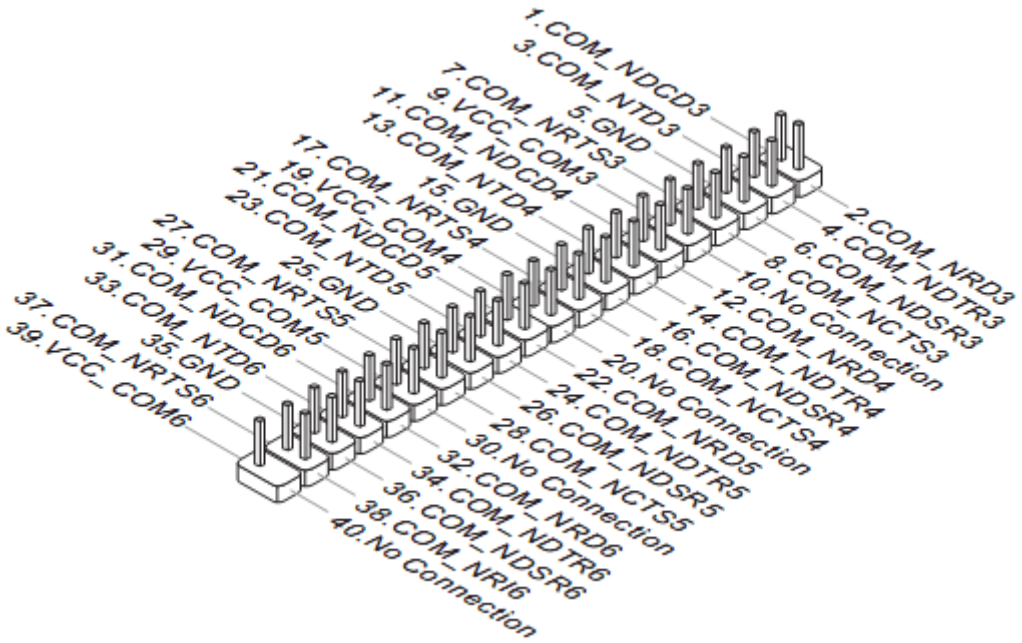


Note that the pins of VCC and GND must be connected correctly to avoid possible damage.

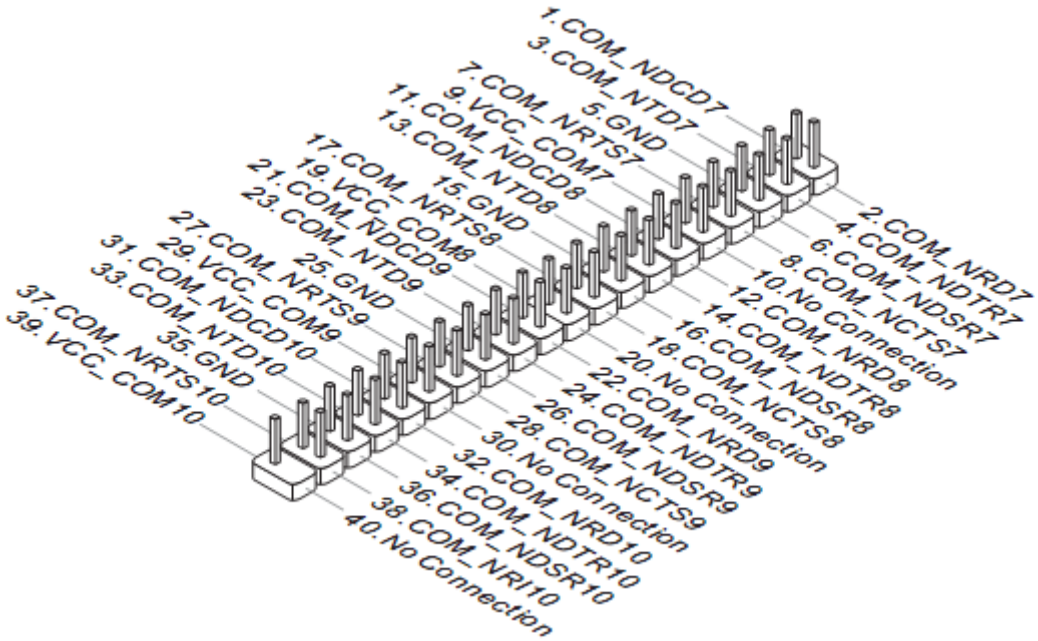
RS-232 Serial Port Pinheader: JCOM1, JCOM3

This connector is a 16550A high speed communications port that sends/ receives 16 bytes FIFOs. You can attach serial devices to it through the optional serial port bracket.

JCOM1



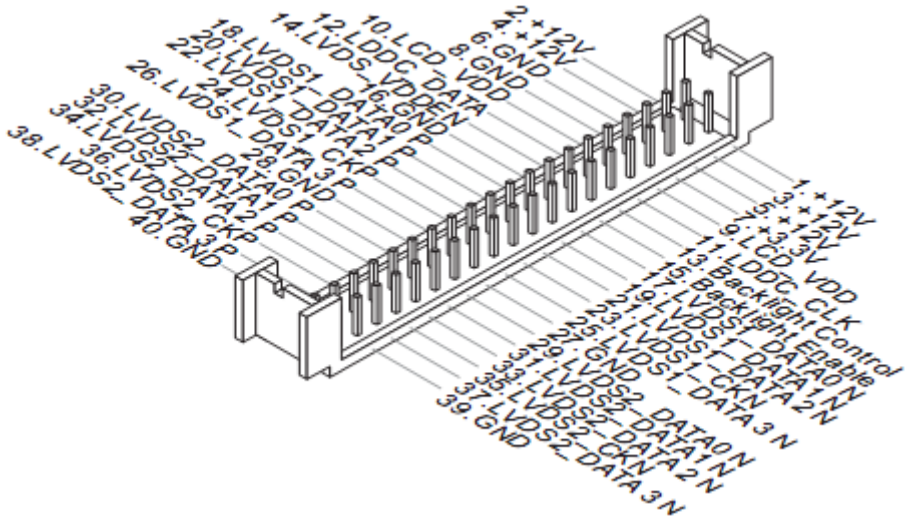
JCOM3



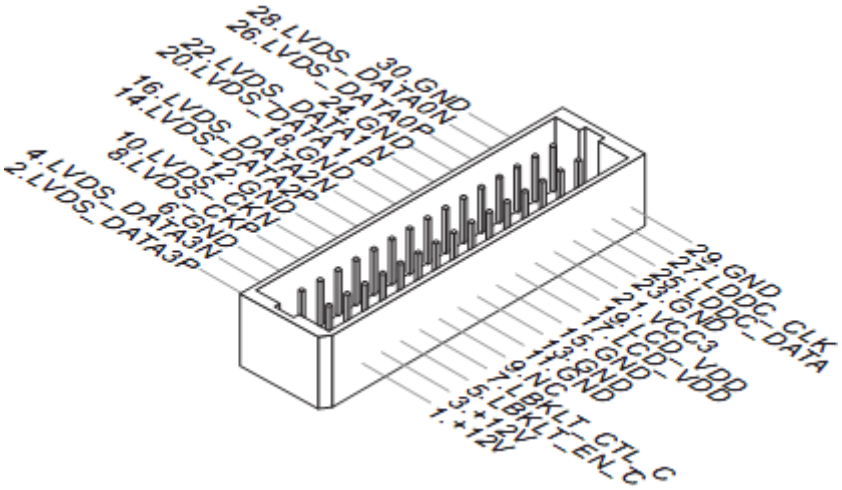
LVDS Connector: JLVDS1, JLVDS2

The LVDS (Low Voltage Differential Signal) connector provides a digital interface typically used with flat panels. After connecting an LVDS interface flat panel to this connector, be sure to check the panel datasheet and set the JVDD1 jumper to proper power voltage.

JLVDS2

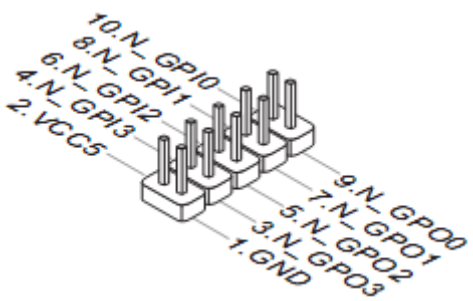


JLVDS1



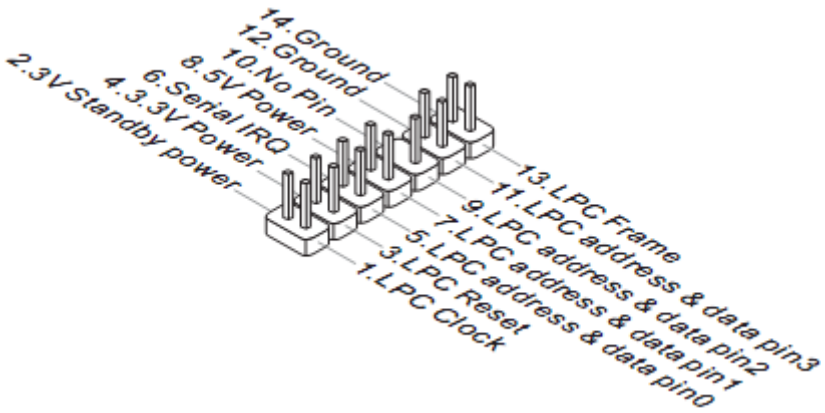
GPIO Connector: J1

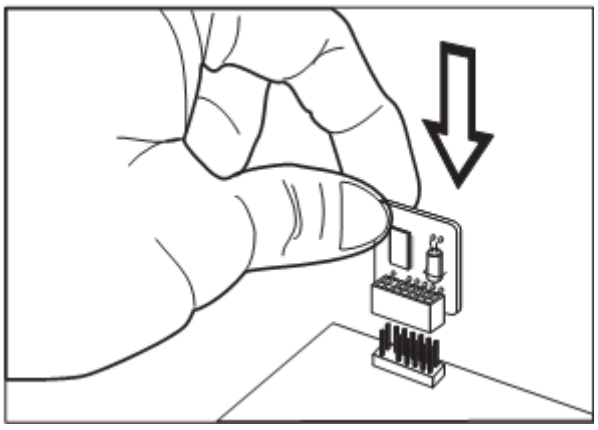
This connector is provided for the General-Purpose Input / Output (GPIO) peripheral module.



TPM Module Pinheader: JTPM1

This connector connects to a TPM (Trusted Platform Module) module (optional). Please refer to the TPM security platform manual for more details and usages.





Jumper

Clear CMOS Jumper: JBAT1

There is a CMOS RAM onboard that has a power supply from an external battery to keep the data of system configuration. With the CMOS RAM, the system can automatically boot OS every time it is turned on. If you want to clear the system configuration, set the jumper to clear data.

Important

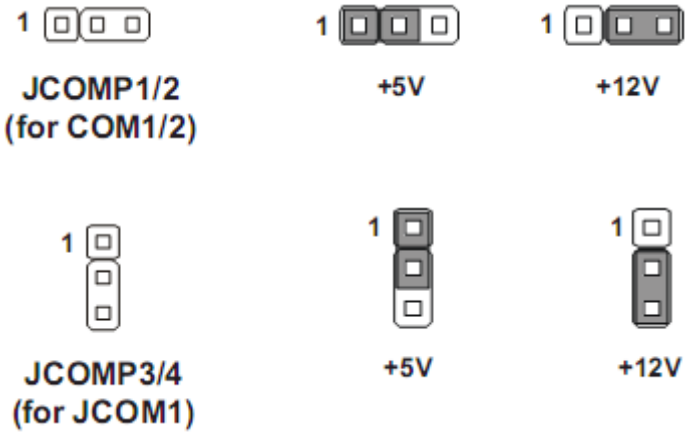
You can clear CMOS by shorting 2-3 pin while the system is off. Then return to 1-2 pin position. Avoid clearing the CMOS while the system is on; it will damage the mainboard.

AT / ATX Select Jumper: JAT1

This jumper allows users to select between AT and ATX power.

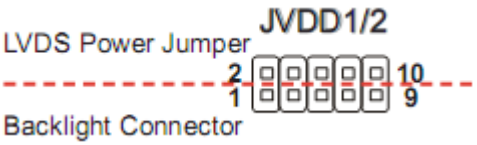
Serial Port Power Jumper: JCOMP1, JCOMP2, JCOMP3, JCOMP4

These jumpers specify the operation voltage of the onboard serial ports.

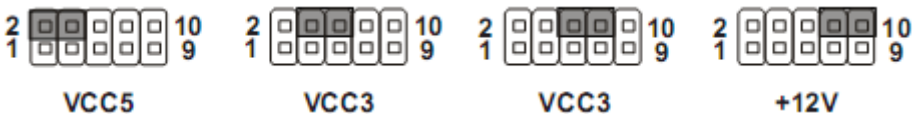


Backlight Pinheader & LVDS Power Jumper: JVDD1, JVDD2

The backlight connector is provided for LCD backlight options while the LVDS power jumper allows users to select the operation voltage of the LVDS flat panel.

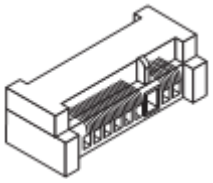


PIN	SIGNAL
1	VCC5
3	L_BKLTCTL
5	INV_ON
7	GND
9	+12V

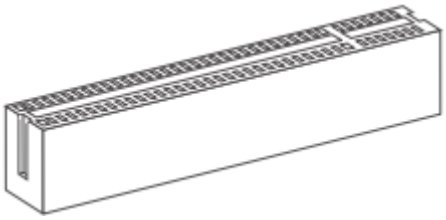


Slot

Mini-PCIe (Peripheral Component Interconnect Ex- press) Slot
The Mini-PCIe slot is provided for wireless LAN card, TV tuner card, Robson NAND Flash card and mSATA devices.



PCI (Peripheral Component Interconnect) Slot
The PCI slot supports PCI interface expansion cards.



Important
When adding or removing expansion cards, make sure that you unplug the power supply first. Meanwhile, read the documentation for the expansion card to configure any necessary hardware or software settings for the expansion card, such as jumpers, switches or BIOS configuration.

Chapter 3 BIOS Setup

This chapter provides information on the BIOS Setup program and allows you to configure the system for optimum use.
You may need to run the Setup program when:

- An error message appears on the screen during the system booting up, and requests you to run SETUP.
- You want to change the default settings for customized features.

Entering Setup

Power on the computer and the system will start POST (Power On Self Test) process. When the message below appears on the screen, press <DEL> key to enter Setup.

Press DEL to enter SETUP

If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On or pressing the RESET button. You may also restart the system by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys.

Important
The items under each BIOS category described in this chapter are under continuous update for better system performance. Therefore, the description may be slightly different from the latest BIOS and should be held for reference only.

Control Keys

← →	Select Screen
↑ ↓	Select Item
Enter	Select
+ -	Change Option
F1	General Help
F7	Previous Values
F9	Optimized Defaults

F10	Save & Exit
Esc	Exit

Getting Help

After entering the Setup menu, the first menu you will see is the Main Menu.

Main Menu

The main menu lists the setup functions you can make changes to. You can use the arrow keys (↑↓) to select the item. The on-line description of the highlighted setup function is displayed at the bottom of the screen.

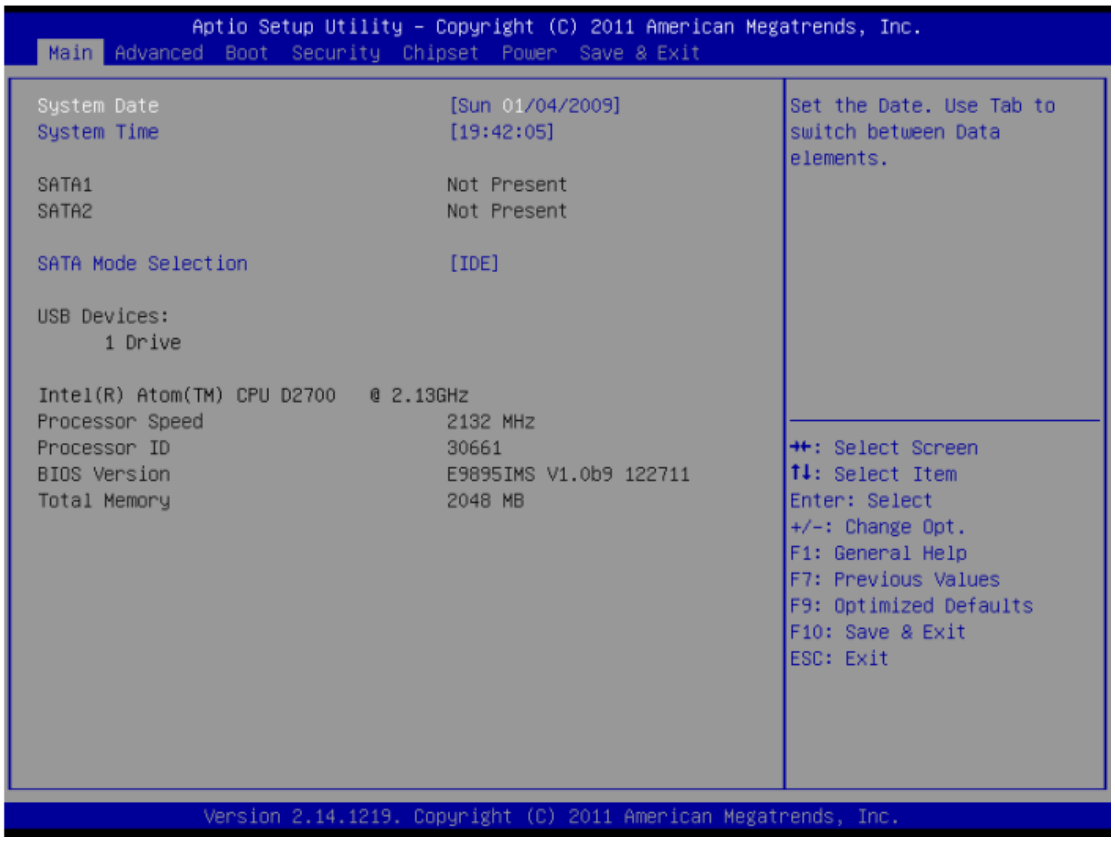
Sub-Menu

If you find a right pointer symbol ▸ appears to the left of certain fields that means a sub-menu can be launched from this field. A submenu contains additional options for a field parameter. You can use arrow keys (↑↓) to highlight the field and press <Enter> to call up the sub-menu. Then you can use the control keys to enter values and move from field to field within a submenu. If you want to return to the main menu, just press the <Esc >.

General Help <F1>

The BIOS setup program provides a General Help screen. You can call up this screen from any menu by simply pressing <F1>. The Help screen lists the appropriate keys to use and the possible selections for the highlighted item. Press <Esc> to exit the Help screen.

The Menu Bar



▸ Main

Use this menu for basic system configurations, such as time, date, etc.

▸ Advanced

Use this menu to set up the items of special enhanced features.

▸ Boot

Use this menu to specify the priority of boot devices.

▸ Security

Use this menu to set supervisor and user passwords.

▸ Chipset

This menu controls the advanced features of the onboard chipsets.

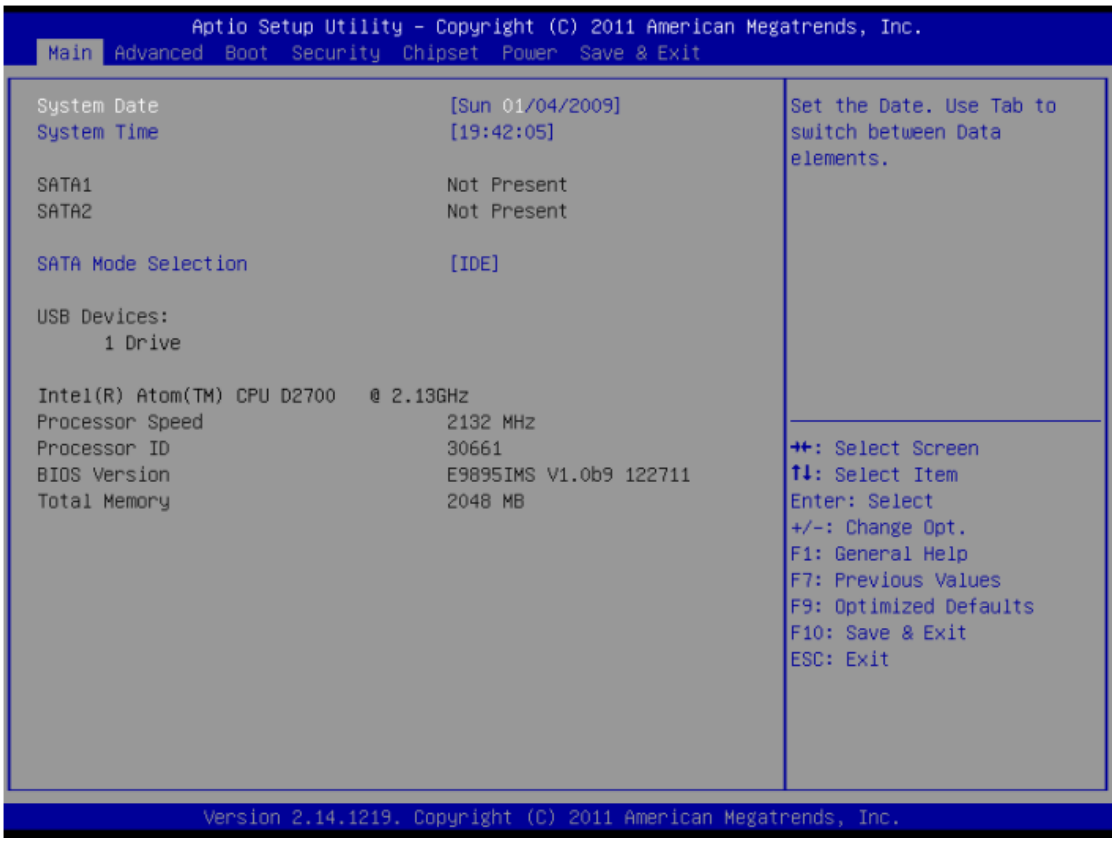
▸ Power

Use this menu to specify your settings for power management.

▸ Save & Exit

This menu allows you to load the BIOS default values or factory default settings into the BIOS and exit the BIOS setup utility with or without changes.

Main



System Date

This setting allows you to set the system date. The date format is <Day>, <Month> <Date> <Year>.

System Time

This setting allows you to set the system time. The time format is <Hour> <Minute> <Second>.

SATA1 / 2

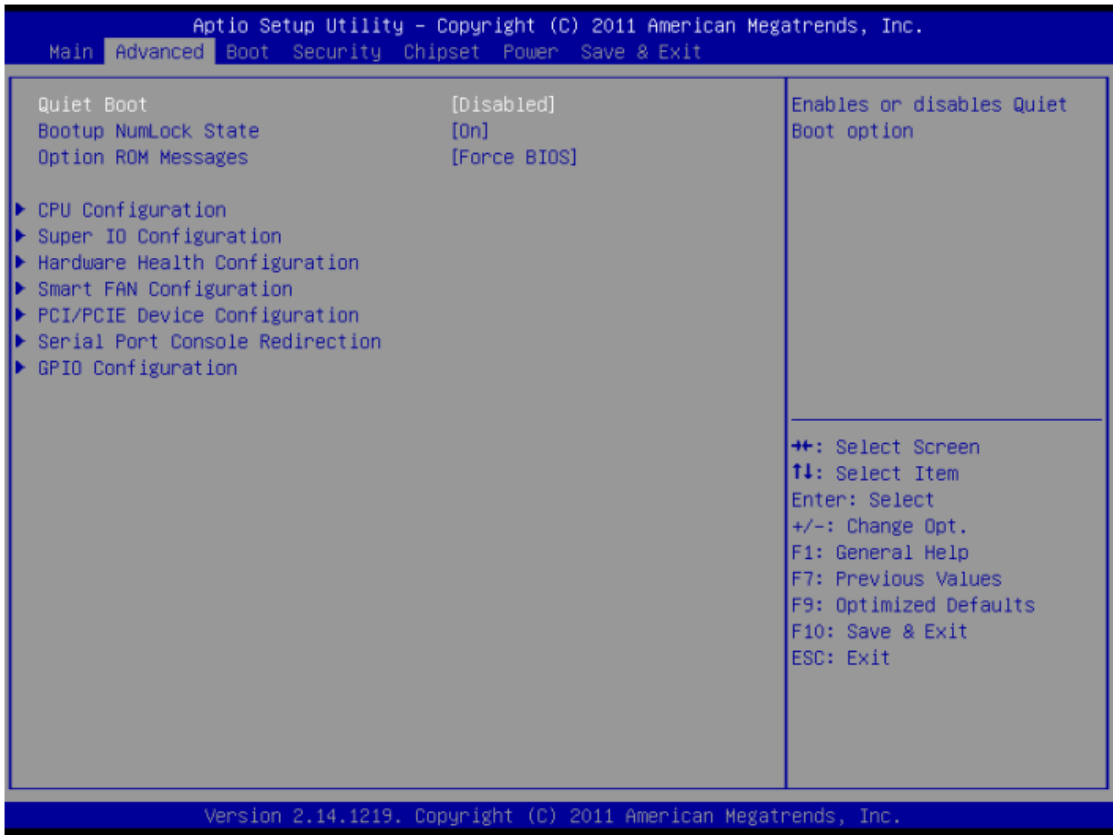
[Type]	Press PgUp / <+> or PgDn / <-> to select [Manual], [None] or [Auto] type. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can use [Manual] to define your own drive type manually.
[LBA/Large Mode]	Enabling LBA causes Logical Block Addressing to be used in place of Cylinders, Heads and Sectors

[Block (Multi-Sector Transfer)]	Any selection except Disabled determines the number of sectors transferred per block
[PIO Mode]	Indicates the type of PIO (Programmed Input/Output)
[DMA Mode]	Indicates the type of Ultra DMA
[S.M.A.R.T.]	This allows you to activate the S.M.A.R.T. (Self-Monitoring Analysis & Reporting Technology) capability for the hard disks. S.M.A.R.T is a utility that monitors your disk status to predict hard disk failure. This gives you an opportunity to move data from a hard disk that is going to fail to a safe place before the hard disk becomes offline.
[32 Bit Data Transfer]	Enables 32-bit communication between CPU and IDE controller

▸ SATA Mode Selection

This setting specifies the SATA controller mode.

Advanced



▸ Quiet Boot

This BIOS feature determines if the BIOS should hide the normal POST messages with the motherboard or system manufacturer's full-screen logo. When it is enabled, the BIOS will display the full-screen logo during the boot-up sequence, hiding normal POST messages.

When it is disabled, the BIOS will display the normal POST messages, instead of the full-screen logo.

Please note that enabling this BIOS feature often adds 2-3 seconds of delay to the booting sequence. This delay ensures that the logo is displayed for a sufficient amount of time. Therefore, it is recommended that you disable this BIOS feature for a faster boot-up time.

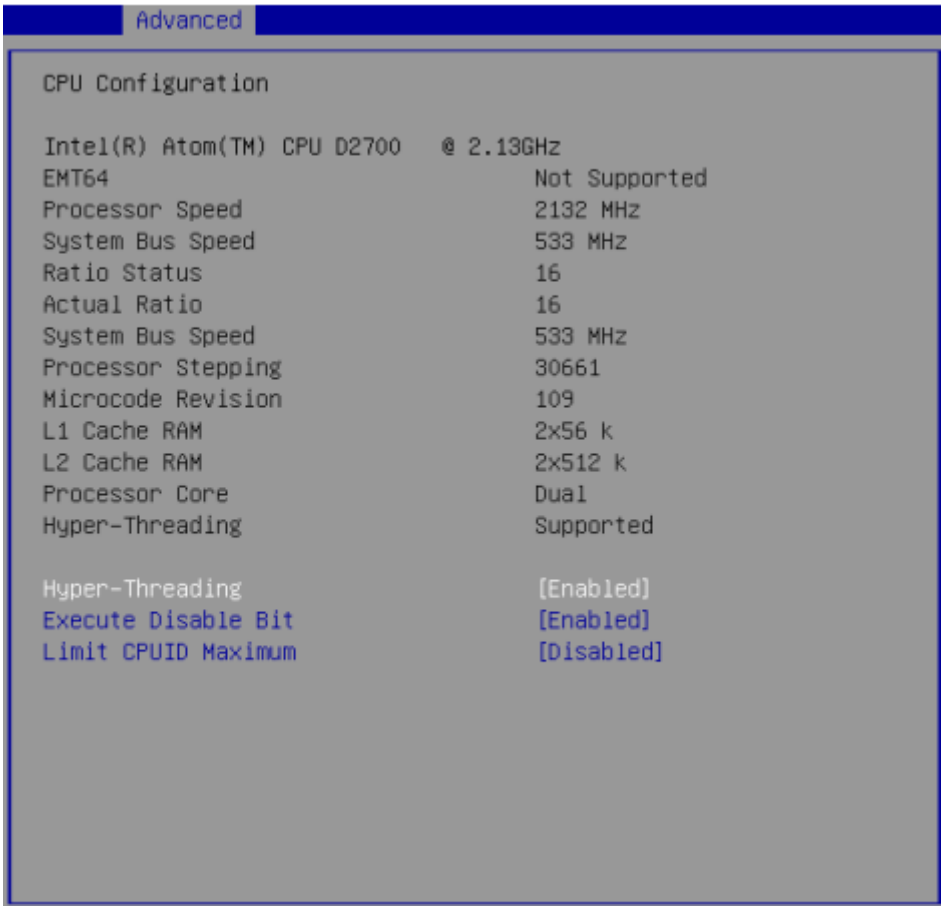
▸ Bootup NumLock State

This setting is to set the Num Lock status when the system is powered on. Setting to [On] will turn on the Num Lock key when the system is powered on. Setting to [Off] will allow users to use the arrow keys on the numeric keypad.

▸ Option ROM Messages

This item is used to determine the display mode when an optional ROM is initialized during POST. When set to [Force BIOS], the display mode used by AMI BIOS is used. Select [Keep Current] if you want to use the display mode of optional ROM.

CPU Configuration



Hyper-Threading

The processor uses Hyper-Threading technology to increase transaction rates and reduces end-user response times. The technology treats the two cores inside the processor as two logical processors that can execute instructions simultaneously. In this way, the system performance is highly improved. If you disable the function, the processor will use only one core to execute the instructions. Please disable this item if your operating system doesn't support HT Function, or unreliability and instability may occur.

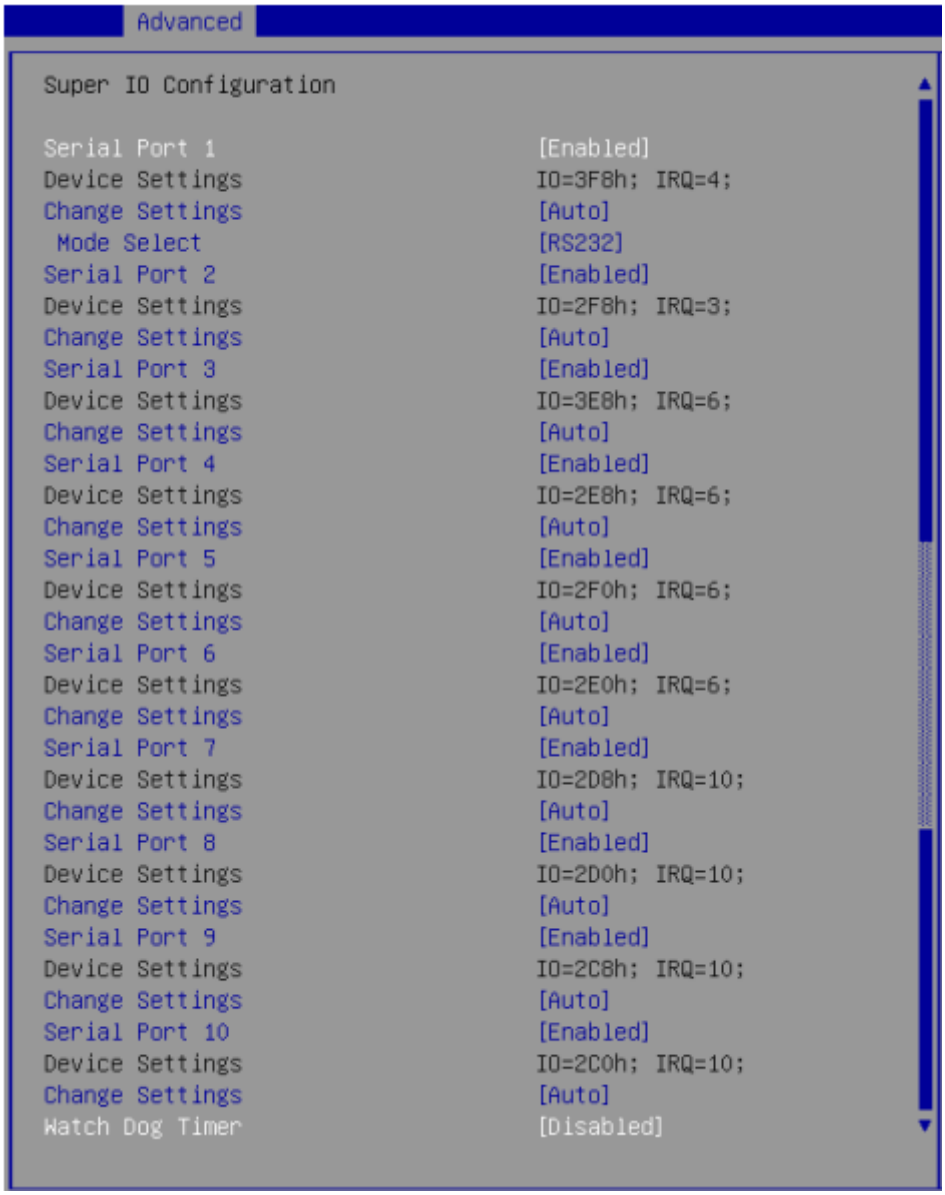
Execute Disable Bit

Intel's Execute Disable Bit functionality can prevent certain classes of malicious "buffer overflow" attacks when combined with a supporting operating system. This functionality allows the processor to classify areas in memory by where application code can execute and where it cannot. When a malicious worm attempts to insert code in the buffer, the processor disables code execution, preventing damage or worm propagation.

▸ **Limit CPUID Maximum**

The Max CPUID Value Limit BIOS feature allows you to circumvent problems with older operating systems that do not support the Intel Pentium 4 processor with Hyper-Threading Technology. When enabled, the processor will limit the maximum CPUID input value to 03h when queried, even if the processor supports a higher CPUID input value. When disabled, the processor will return the actual maximum CPUID input value of the processor when queried.

▸ **Super IO Configuration**



▸ **Serial Port 1/ 2/ 3/ 4/ 5/ 6/ 7/ 8/ 9/ 10**

This setting enables/disables the specified serial port.

▸ **Change Settings**

This setting is used to change the address & IRQ settings of the specified serial port.

▸ **Mode Select**

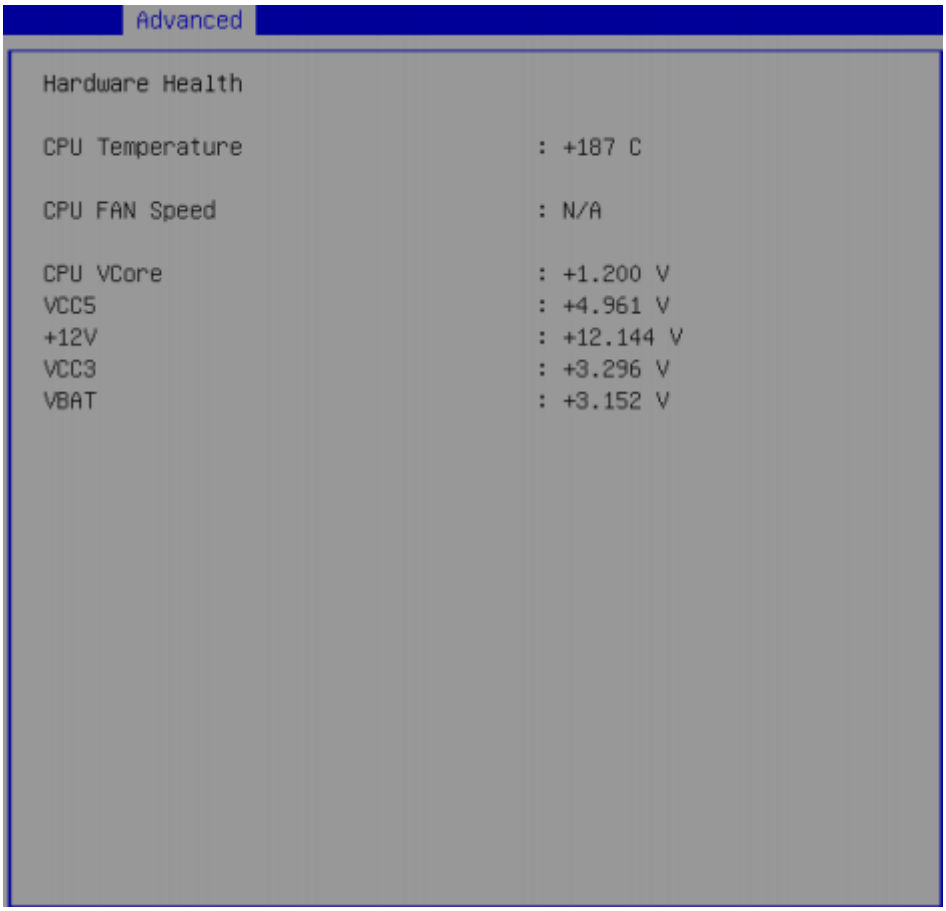
Select an operation mode for the serial port 1.

▸ **Watch Dog Timer**

You can enable the system watch-dog timer, a hardware timer that generates a reset when the software that it monitors does not respond as expected each time the watch dog polls it.

▸ **Hardware Health Configuration**

These items display the current status of all monitored hardware devices / components such as voltages, temperatures and all fans' speeds.

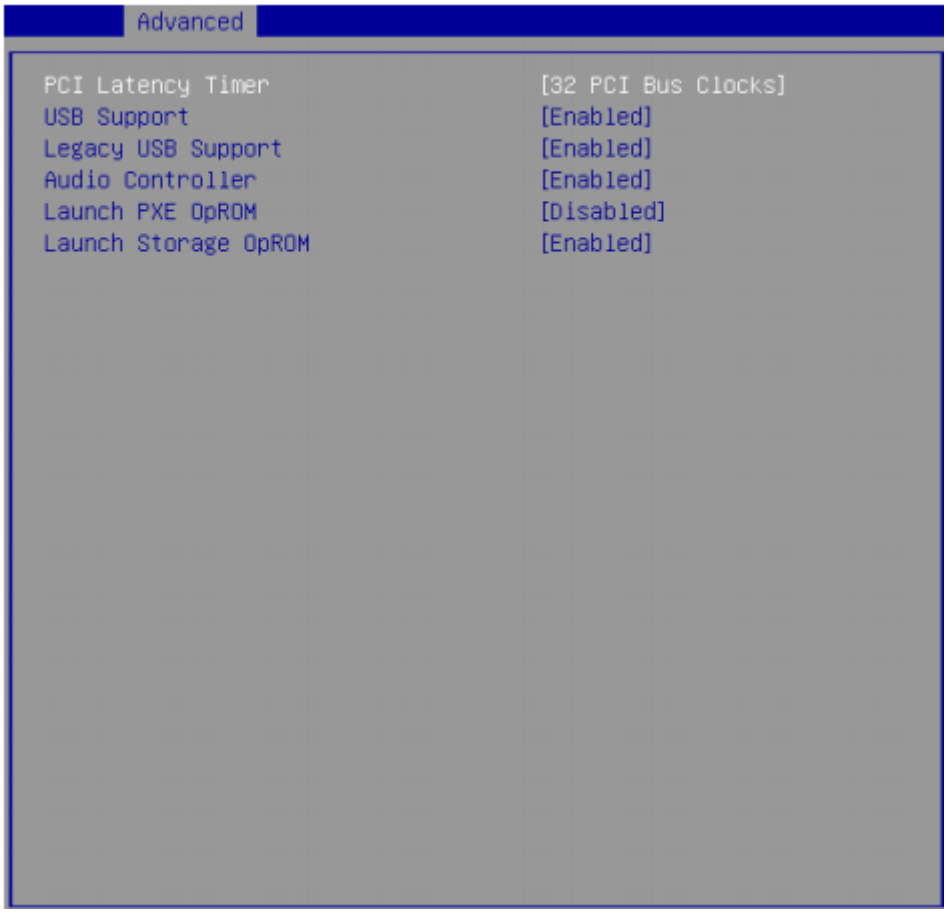


▸ Smart Fan Configuration

▸ Smart CPUFAN Function

This setting enables/disables the Smart Fan function. Smart Fan is an excellent feature which will adjust the CPU/system fan speed automatically depending on the current CPU/system temperature, avoiding the overheating to damage your system.

▸ **PCI/PCIE Device Configuration**



▸ **PCI Latency Timer**

This item controls how long each PCI device can hold the bus before another takes over. When set to higher values, every PCI device can conduct transactions for a longer time and thus improve the effective PCI bandwidth. For better PCI performance, you should set the item to higher values.

▸ **USB Support**

This setting enables/disables support for USB devices.

▸ **Legacy USB Support**

Set to [Enabled] if you need to use any USB 1.1 / 2.0 device in the operating system that does not support or have any USB 1.1 / 2.0 driver installed, such as DOS and SCO Unix.

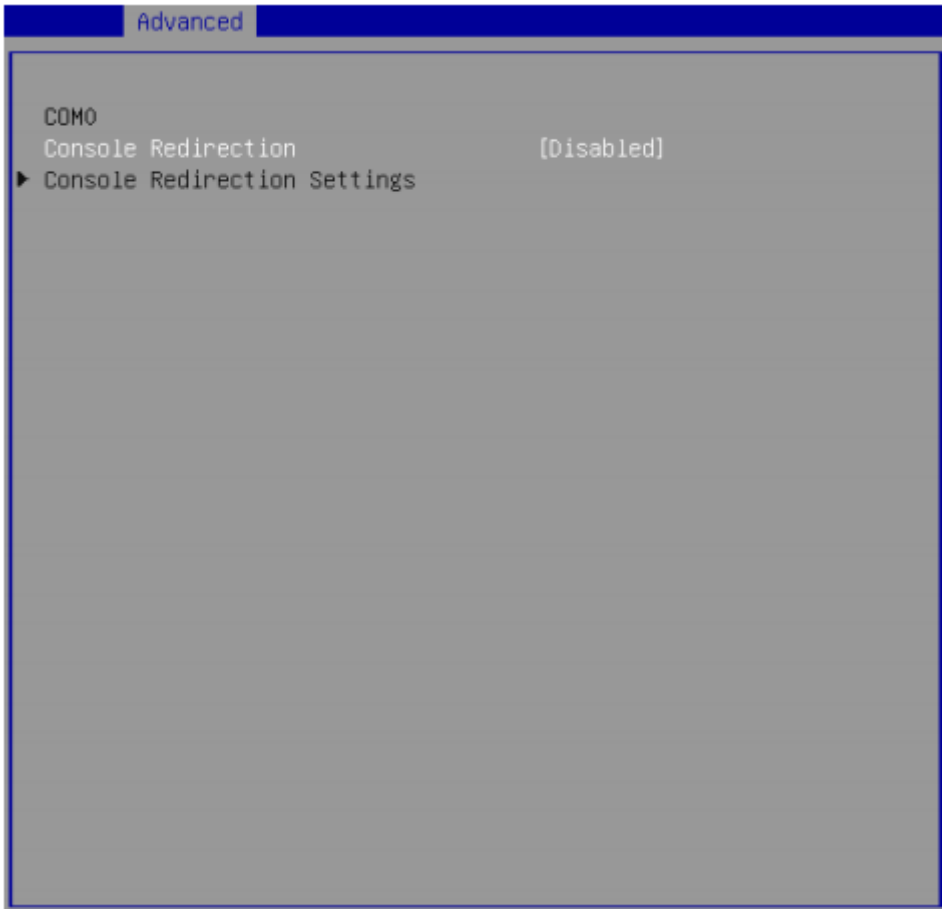
▸ **Audio Controller**

This setting enables/disables the onboard audio controller.

▸ **Launch PXE OpROM, Launch Storage OpROM**

This setting enables / disables the initialization of the onboard LAN Boot ROM during bootup. Selecting [Disabled] will speed up the boot process.

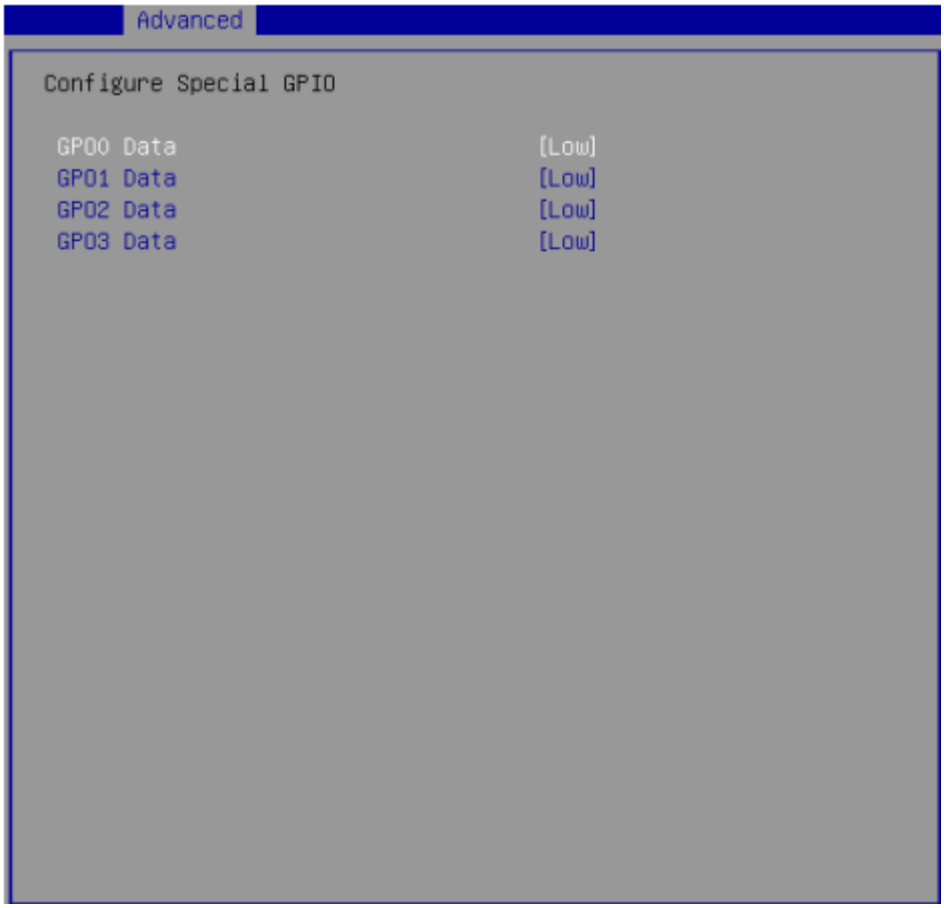
▸ Serial Port Console Redirection



▸ Console Redirection

Console Redirection operates in host systems that do not have a monitor and keyboard attached. This setting enables / disables the operation of console redirection. When set to [Enabled], BIOS redirects and sends all contents that should be displayed on the screen to the serial COM port for display on the terminal screen. Besides, all data received from the serial port is interpreted as keystrokes from a local keyboard.

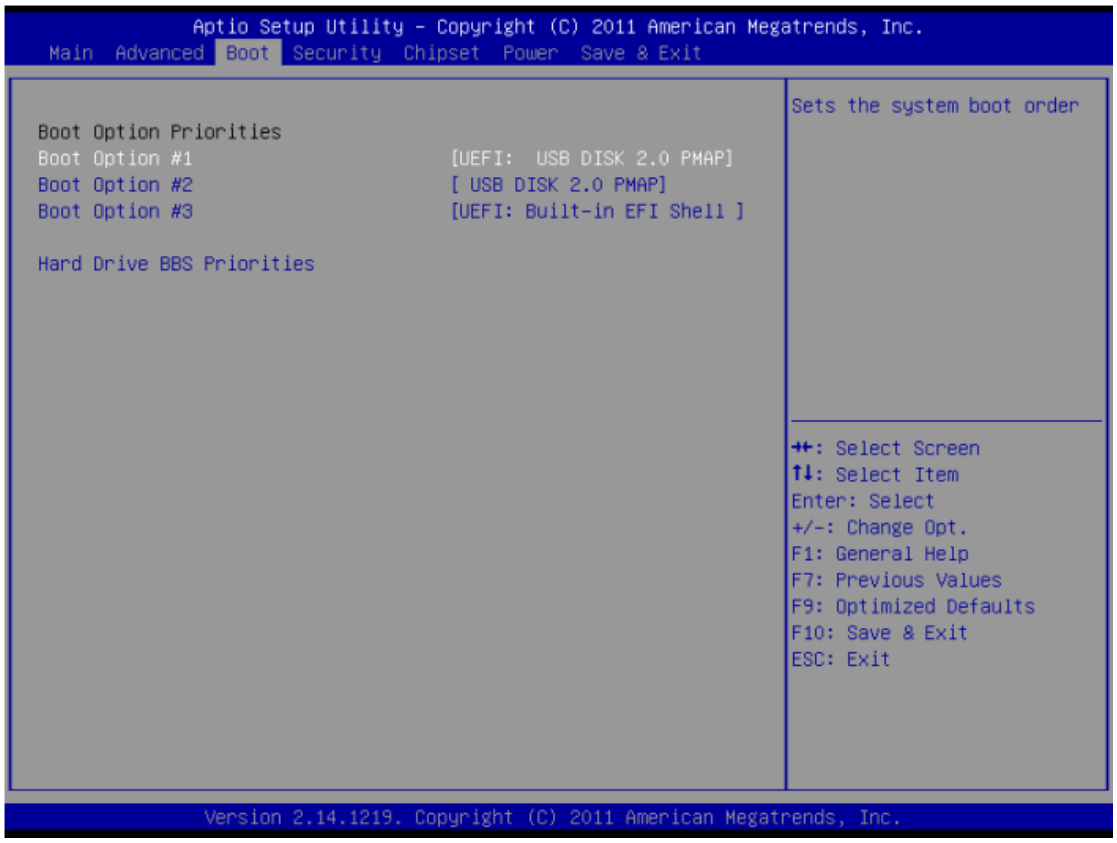
GPIO Configuration



GPO0 Data, GPO1 Data, GPO2 Data, GPO3 Data

This setting controls the operation mode of the specified GPIO.

Boot



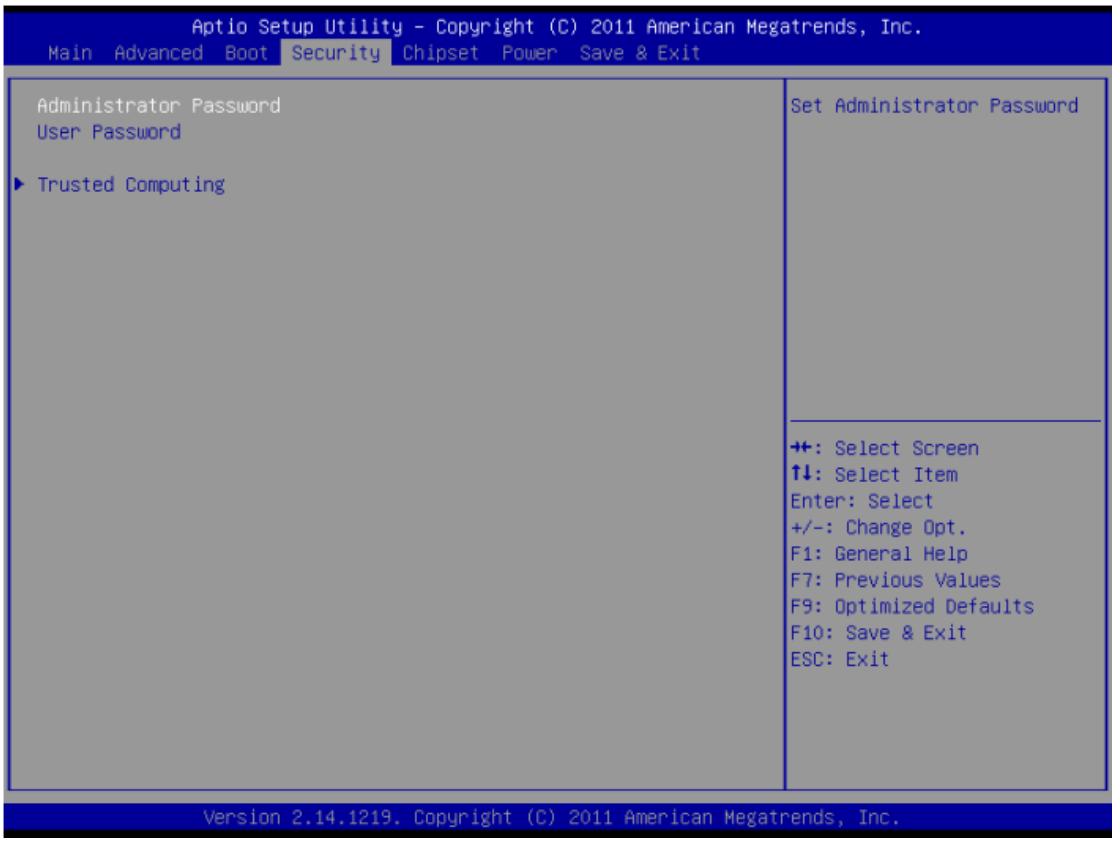
▸ Boot Option #1 / #2 / #3

This setting allows users to set the sequence of boot devices where BIOS attempts to load the disk operating system.

▸ Hard Drive BBS Priorities

This setting allows users to set the priority of the specified devices. First press <Enter> to enter the sub-menu. Then you may use the arrow keys (↑↓) to select the desired device, then press <+>, <-> or <PageUp>, <Page- Down> key to move it up/down in the priority list.

Security



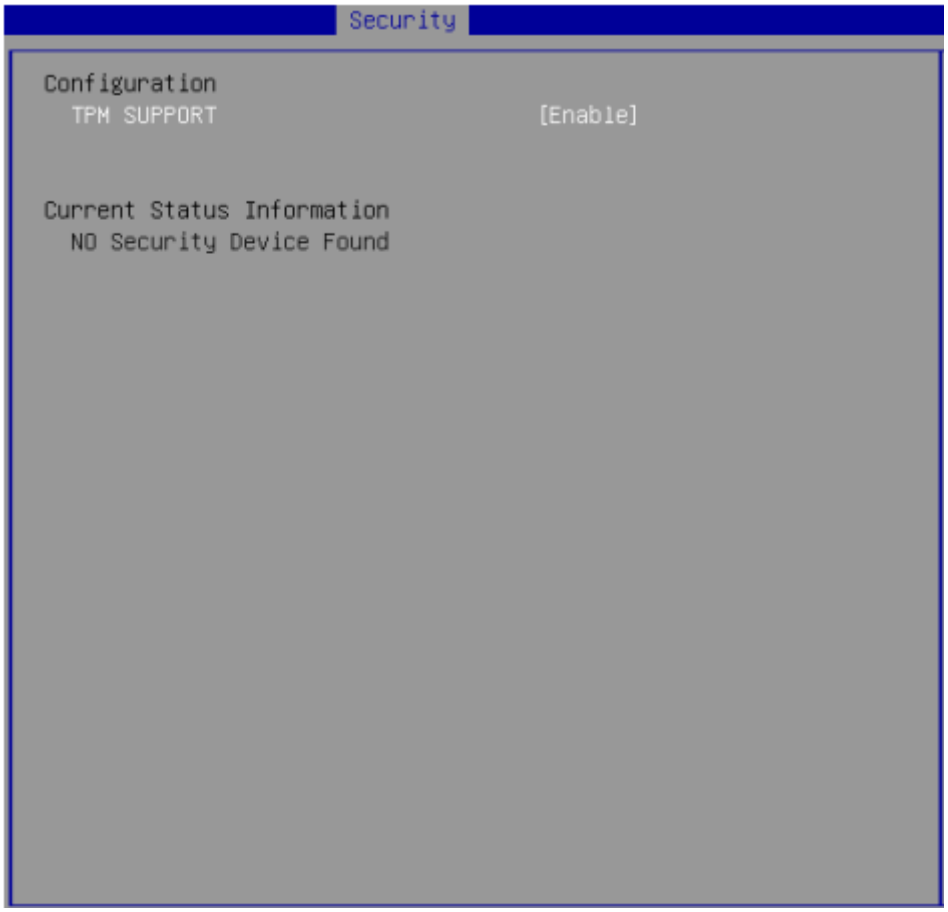
▸ Administrator Password

Administrator Password controls access to the BIOS Setup utility.

▸ User Password

User Password controls access to the system at boot and to the BIOS Setup utility.

Trusted Computing



TPM Support

This setting controls the Trusted Platform Module (TPM) designed by the Trusted Computing Group (TCG). TPMs are special-purpose integrated circuits (ICs) built into a variety of platforms to enable strong user authentication and machine attestation - essential to prevent inappropriate access to confidential and sensitive information and to protect against compromised networks.

Chipset

▸ IGFX - Boot Type

Use the field to select the type of device you want to use as the boot display of the system.

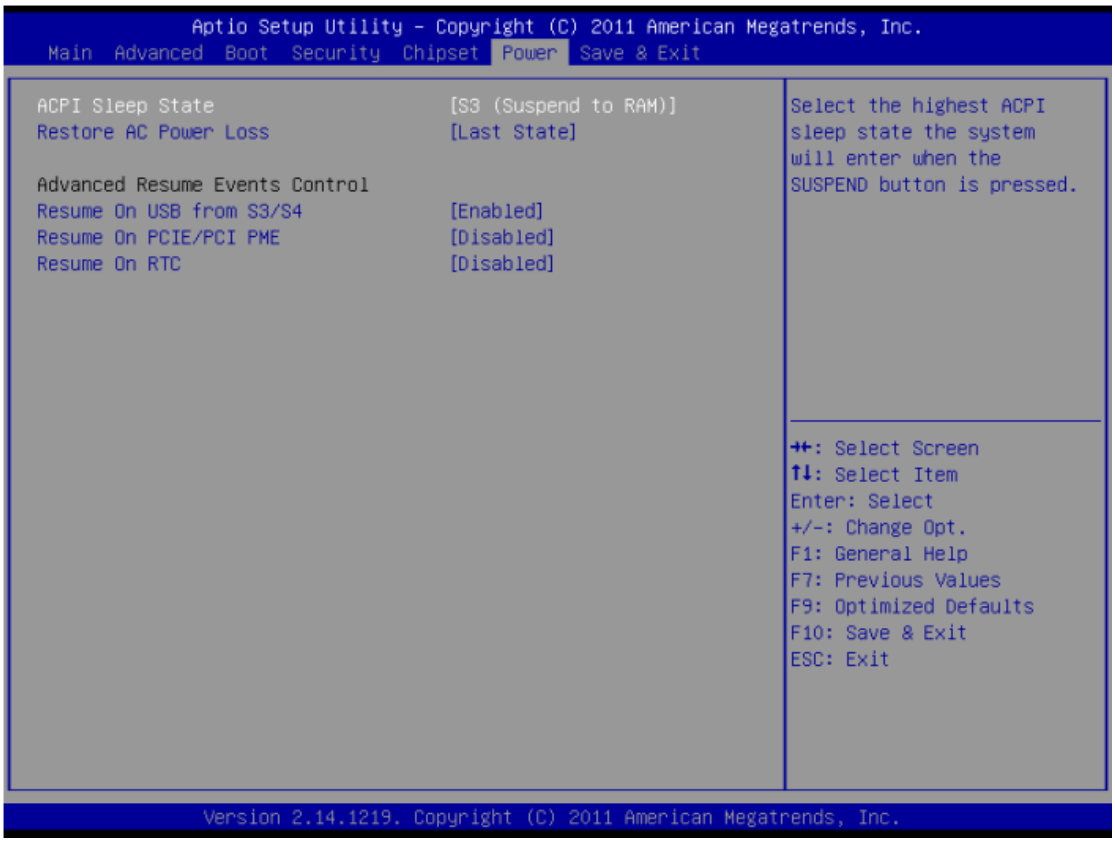
▸ LCD Panel Type

This setting allows you to set the resolution of the boot display device.

▸ Fixed Graphics Memory Size

This setting specifies the size of system memory allocated for video mem- ory.

Power



ACPI Sleep State

This item specifies the power saving modes for ACPI function. If your operating system supports ACPI, you can enter the Standby mode in S3 (STR).

Restore AC Power Loss

This setting specifies whether your system will reboot after a power failure or interrupt occurs. Available settings are:

[Power Off]	Leaves the computer in the power off state.
[Power On]	Leaves the computer in the power on state.
[Last State]	Restores the system to the previous status before power failure or interrupt occurred.

Resume On USB from S3 / S4

The item allows the activity of the USB device to wake up the system from S3 / S4 sleep state.

Resume On PCIE/PCI PME

This field specifies whether the system will be awakened from power saving

modes when activity or input signal of onboard PCIE/PCI PME is detected.

▸ Resume On RTC

When [Enabled], your can set the date and time at which the RTC (real-time clock) alarm awakens the system from suspend mode.

Save & Exit

▸ Save Changes and Exit

Save changes to CMOS and exit the Setup Utility.

▸ Discard Changes and Exit

Abandon all changes and exit the Setup Utility.

▸ Restore Defaults

Restore the factory defaults.

▸ Save as User Defaults

Save all changes as user defaults.

▸ Restore User Defaults

Restore the preset user defaults.