



Vento2 516Q / 532Q

Quick Guide

Version 1.0

Published November 2011

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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.

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The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance. "Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate"

For more product details, please visit huperLab's website at [www. huperlab.com](http://www.huperlab.com)

huperVision 4000 Vento2 516Q/532Q

Quick Guide

Published on November 2011

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Chapter 1 Introduction

Thank you for purchasing huperLab Vento2 516Q / Vento2 532Q DSS Server Board, a reliable surveillance motherboard produced under huperLab's consistently stringent quality control. It delivers excellent performance with robust design conforming to huperLab's commitment to quality and endurance. In this manual, chapter 1 and 2 contain introduction of the motherboard and introduction of the motherboard and step-by-step guide to the hardware installation. Chapter 3 and 4 contain the configuration guide to BIOS setup and information of the Support CD.



Because the motherboard specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on huperLab website without further notice. You may find the latest VGA cards and CPU support lists on huperLab website as well. huperLab website If you require software support related to this motherboard, please visit huperLab website for specific information about the model you are using. huperLab website <http://www.huperlab.com>

1.1 Package Contents

- huperLab **Vento2 516Q / Vento2 532Q** Motherboard
(Micro-ATX Form Factor: 9.6-in x 9.6-in, 24.4 cm x 24.4 cm)
- huperLab **Vento2 516Q / Vento2 532Q** Quick Installation Guide
- huperLab **Vento2 516Q / Vento2 532Q** Support CD
- huperVision 4000 Software CD

Motherboard Accessories

Vento 516Q: One 16CH Video in Cable

Vento 532Q: Two 16CH Video in Cable & One DB25 Bracket

Audio in cable with bracket (Optional)

TV-Out cable with bracket (Optional)

Audio in / TV-Out cable with bracket (Optional)

One I/O Panel shield

Two Serial ATA (SATA) Data Cable (Optional)

1.2 Hardware Specifications

CPU

- Intel[®] Socket 1155 for 2nd Generation Core[™] i7 / Core[™] i5 / Core[™] i3 Processors, Pentium[®] processor, and Celeron[®] processor

Chipset

- Intel[®] Q67 Platform Controller Hub

Main Memory

- 4x 240-pin DDR3 DIMM sockets
- Supports up to 16GB 1066/1333 dual channel DIMM
- Supports non-ECC unbuffered DIMM

Onboard LAN

- 1x Intel[®] 82579LM PHY for Intel AMT 7.0
- 1x Intel[®] 82583 PCI Express Gigabit Ethernet
- Supports boot from LAN (PXE)
- 2x RJ45 with LED

Display

- Integrated HD graphics
- 1x VGA
- 1x DVI-D
- 1x HDMI

Note: Vento2 DSS Server Board allows dual display interface

Expansion

- 1x PCIe x16 slot
- 1x Mini PCIe slot

Edge I/O Interfaces

- 1x VGA port
- 1x DVI-D port
- 1x HDMI port
- 2x LAN ports
- 4x USB 2.0 ports
- 1x DB25 (Audio/Video input connector)
- 1x Line-in, 1x Line-out(Speaker-out), 1x Mic-in

I/O Interfaces

- 2x SATA III connectors
- 4x SATA II connectors
- 6x USB 2.0 connectors
- 2x RS232/422/485 COM connectors
- 2x 8-pin GPIO connectors
- 2x 20-pin Audio input connector (supports 16CH audio-in)
- 2x 34-pin Video-in connector
- CPU and Chassis fan connectors
- 24-pin ATX power connector

BIOS

- AMI BIOS
- Plug and play support

System Monitor

- 4 Voltages (+3.3V, +5V, +12V, Vcore)
- 3 Temperatures
- 3 FAN speed monitors (1 for CPU and 2 for System FAN)

Power Input

- Supports ATX power supply
- Standard ATX 24-pin connector for +12V/ +5V/ +3.3V/ +5Vsb/ -12V

Dimensions

- microATX
- 244mm (L) x 244mm (W)

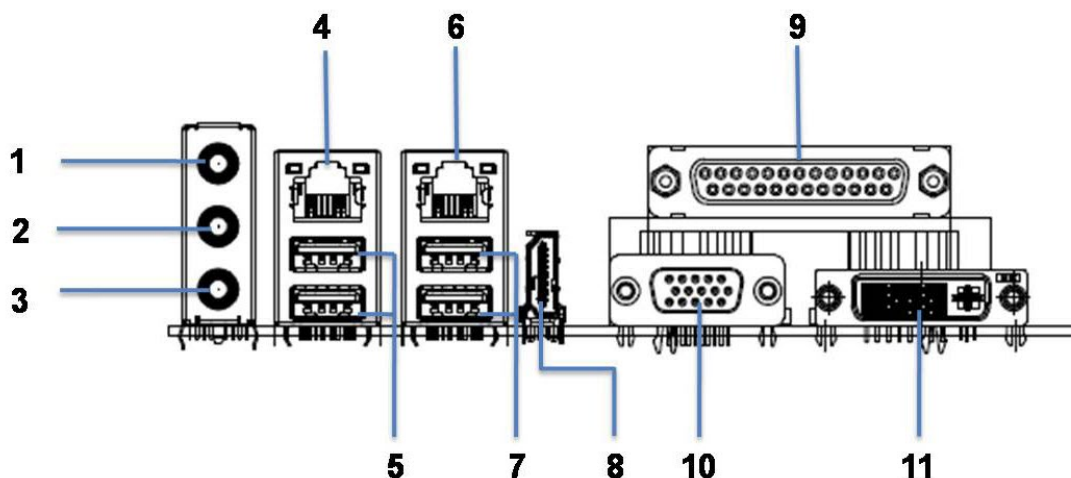
Environment

- Board level operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 70°C
- Relative humidity: 10% to 90%, (Non-condensing)

Certifications

- CE approval
- FCC Class A

1.3 I/O Panel



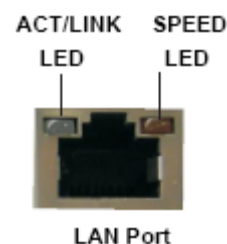
- | | |
|----------------------------|----------------------------|
| 1. Line In (Light Blue) | 7. USB 2.0 Ports (USB 2/3) |
| 2. Line Out (Green) | 8. HDMI |
| 3. Microphone (Pink) | 9. Audio/Video Input Port |
| 4. LAN RJ-45 Port (LAN 1) | 10. VGA/D-Sub Port |
| 5. USB 2.0 Ports (USB 0/1) | 11. DVI-D Port |
| 6. LAN RJ-45 Port (LAN 2) | |

* There are two LED next to the LAN port. Please refer to the table below for the LAN port LED indications.

LAN Port LED Indications

Activity / Link LED	
Status	Description
Off	No Link
Blinking	Data Activity


SPEED LED	
Status	Description
Off	10Mbps connection
Orange	100Mbps connection
Green	1Gbps connection



* To enable Multi-Streaming function, you need to connect a front panel audio cable to the front panel audio header. Please refer to below steps for the software setting of Multi-Streaming.

For Windows® XP:

After restarting your computer, you will find "Mixer" tool on your system.

Please select "Mixer ToolBox" , click "Enable playback multi-streaming", and click "ok". Choose "2CH" or "4CH" and then you are allowed to select "Realtek HDA Primary output" to use Rear Speaker and Front Speaker, or

select “Realtek HDA Audio 2nd output” to use front panel audio. Then reboot your system.

For Windows® 7 / Vista™:

After restarting your computer, please double-click “Realtek HD Audio Manager” on the system tray. Set “Speaker Configuration” to “Quadraphonic” or “Stereo”. Click “Device advanced settings”, choose “Make front and rear output devices playbacks two different audio streams simultaneously”, and click “ok”. Then reboot your system.

Chapter 2 Installation

2.1 Installing the CPU

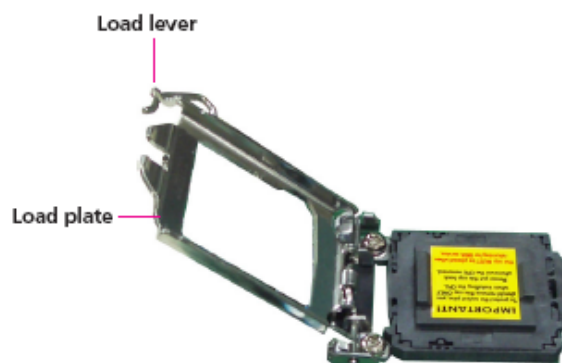


- Before you proceed, make sure (1) the CPU socket comes with a protective cap, (2) the cap is not damaged and (3) the socket's contact pins are not bent.
- Make sure all power cables are unplugged before you install the CPU.
- The CPU socket must not come in contact with anything other than the CPU. Avoid unnecessary exposure. Remove the protective cap only when you are about to install the CPU.

1. Unlock the socket by pushing the load lever down (1), moving it side-ways (2) until it is released from the retention tab; then lift the load lever up.



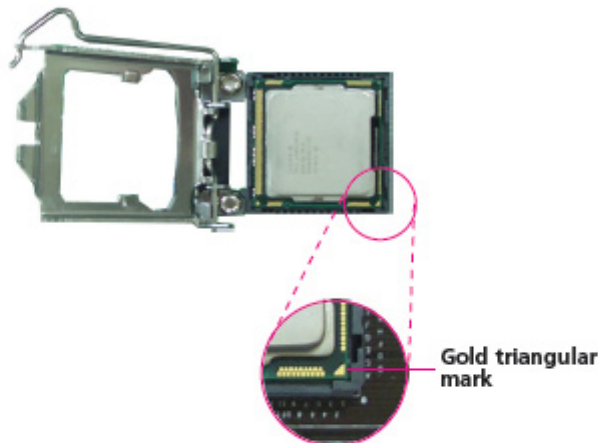
2. Lifting the load lever will at the same time lift the load plate. Lift the load lever up to the angle shown on the photo.



3. Remove the protective cap from the CPU socket. The cap is used to protect the CPU socket against dust and harmful particles. Remove the protective cap only when you are about to install the CPU.



4. Insert the CPU into the socket. The gold triangular mark on the CPU must align with the corner of the CPU socket shown on the photo.



- Handle the CPU by its edges and avoid touching the pins.
- The CPU will fit in only one orientation and can easily be inserted without exerting any force.

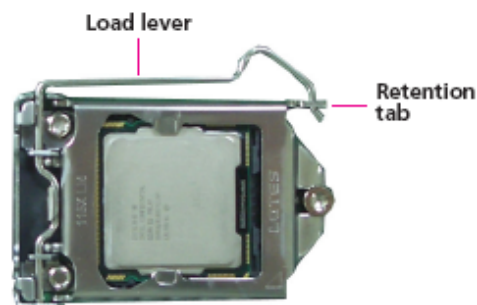
5. Close the load plate and then push the load lever down.

While closing the load plate, make sure the front edge of the load plate slides under the retention knob.



Do not force the CPU into the socket. Forcing the CPU into the socket may bend the pins and damage the CPU.

6. Hook the load lever under the retention tab.



2.2 Installing the Fan and Heat Sink



The CPU must be kept cool by using a CPU fan with heat sink. Without sufficient air circulation across the CPU and heat sink, the CPU will over-heat damaging both the CPU and system board.

1. Before you install the fan / heat sink, you must apply a thermal paste onto the top of the CPU. The thermal paste is usually supplied when you purchase the fan / heat sink assembly. Do not spread the paste all over the surface. When

you later place the heat sink on top of the CPU, the compound will disperse evenly.

Some heat sinks come with a patch of pre-applied thermal paste. Do not apply thermal paste if the fan / heat sink already has a patch of thermal paste on its underside. Peel the strip that covers the paste before you place the fan / heat sink on top of the CPU.

2. Place the heat sink on top of the CPU. The 4 pushpins around the heat sink, which are used to secure the heat sink onto the system board, must match the 4 mounting holes around the socket.
3. Orient the heat sink such that the CPU fan's cable is nearest the CPU fan connector.
4. Rotate each push-pin according to the direction of the arrow shown on top of the pin.

Push down two pushpins that are diagonally across the heat sink. Perform the same procedure for the other two push-pins.

5. Connect the CPU fan's cable to the CPU fan connector on the system board.

2.3 Jumpers and Connectors

Before you Begin

- Ensure you have a stable, clean working environment. Dust and dirt can get into components and cause a malfunction. Use containers to keep small components separated.
- Adequate lighting and proper tools can prevent you from accidentally damaging the internal components. Most of the procedures that follow require only a few simple tools, including the following:
 - A Philips screwdriver
 - A flat-tipped screwdriver
 - A set of jewelers Screwdrivers
 - A grounding strap
 - An anti-static pad
- Using your fingers can disconnect most of the connections. It is recommended that you do not use needle-nosed pliers to disconnect connections as these can damage the soft metal or plastic parts of the connectors.
- Before working on internal components, make sure that the power is off. Ground yourself before touching any internal components, by touching a metal object. Static electricity can damage many of the electronic components. Humid environment tend to have less static electricity than dry environments. A grounding strap is warranted whenever danger of static electricity exists.

Precautions

Computer components and electronic circuit boards can be damaged by discharges of static electricity. Working on the computers that are still connected to a power supply can be extremely dangerous. Follow the guidelines below to avoid damage to your computer or yourself:

- Always disconnect the unit from the power outlet whenever you are working inside the case.
- If possible, wear a grounded wrist strap when you are working inside the computer case. Alternatively, discharge any static electricity by touching the bare metal chassis of the unit case, or the bare metal body of any other grounded appliance.

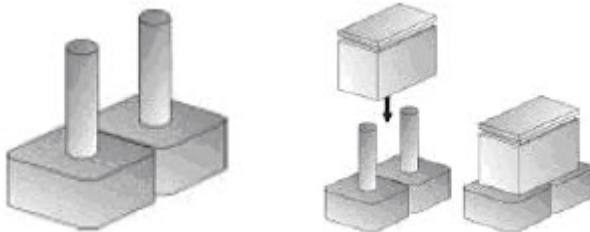
- Hold electronic circuit boards by the edges only. Do not touch the components on the board unless it is necessary to do so. Don't flex or stress the circuit board.
- Leave all components inside the static-proof packaging that they shipped with until they are ready for installation
- Use correct screws and do not over tighten screws.

Jumper Settings

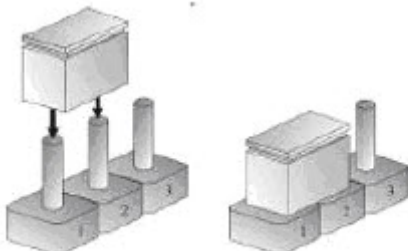
A jumper is the simplest kind of electric switch. It consists of two metal pins and a cap. When setting the jumpers, ensure that the jumper caps are placed on the correct pins. When the jumper cap is placed on both pins, the jumper is short. If you remove the jumper cap, or place the jumper cap on just one pin, the jumper is open.

Refer to the illustrations below for examples of what the 2-pin and 3-pin jumpers look like when they are short (on) and open (off).

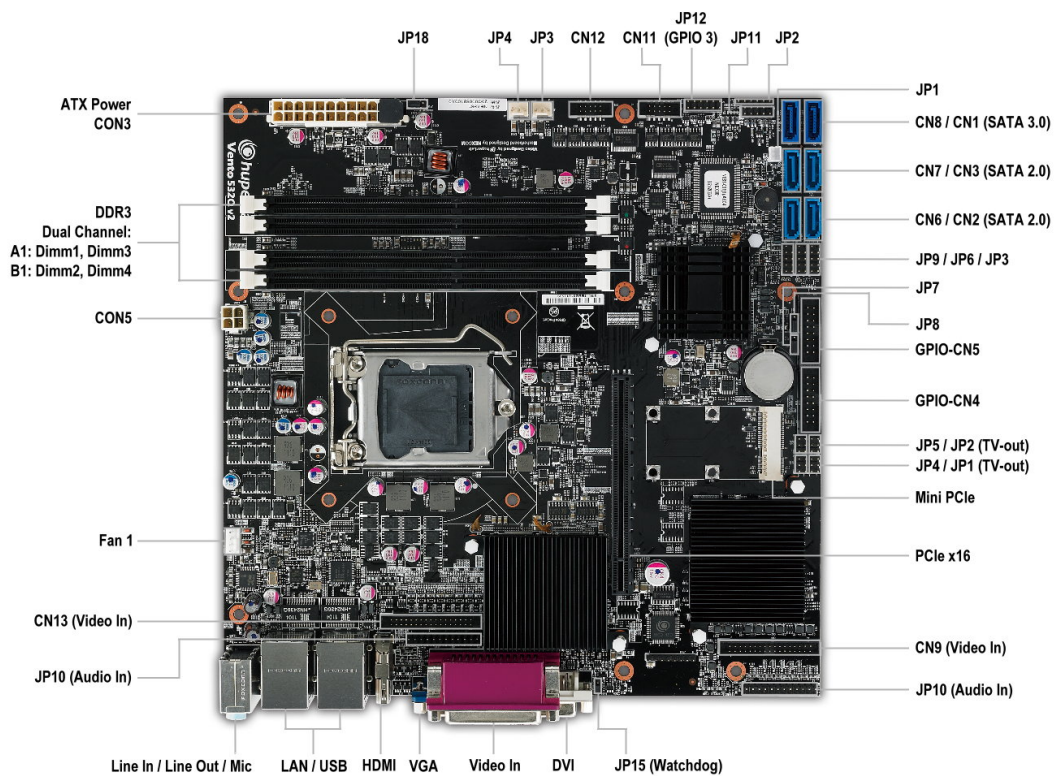
Two-Pin Jumpers: Open (Left) and Short (Right)



Three-Pin Jumpers: Pins 1 and 2 Are Short



Locations of the Jumpers and Connectors



Jumpers

CMOS Clear Select

Connector type: 1x3 3-pin header

Connector location: JP7



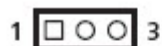
Pin	Settings
1-2 On	Normal
2-3 On	Clear BIOS

1-2 On: default

ME Clear Select

Connector type: 1x3 3-pin header

Connector location: JP8



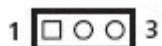
Pin	Settings
1-2 On	Normal
2-3 On	Clear ME

1-2 On: default

Watchdog Enable

Connector type: 1x3 3-pin header

Connector location: JP15



Pin	Settings
1-2 On	Enable
2-3 On	Enable

1-2 On: default

Power Mode Select

Connector type: 1x3 3-pin header

Connector location: JP18



Pin	Settings
1-2 On	ATX
2-3 On	AT

1-2 On: default

Internal Connectors

SATA DOM Power Connector

Connector type: 1x2 2-pin boxed header

Connector location: J1

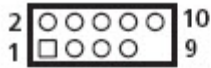


Pin	Definition
1	+5V
2	GND

USB Connectors

Connector type: 2x5 10-pin header

Connector location: JP6 (USB6, USB7), JP3 (USB8, USB9), JP9 (USB4, USB5)

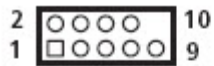


Pin	Definition	Pin	Definition
1	5VDUAL	2	5VDUAL
3	DATA0_N	4	DATA1_N
5	DATA1_P	6	DATA1_P
7	GND	8	GND
9	KEY	10	NC

FP Control Connector

Connector type: 2x5 10-pin header

Connector location: JP11

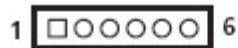


Pin	Definition	Pin	Definition
1	SATA_LED_P	2	PWR_LED_P
3	SATA_LED_N	4	GND
5	GND	6	PWRBT_N
7	RST_BTN_N	8	GND
9	NC		

External PS/2 Keyboard/Mouse Connector

Connector size: 1x6 6-pin header

Connector location: J2



Pin	Definition	Pin	Definition
1	+5V	4	Keyboard Data
2	Mouse Clock	5	Keyboard Clock
3	Mouse Data	6	GND

System Fan Connectors

Connector type: 1x3, 3-pin Wafer

Connector location: J3, J4



Pin	Definition
1	GND
2	+12V
3	SENSE

CPU Fan Connector

Connector type: 1x4, 4-pin Wafer

Connector location: FAN1

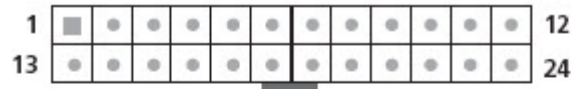


Pin	Definition
1	GND
2	VCC12
3	FAN_TAC1
4	FAN_CTL1

ATX Power Connector

Connector type: 2x12 24-pin connector

Connector location:

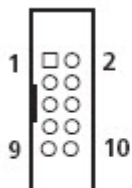


Pin	Definition	Pin	Definition
1	VCC3	13	VCC3
2	VCC3	14	NC
3	GND	15	GND
4	VCC5	16	PS-ON
5	GND	17	GND
6	VCC5	18	GND
7	GND	19	GND
8	POWEROK	20	NC
9	5VSB	21	VCC5
10	VCC12	22	VCC5
11	VCC12	23	VCC5
12	VCC3	24	GND

COM1 and COM2 Connectors

Connector type: 2x5, 10-pin header, 2.0mm -M-180

Connector location: CN11 (COM1) and CN12 (COM2)

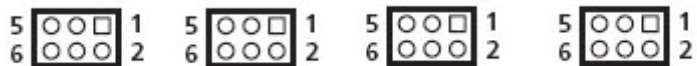


Pin	Definition	Pin	Definition
1	DCD1/RS422_TX-/RS485_-	2	RXD1/RS422_TX+/RS485_+
3	TXD1/RS422_RX+	4	DTR1/RS422_RX-
5	GND	6	DSR1/RS422_RTS-
7	RTS1/RS422_RTS+	8	CTS1/RS422_CTS+
9	RI1/RS422_CTS-	10	GND

TV-Out Connectors

Connector type: 2x3, 6-pin header

Connector location: JP1 (TV-Out 7,8) , JP2 (TV-Out 5,6) ,
JP4 (TV-Out 3,4) , JP5 (TV-Out 1,2)



JP5

Pin	Definition	Pin	Definition
1	TV OUT 1	2	GND
3	TV OUT 2	4	GND
5	N/A	6	GND

JP4

Pin	Definition	Pin	Definition
1	TV OUT 3	2	GND
3	TV OUT 4	4	GND
5	N/A	6	GND

JP2

Pin	Definition	Pin	Definition
1	TV OUT 5	2	GND
3	TV OUT 6	4	GND
5	N/A	6	GND

JP1

Pin	Definition	Pin	Definition
1	TV OUT 7	2	GND
3	TV OUT 8	4	GND
5	N/A	6	GND

GPIO Connector 1

Connector type: 2x8, 16-pin header

Connector location: CN5



Pin	Definition	Pin	Definition
1	GPIO 1	2	GND
3	GPIO 2	4	GND
5	GPIO 3	6	GND
7	GPIO 4	8	GND
9	GPIO 5	10	GND
11	GPIO 6	12	GND
13	GPIO 7	14	GND
15	GPIO 8	16	GND

GPIO Connector 2

Connector type: 2x8, 16-pin header

Connector location: CN4

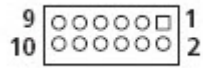


Pin	Definition	Pin	Definition
1	GPIO 9	2	GND
3	GPIO 10	4	GND
5	GPIO 11	6	GND
7	GPIO 12	8	GND
9	GPIO 13	10	GND
11	GPIO 14	12	GND
13	GPIO 15	14	GND
15	GPIO 16	16	GND

GPIO Connector 3

Connector type: 2x6 12-pin header

Connector location: JP12



Pin	Definition	Pin	Definition
1	GP11	2	GP12
3	GP13	4	GP14
5	GPO 1	6	GPO 2
7	GPO 3	8	GPO 4
9	+ 3.3V	10	+ 3.3V
11	GND	12	GND

Camera Audio-in Connector (Rows A and B)

Connector type: 2x10 20-pin header

Connector location: JP17



Pin	Definition	Pin	Definition
1	AUDIO IN 1	2	AUDIO IN 9
3	AUDIO IN 2	4	AUDIO IN 10
5	AUDIO IN 3	6	AUDIO IN 11
7	AUDIO IN 4	8	AUDIO IN 12
9	AUDIO IN 5	10	AUDIO IN 13
11	AUDIO IN 6	12	AUDIO IN 14
13	AUDIO IN 7	14	AUDIO IN 15
15	AUDIO IN 8	16	AUDIO IN 16
17	GND	18	GND
19	N/A	20	GND

Camera Audio-in Connector (Rows C and D)

Connector type: 2x10 20-pin header

Connector location: JP10



Pin	Definition	Pin	Definition
1	AUDIO IN 17	2	AUDIO IN 25
3	AUDIO IN 18	4	AUDIO IN 26
5	AUDIO IN 19	6	AUDIO IN 27
7	AUDIO IN 20	8	AUDIO IN 28
9	AUDIO IN 21	10	AUDIO IN 29
11	AUDIO IN 22	12	AUDIO IN 30
13	AUDIO IN 23	14	AUDIO IN 31
15	AUDIO IN 24	16	AUDIO IN 32
17	GND	18	GND
19	N/A	20	GND

Camera Video-in Connector

Connector type: 2x17 34-pin header

Connector location: CN13



Pin	Definition	Pin	Definition
1	VIDEO IN 1	2	GND
3	VIDEO IN 2	4	GND
5	VIDEO IN 3	6	GND
7	VIDEO IN 4	8	GND
9	VIDEO IN 5	10	GND
11	VIDEO IN 6	12	GND
13	VIDEO IN 7	14	GND
15	VIDEO IN 8	16	GND
17	VIDEO IN 9	18	GND
19	VIDEO IN 10	20	GND
21	VIDEO IN 11	22	GND
23	VIDEO IN 12	24	GND
25	VIDEO IN 13	26	GND
27	VIDEO IN 14	28	GND
29	VIDEO IN 15	30	GND
31	VIDEO IN 16	32	GND
33	GND	34	GND

Camera Video-in Connector

Connector type: 2x17 34-pin header

Connector location: CN9



Pin	Definition	Pin	Definition
1	VIDEO IN 17	2	GND
3	VIDEO IN 18	4	GND
5	VIDEO IN 19	6	GND
7	VIDEO IN 20	8	GND
9	VIDEO IN 21	10	GND
11	VIDEO IN 22	12	GND
13	VIDEO IN 23	14	GND
15	VIDEO IN 24	16	GND
17	VIDEO IN 25	18	GND
19	VIDEO IN 26	20	GND
21	VIDEO IN 27	22	GND
23	VIDEO IN 28	24	GND
25	VIDEO IN 29	26	GND
27	VIDEO IN 30	28	GND
29	VIDEO IN 31	30	GND
31	VIDEO IN 32	32	GND
33	GND	34	GND

Chapter 3 BIOS SETUP

This chapter describes how to use the BIOS setup program for the NEX 881. The BIOS screens provided in this chapter are for reference only and may change if the BIOS is updated in the future.

3.1 About BIOS Setup

The BIOS (Basic Input and Output System) Setup program is a menu driven utility that enables you to make changes to the system configuration and tailor your system to suit your individual work needs. It is a ROM-based configuration utility that displays the system's configuration status and provides you with a tool to set system parameters.

These parameters are stored in non-volatile battery-backed-up CMOS RAM that saves this information even when the power is turned off. When the system is turned back on, the system is configured with the values found in CMOS.

- Hard drives, diskette drives, and peripherals
- Video display type and display options
- Password protection from unauthorized use
- Power management features

3.2 When to Configure the BIOS

This program should be executed under the following conditions:

- When changing the system configuration
- When a configuration error is detected by the system and you are prompted to make changes to the Setup program
- When resetting the system clock
- When redefining the communication ports to prevent any conflicts
- When making changes to the Power Management configuration
- When changing the password or making other changes to the security setup

Normally, CMOS setup is needed when the system hardware is not consistent with the information contained in the CMOS RAM, whenever the CMOS RAM has lost power, or the system features need to be changed.

3.3 BIOS Setup Utility

Once you enter the AMI BIOS Setup Utility, the Main Menu will appear on the screen. The main menu allows you to select from several setup functions and one exit. Use arrow keys to select among the items and press <Enter> to accept or enter the submenu.

3.4 Main

The Main menu is the first screen that you will see when you enter the BIOS Setup Utility.



BIOS Information

Displays the detected BIOS information.

Memory Information

Displays the detected system memory information.

System Date

The date format is <day>, <month>, <date>, <year>. Day displays a day, from Sunday to Saturday. Month displays the month, from January to December. Date displays the date, from 1 to 31. Year displays the year, from 1999 to 2099.

System Time

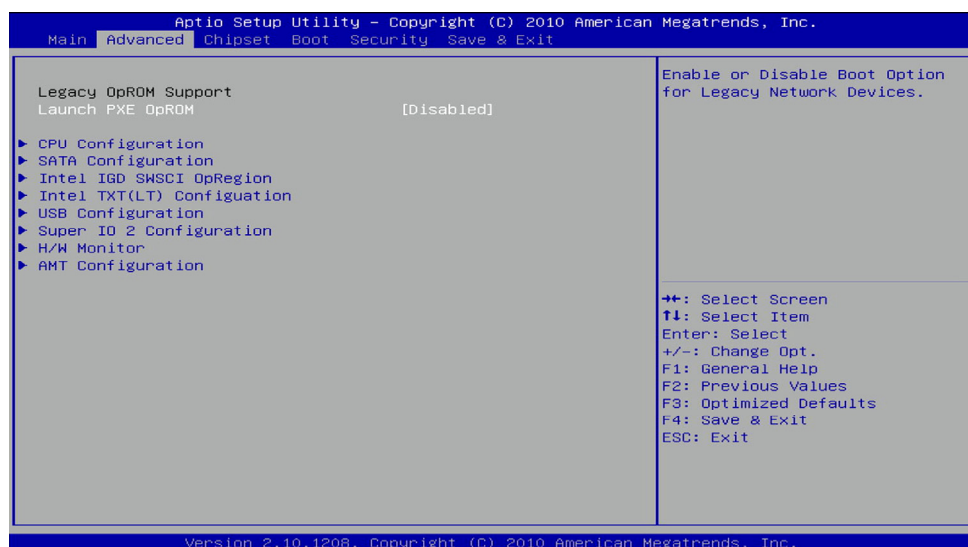
The time format is <hour>, <minute>, <second>. The time is based on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00. Hour displays hours from 00 to 23. Minute displays minutes from 00 to 59. Second displays seconds from 00 to 59.

3.5 Advanced

The Advanced menu allows you to configure your system for basic operation. Some entries are defaults required by the system board, while others, if enabled, will improve the performance of your system or let you set some features according to your preference.



Setting incorrect field values may cause the system to malfunction.

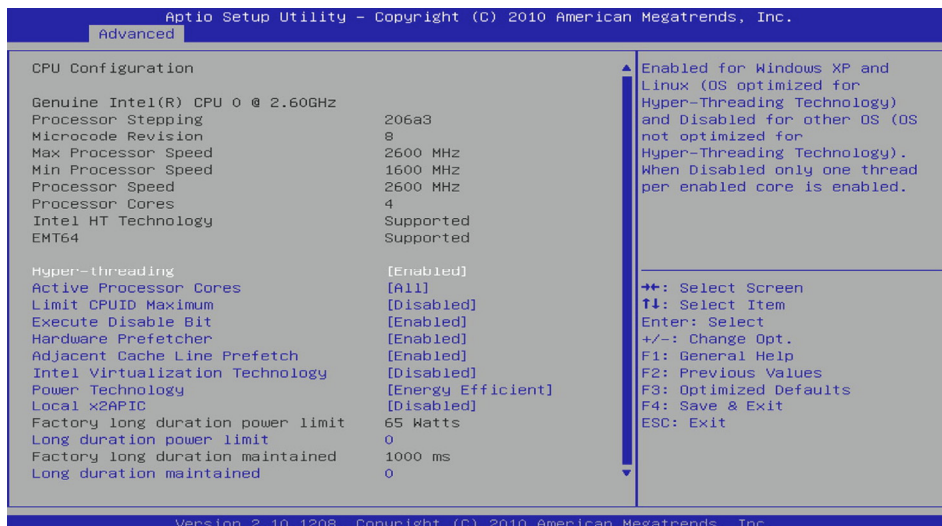


Launch PXE OpROM

Enables or disables the boot option for legacy network devices.

CPU Configuration

This section is used to configure the CPU.



CPU Configuration

Displays the detected CPU information.

Active Processor Cores

This field is used to enter the number of cores to enable in each processor package.

Limit CPUID Maximum

The CPUID instruction of some newer CPUs will return a value greater than 3.

The default is Disabled because this problem does not exist in the Windows series operating systems. If you are using an operating system other than Windows, this problem may occur. To avoid this problem, enable this field to limit the return value to 3 or lesser than 3.

Execute Disable Bit

When this field is set to Disabled, it will force the XD feature flag to always return to 0. XD can prevent certain classes of malicious buffer overflow attacks when combined with a supporting OS (Windows Server 2003 SP1, Windows XP SP2, SuSE Linux 9.2, RedHat Enterprise 3 Update 3.)

Hardware Prefetcher

Tuns on or off the Mid level Cache (L2) streamer prefetcher. The options are Enabled and Disabled.

Adjacent Cache Line Prefetch

Turns on or off prefetching of adjacent cache lines. The options are Enabled and Disabled.

Intel Virtualization Technology

When this field is set to Enabled, the VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.

Power Technology

Configures the power management features.

Local x2APIC

Enables or disables the Local x2APIC. Some OSes doesn't support this feature.

Long Duration Power Limit

Configures the long duration power limit in Watts.

Long Duration Maintained

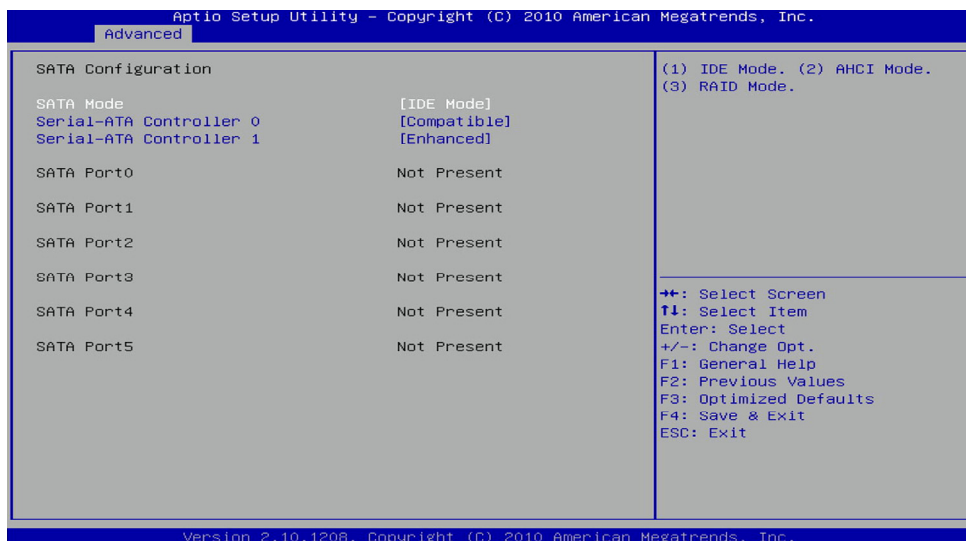
Time window when the long duration power is maintained.

Short Duration Power Limit

Configures the short duration power limit in Watts.

SATA Configuration

This section is used to configure SATA.



SATA Mode

IDE Mode This option configures the Serial ATA drives in IDE mode.

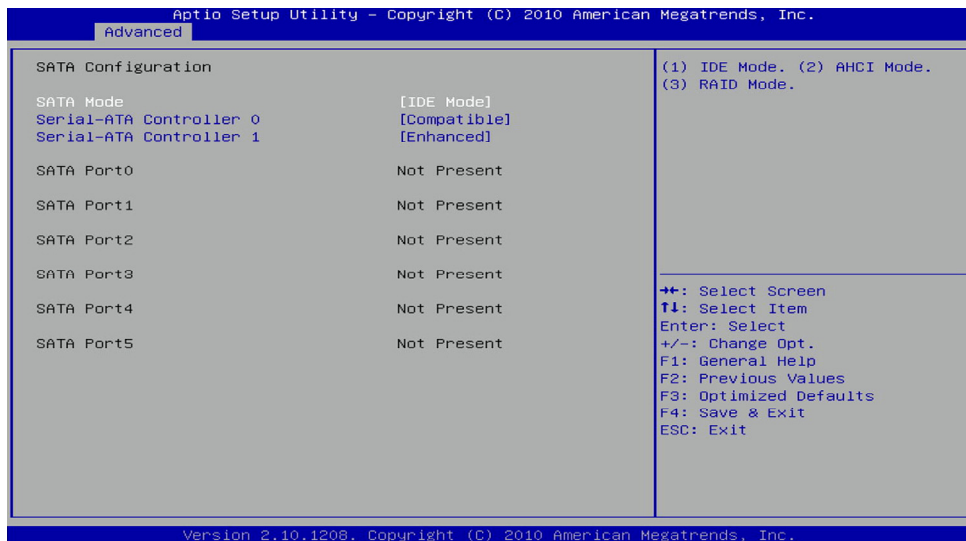
RAID Mode This option enables the RAID function for Serial ATA drives.

AHCI Mode This option configures the Serial ATA drives in AHCI mode.

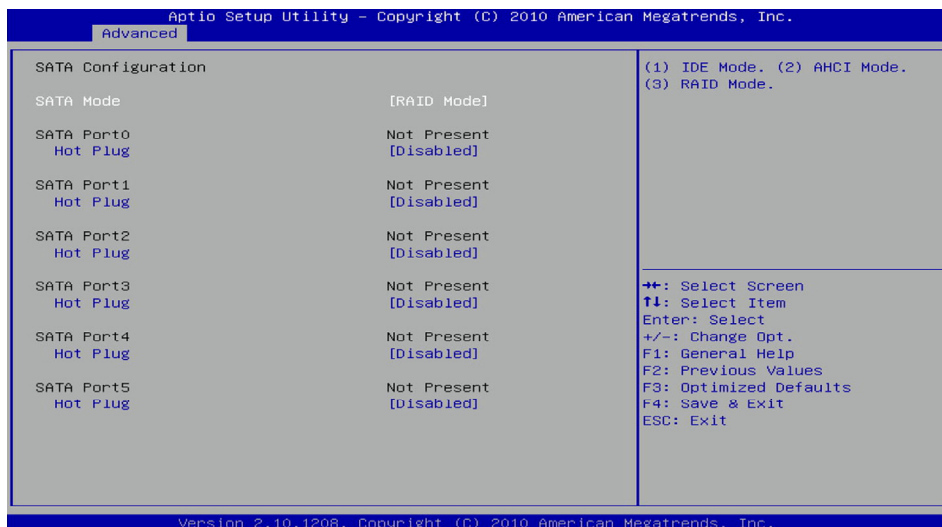
Serial-ATA Controller 0 / Serial-ATA Controller 1

Configures the Serial ATA controller to Compatible or Enhanced mode.

IDE Mode



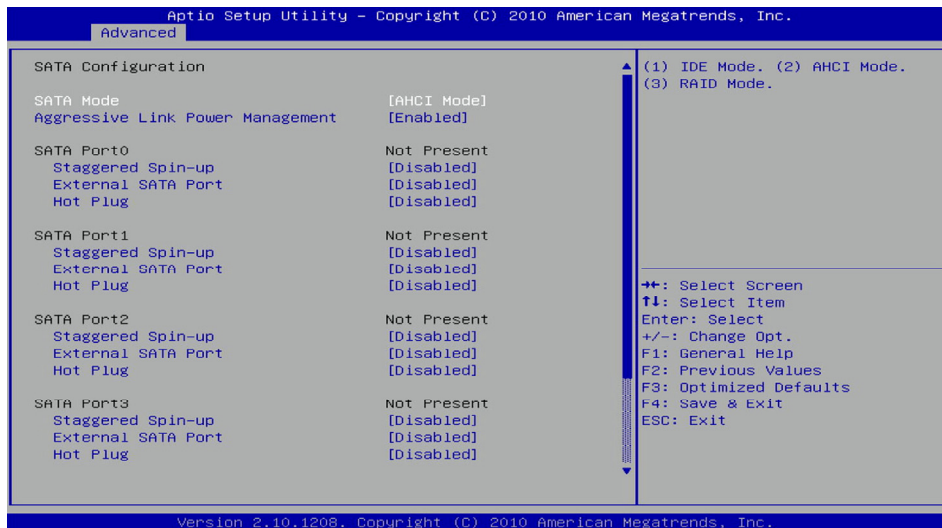
RAID Mode



HOT Plug

SATA Ports Hot Plug Support.

AHCI Mode



Aggressive Link Power Management Support

For Cougar Point B0 stepping onwards.

Staggered Spin-up

AHCI Supports Staggered Spin-up.

External SATA Port

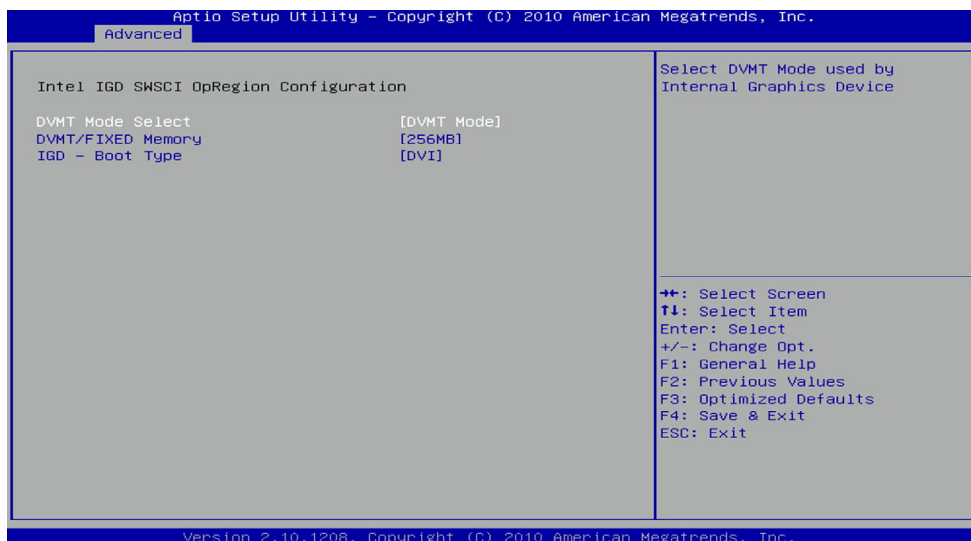
eSATA Ports Support.

HOT Plug

SATA Ports Hot Plug Support.

Intel IGD SWSCI OpRegion

This section is used to configure the Intel graphics display.



DVMT Mode Select

Selects the DVMT mode used by the internal graphics device.

DVMT/FIXED Memory

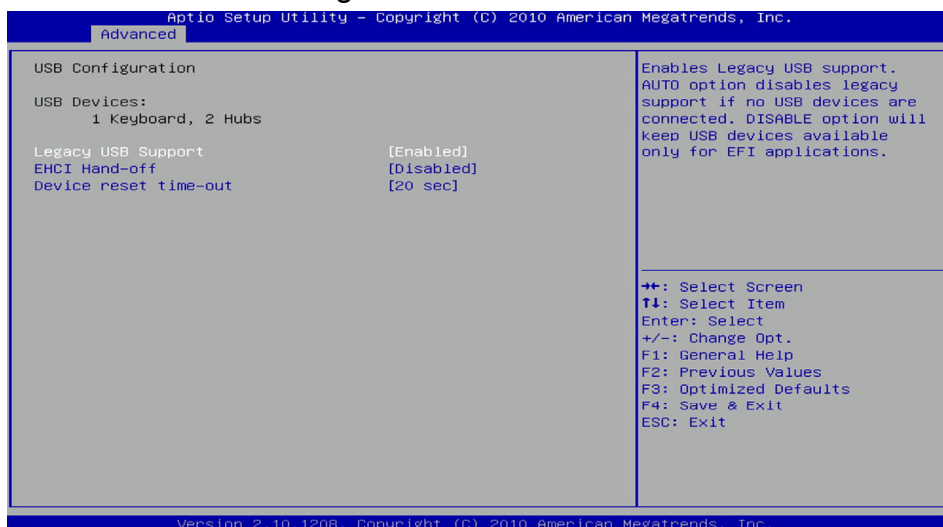
Selects the DVMT/FIXED mode memory size used by the internal graphics device.

IGD - Boot Type

Selects the video device that will be activated during POST. This will not affect any external graphics that may be present.

USB Configuration

This section is used to configure the USB



USB Configuration

Displays the detected USB devices.

Legacy USB Support

- Enable Enables Legacy USB
- Auto Disables support for Legacy when no USB devices are connected
- Disable Keeps USB devices available only for EFI applications.

EHCI Hand-Off

This is a workaround for OSES that does not support EHCI hand-off. The EHCI ownership change should be claimed by the EHCI driver.

Device Reset Timeout

Selects the USB mass storage device's start unit command timeout.

Super IO 2 Configuration

This section is used to configure the serial and parallel ports.

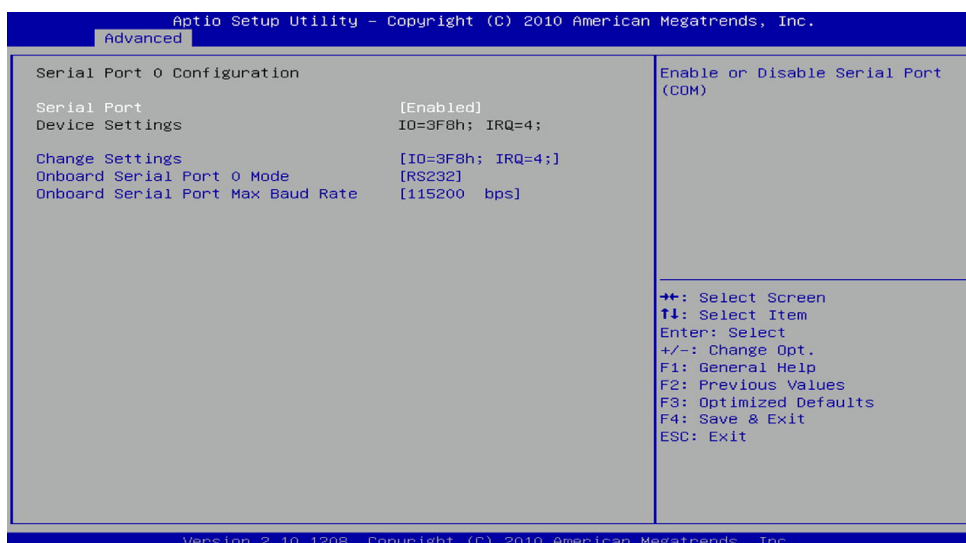


Super IO Chip 2

Displays the Super I/O chip used on the board

Serial Port 0/1 Configuration

This section is used to configure the serial ports.



Serial Port

Enables or disables the serial port.

Change Settings

Selects an optimal settings for the Super IO device.

Onboard Serial Port 0/1 Mode

Change the serial port mode.

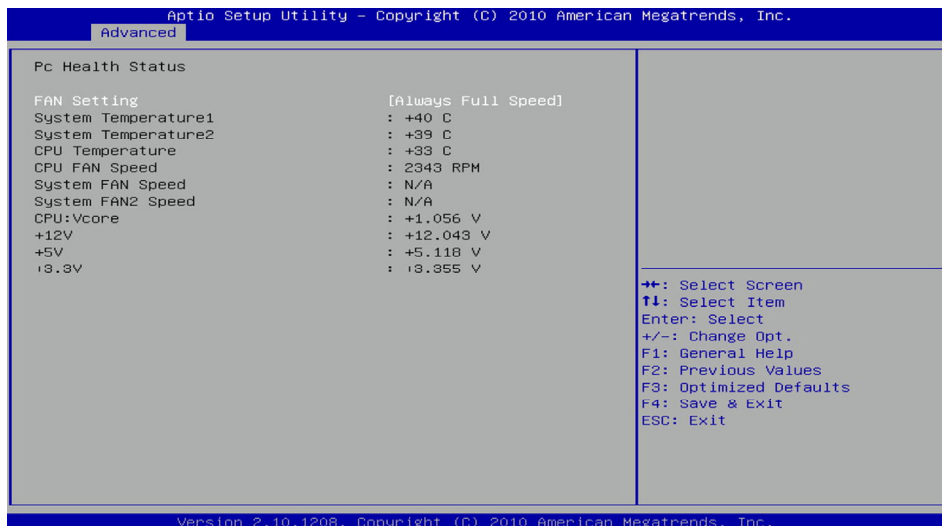
Select <RS232> or <RS422> or <RS485> mode.

Onboard Serial Port Max Baud Rate

Selects the maximum baud rate of the serial port.

H/W Monitor

This section is used to configure the hardware monitoring events such as temperature, fan speed and voltages.



FAN Setting

Configures the cooling fan.

System Temperature 1 to CPU Temperature

Detects and displays the internal temperature of the system and the current temperature of the CPU

CPU Fan Speed to System Fan2 Speed

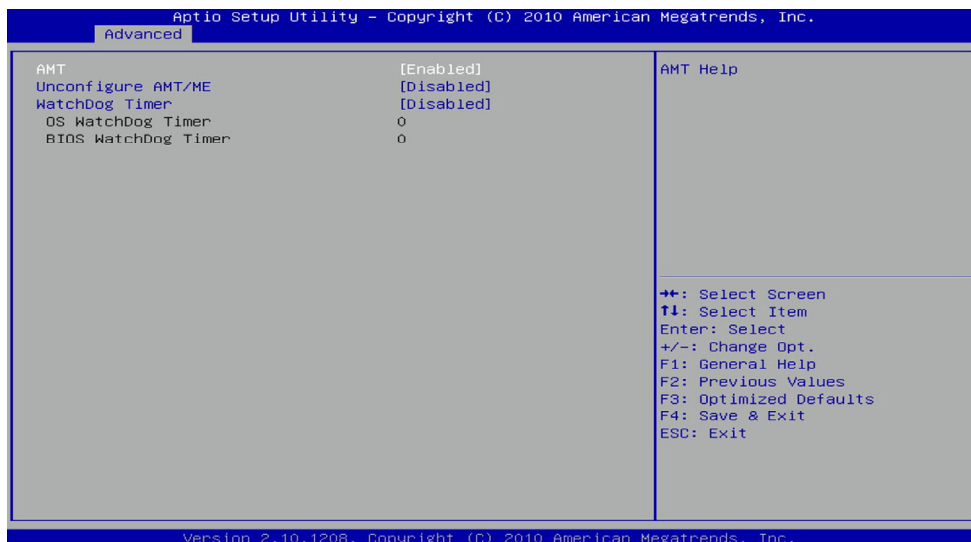
Detects and displays the current fan speed in RPM (Revolutions Per Minute).

CPU:Vcore to +3.3V

Detects and displays the output voltages.

AMT Configuration

This section is used to configure AMT.



AMT

Enables or disables the AMT function.

Unconfigure AMT/ME

Select Enabled to unconfigure the AMT/ME function without the need for a password.

Watchdog Timer

Enables or disables the Watchdog Timer function.

OS Watchdog Timer

Selects the time interval of the OS Watchdog Timer.

BIOS Watchdog Timer

Selects the time interval of the BIOS Watchdog Timer.

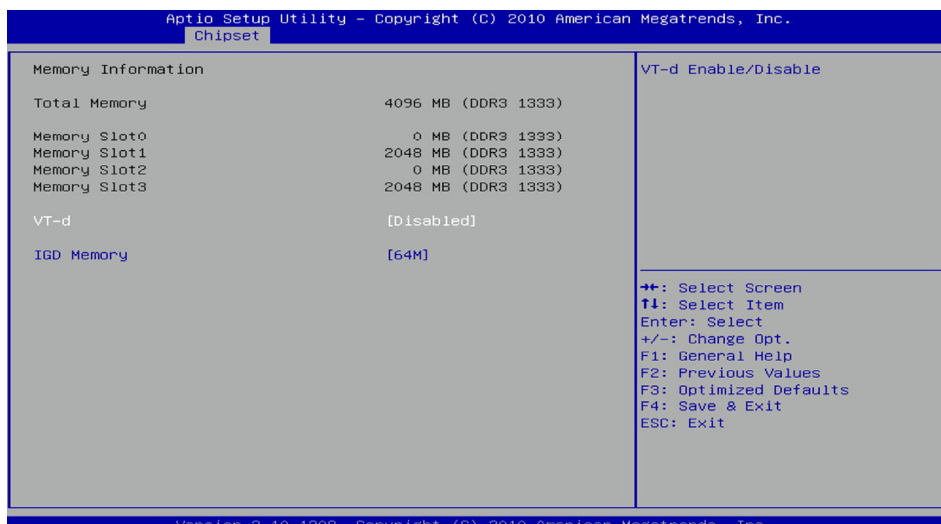
3.6 Chipset

This section gives you functions to configure the system based on the specific features of the chipset. The chipset manages bus speeds and access to system memory resources.



North Bridge

This section is used to configure the north bridge features.



VT-d

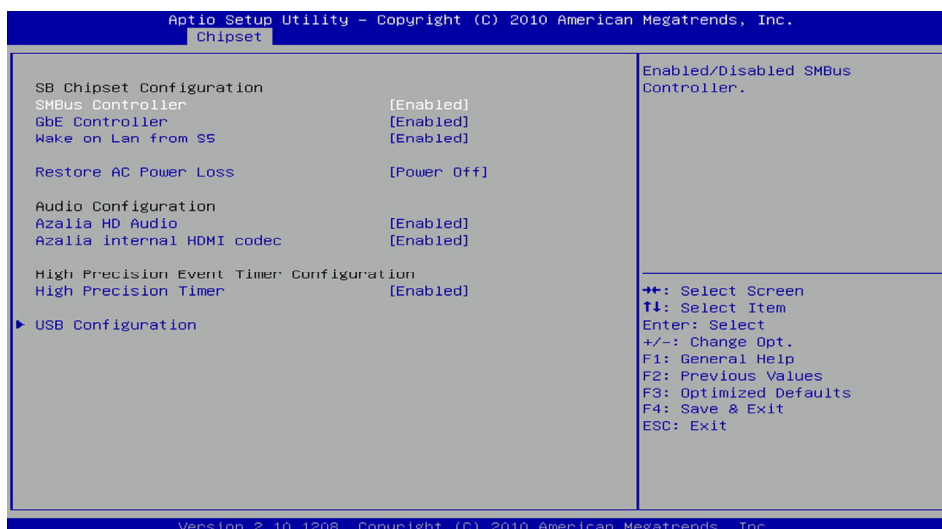
The options are Enabled and Disabled.

IGD Memory

Selects the internal graphics device's shared memory size.

South Bridge

This section is used to configure the south bridge features.



SMBus Controller

Enables or disables the SMBus controller.

GbE Controller

Enables or disables the Gigabit LAN controller.

Wake On Lan From S5

When enabled, it allows the system to wake up from S5 via the network LAN.

Restore AC Power Loss

Power Off	When power returns after an AC power failure, the system's power is off. You must press the Power button to power-on the system.
Power On	When power returns after an AC power failure, the system will automatically power-on.
Last State	When power returns after an AC power failure, the system will return to the state where you left off before power failure occurs. If the system's power is off when AC power failure occurs, it will remain off when power returns. If the system's power is on when AC power failure occurs, the system will power-on when power returns.

Azalia HD Audio

Enables or disables the Azalia HD audio.

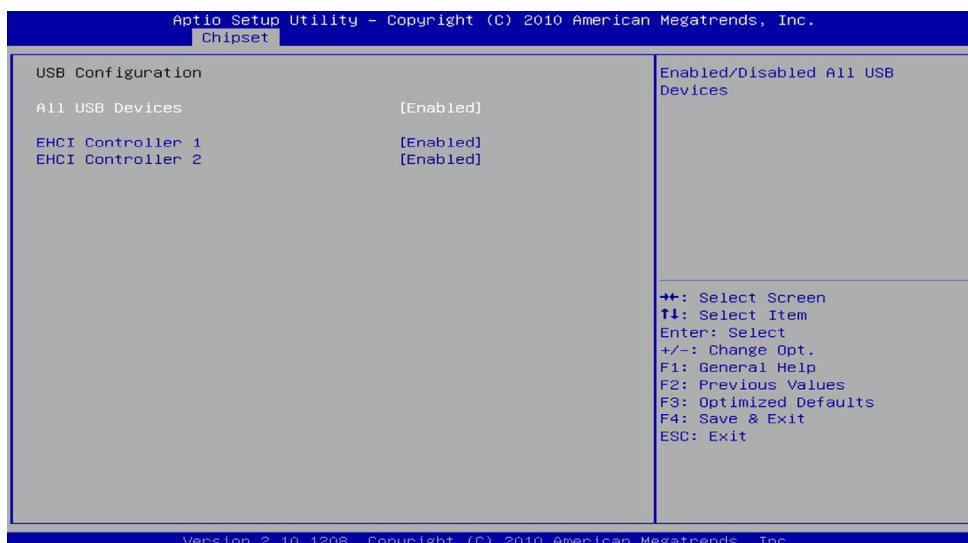
Azalia Internal HDMI Codec

Enables or disables the HDMI feature.

High Precision Timer

Enables or disables the high precision event timer.

USB Configuration



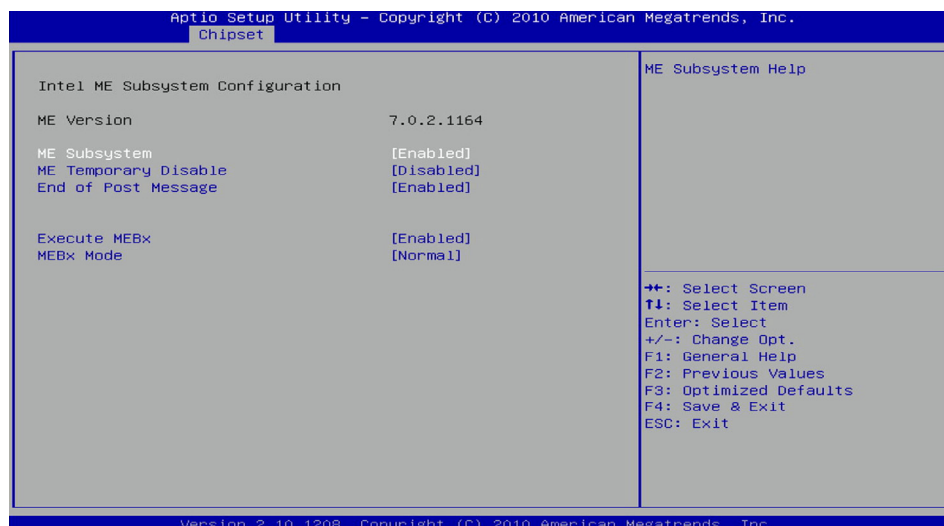
All USB Devices

Enables or disables all USB devices.

EHCI Controller 1 and EHCI Controller 2

Enables or disables the Enhanced Host Controller Interface (USB 2.0).

Intel ME Configuration



ME Subsystem

The options are Enabled and Disabled.

ME Temporary Disable

The options are Enabled and Disabled.

End of the POST Message

The options are Enabled and Disabled.

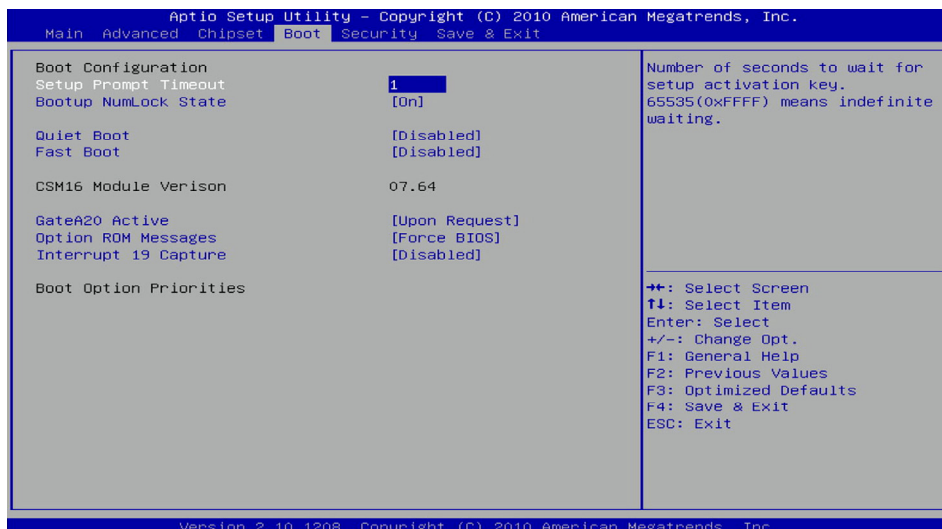
Execute MEBx

The options are Enabled and Disabled.

MEBx Mode

The options are Normal, Hidden Ctrl + P and Enter MEBx Setup.

3.7 Boot



Setup Prompt Timeout

Selects the number of seconds to wait for the setup activation key.
65535(0xFFFF) denotes indefinite waiting.

Bootup NumLock State

This allows you to determine the default state of the numeric keypad. By default, the system boots up with NumLock on wherein the function of the numeric keypad is the number keys. When set to Off, the function of the numeric keypad is the arrow keys.

Quiet Boot

Enabled Displays OEM logo instead of the POST messages.

Disabled Displays normal POST messages.

Fast Boot

Enables or disables the fast boot.

Gate A20 Active

Upon Request GA20 can be disabled using BIOS services.

Always Does not allow disabling GA20. This option is useful when an
RT code is executed above 1MB.

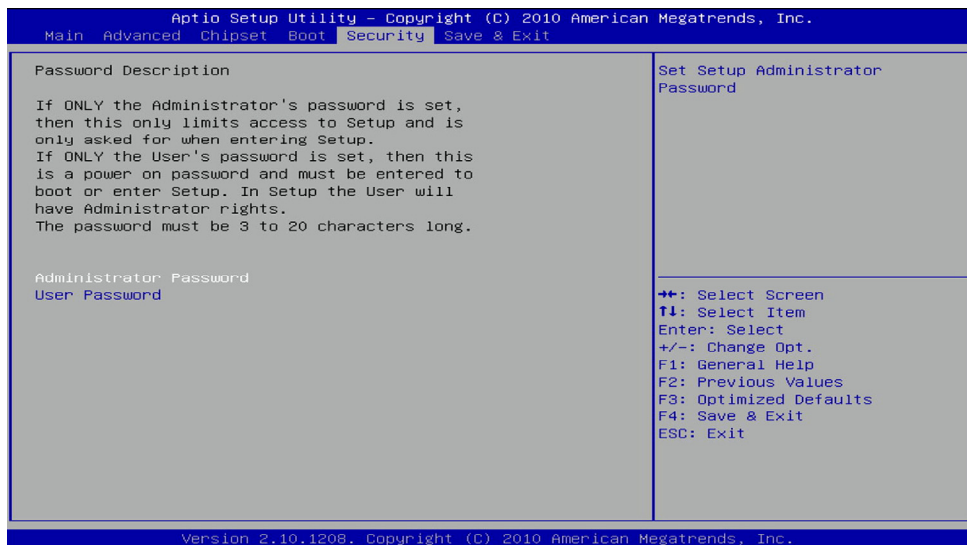
Option ROM Messages

Selects the display mode for Option ROM. The options are Force BIOS and
Keep Current.

Interrupt 19 Capture

When enabled, it allows the optional ROM to trap interrupt 19.

3.8 Security



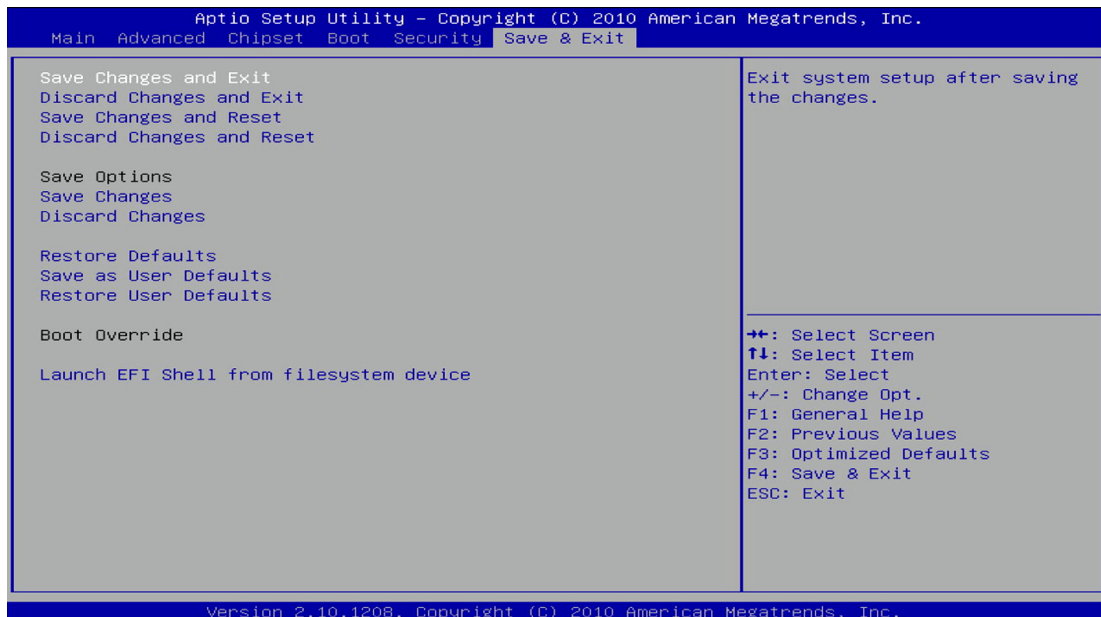
Administrator Password

Sets the administrator password.

User Password

Sets the user password.

3.9 Save & Exit



Save Changes and Exit

To save the changes and exit the Setup utility, select this field then press <Enter>. A dialog box will appear. Confirm by selecting Yes. You can also press <F10> to save and exit Setup.

Discard Changes and Exit

To exit the Setup utility without saving the changes, select this field then press <Enter>. You may be prompted to confirm again before exiting. You can also press <ESC> to exit without saving the changes.

Save Changes and Reset

To save the changes and reset, select this field then press <Enter>. A dialog box will appear. Confirm by selecting Yes.

Discard Changes and Reset

To exit the Setup utility without saving the changes, select this field then press <Enter>. You may be prompted to confirm again before exiting.

Discard Changes

To discard the changes, select this field then press <Enter>. A dialog box will appear. Confirm by selecting Yes to discard all changes made and restore the previously saved settings.

Chaper 4 huperVision Software Installation

4.1 Easy Steps to Install Software

Installation

1. Insert CDROM You will see the Auto Run start up like following Picture



2. Press [**huperVision**] Button

Now start huperVision installation program, The first dialogue box pop-out and please select your installation languages and press [**OK**] button



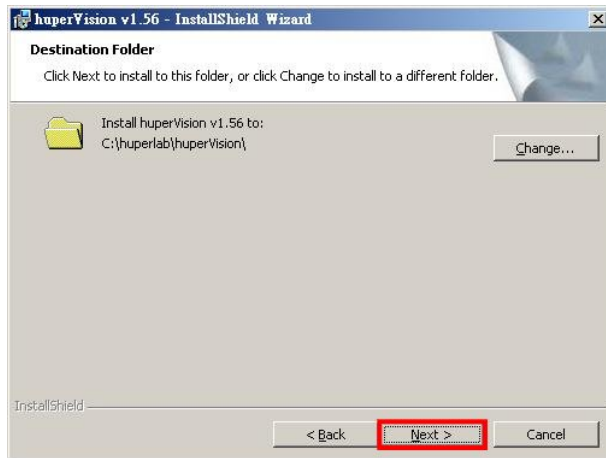
Please wait until the following dialogue appears. Please press **[Next]** button to proceed.



3. Now you see the License agreement, Please take a look if you want, or directly select **[I accept the terms in the license agreement]** then press **[Next]** button to proceed.



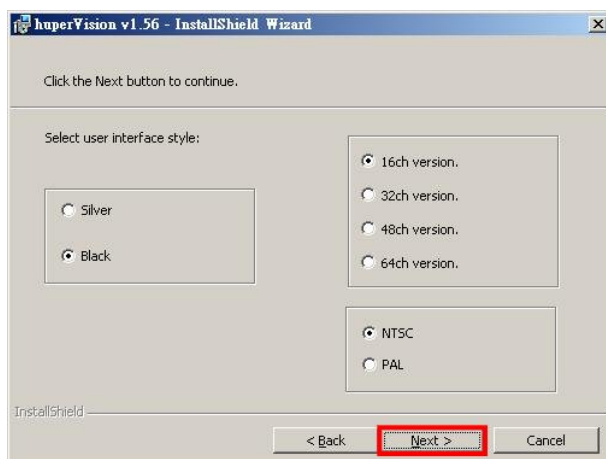
4. The destination folder selection appears. Please directly press **[Next]** button to use the default folder.



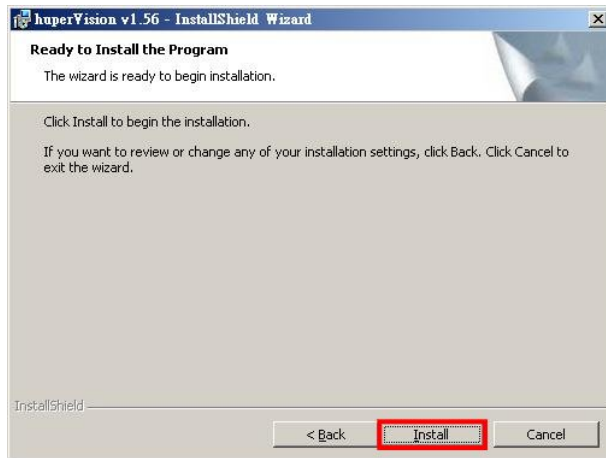
5. Selection of interface type and channel version.
Select black (default) to use huperVision new interface style or silver to use huperVision traditional interface style.

Please select 16ch version to fit all series of huperVision capture cards. If you want to setup a 32CH machine, please select 32ch version which will use dual VGA output.

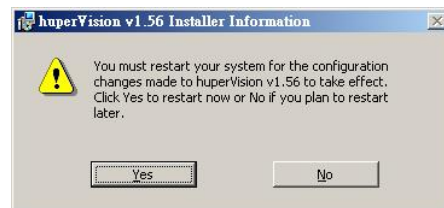
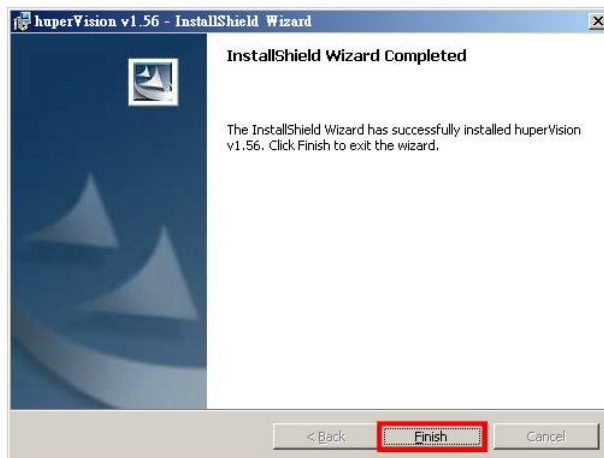
Meanwhile, select correct Video standard (NTSC/PAL) and press **[Next]** to proceed. (This option can be adjusted after setup)



6. Now Press the **[Install]** button to start full installation with capture card driver setup.



Press **[Finish]** to end installation. Please press **[Yes]** to initial huperVision site server program when the installer asking for a reboot.




4.2 Simple Steps to Start Recording

Please follow the steps below to start recording.

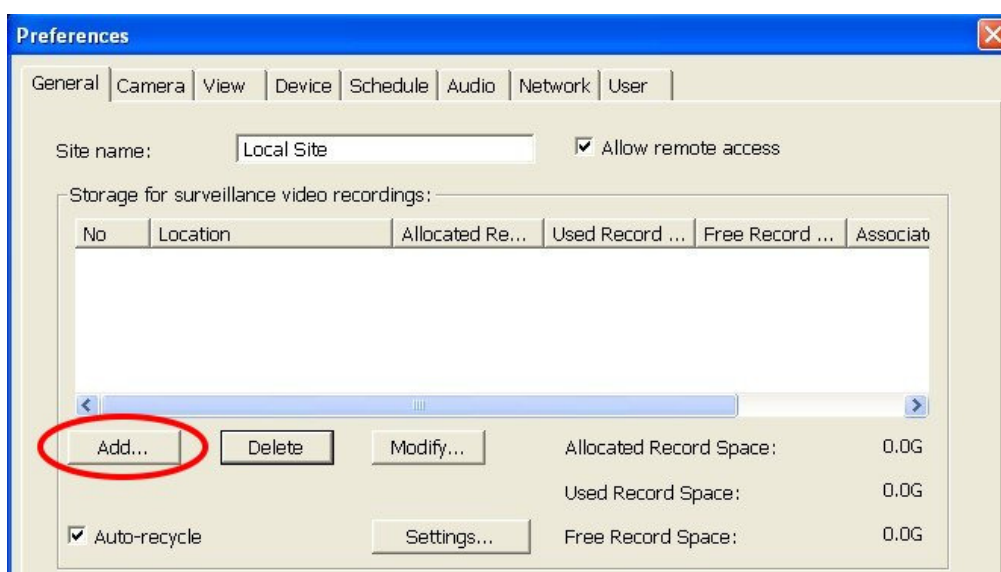
1. After reboot (Manually), huperVision site server program is launching.
You will see a pop-up warning message; this is a notification that you have not specified a recording path to record.



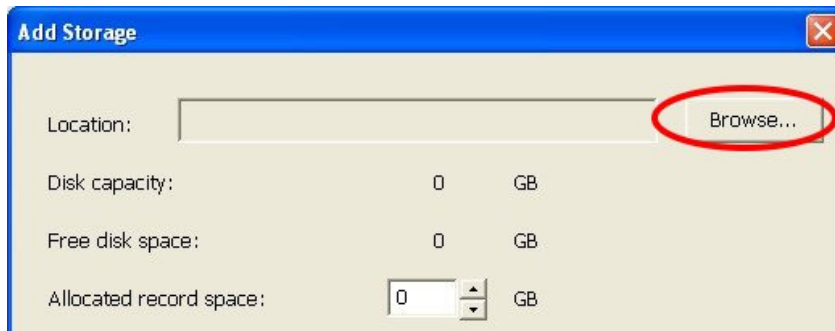
2. You can press the [**Hammer**] Button  to display the general page of preference.



3. Press the [**Add...**] button to add a new folder to store your recording data files.



4. Press [**Browser...**] button in the Add Storage dialogue box.

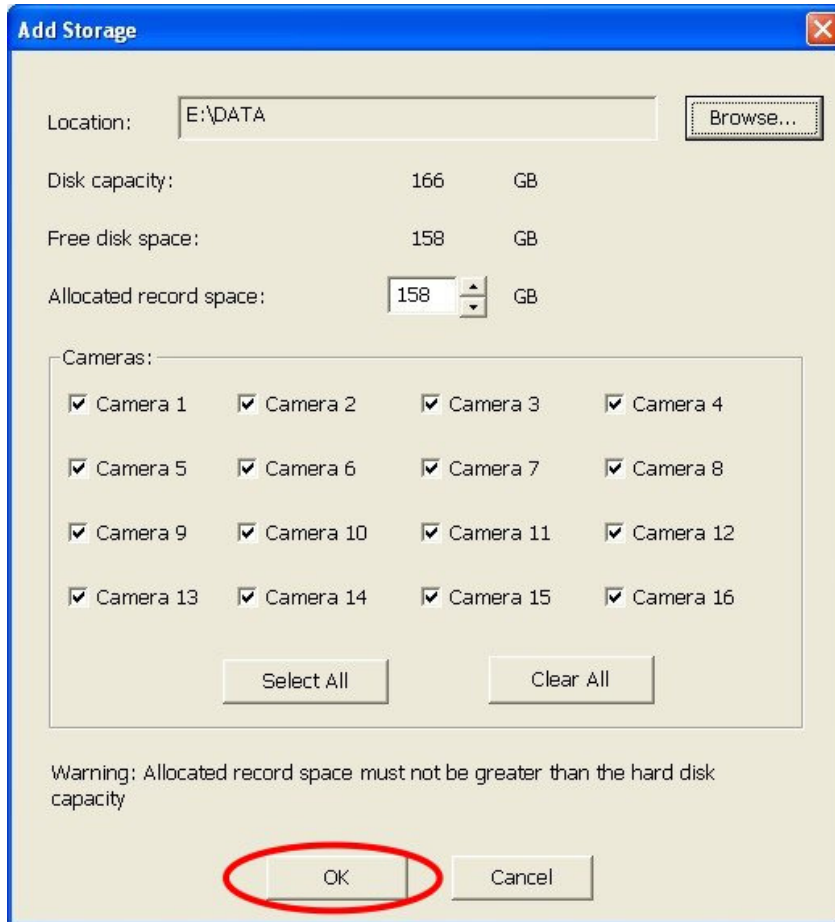


5. You can create a new folder in drive E; e.g. E:\DATA (D:\DATA indicates there is a DATA folder under Drive D.)

So, you select the Drive E icon and press the button [**Make New Folder**]
And input the new folder name "DATA", then press [**OK**].



6. The result will be shown when back to the Add Storage dialogue box.
Please press [OK] button to save the decision.



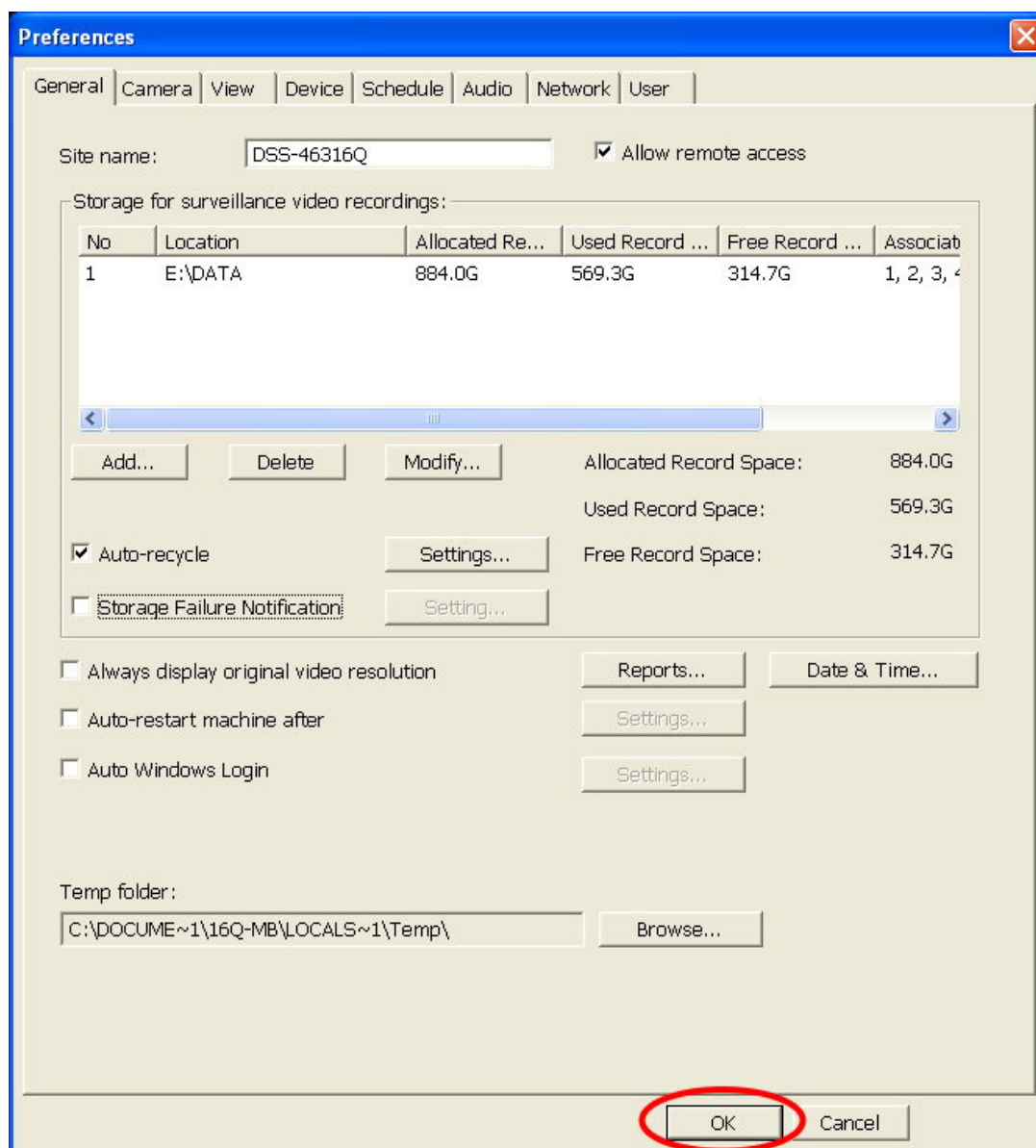
The 'Add Storage' dialog box is shown with the following fields and options:

- Location:** E:\DATA (with a 'Browse...' button)
- Disk capacity:** 166 GB
- Free disk space:** 158 GB
- Allocated record space:** 158 GB (with a spinner box)
- Cameras:** A grid of 16 checkboxes, all of which are checked, labeled Camera 1 through Camera 16.
- Buttons:** 'Select All' and 'Clear All' buttons are located below the camera list.
- Warning:** A text box at the bottom states: 'Warning: Allocated record space must not be greater than the hard disk capacity'.
- OK/Cancel:** At the bottom, there are 'OK' and 'Cancel' buttons. The 'OK' button is circled in red.

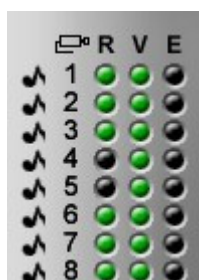
Note: Please keep the all 16 cameras be checked even if you don't have that much cameras.

Please also do NOT change the Allocated record space value by its automatic decision.


- After Create the folder and press the [OK] button of the Preference page.
Congratulations! You start to record videos.

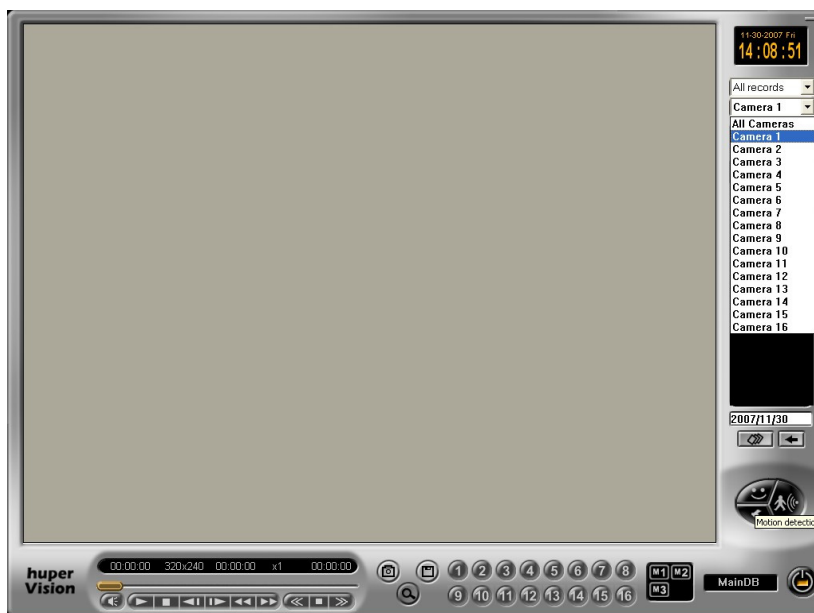


- The R LED turns green at upper right side, indicates that available channels are recording now.



4.3 Simple Steps to Playback Recordings

1. Launch the huperVision Record Player program by clicking the icon 
2. You will see the following full screen program to cover the current huperVision Live view. Don't worry. The Live View and recording task are still working at the background.



3. You have to select which channel you want to playback with, or select All Channels to playback all available channels at the same time.



4. After you select the channel you want to playback, it shows a list of time mark for today's recording. Please select a Time mark to load the Video records.



5. All the video available channels will show the first Image in the Video split area, after the video load progress bar running to the end.

You can now press the Play Button to start playback selected channel recordings.



6. If you want to select different Channel to playback, please repeat from Step 3 to Step 5.

7. You can press the **[Power off]**  button to Exit this Playback program any time.

Note: Press this Power off button will NOT close the running huperVision site server. There is also a protection for accident press the huperVision site server power button, a Confirm dialogue box will show before it really shut down the huperVision site server main program.

Now you are ready to use huperVision IVS system, for more operation guide on Intelligent Video Functions, please refer to full Users Manual.

Press the [**Document**] on the Installation CDROM autorun program.



You will be able to open the Document. Before you load this document, please ensure your system have already Acrobat Reader program installed.

The Acrobat Reader program is included in the Installation CDROM
E:\English\Doc\aar.exe