

FWS-7200

1U Rackmount

Network Appliance Platform

3.5" SATA HDD x 1

or 2.5" SATA HDD x 2

CF SATA Socket

6 LAN Ports

2 USB2.0, 1 COM for Console

1 Mini PCI

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Packing List

Before you begin installing your card, please make sure that the following materials have been shipped:

- FWS-7200
- CD-ROM for manual (in PDF format) and drivers
- Ear Bracket x 1 set
- Screw Accessories

If any of these items should be missing or damaged, please contact your distributor or sales representative immediately.

Note:

VGA Cable is an optional accessory. Please purchase those cables according to the following item numbers.

1700160253 VGA Cable

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Chapter

1

**General
Information**

1.1 Introduction

FWS-7200 adopts the Intel® Dual Core Atom™ D525 Processor and equips with Intel® Atom™ D525 + ICH8M chipset. The system memory features two 204-pin single channel DDR3 800MHz SODIMM slots up to 4GB. It deploys six Gigabit Ethernet LAN ports with one pair (optional two pairs) LAN bypass function. The condensed appearance of FWS-7200 features 1U form factor that fits nicely into a space- limited environment.

This compact FWS-7200 can be equipped with a 3.5" SATA HDD or two 2.5" SATA HDD and CF-SATA socket. In addition, it offers flexible expansion with network products and features one Mini-PCI and two PCI expansion slots, two USB2.0 ports and one RS-232 console port on the front panel. The console port deploys console re-direction that increases the network security via remote control. Moreover, the front panel supports LCM with keypad control for easy access and operation. All of these designs provide for a more user-friendly solution.

1.2 Features

- 1U Rackmount 6 LAN ports Network Appliance
- Onboard Intel® Dual-Core Atom™ D525 processor
- Intel® Atom™ D525 + ICH8M
- Two 204-pin Single Channel DDR3 800MHz SODIMM Up to 4GB
- 10/100/1000Base-TX Ethernet Port x 6 With One Pair (Optional Two Pairs) LAN Bypass Function
- 3.5" SATA HDD x 1 or 2.5" SATA HDD x 2 and CF-SATA Socket
- One Parallel LCM with Keypad
- RS-232 Console x 2 (Front Panel x 1, optional Pin Header x 1), USB2.0 x 2 (Type A Connector x 2 and optional Pin Header x 2)
- AC Power Input Requirement
- Mini PCI Slot x 1, Expansion PCI Slot x 2
- Parallel LCM With Keypad On The Front Panel

1.3 Specifications

System

Form Factor	1U Rackmount 6 LAN ports Network Appliance
Processor	Onboard Intel® Atom™ D525 processor
System Memory	204-pin single channel DDR3 800MHz SODIMM slot x 2, up to 4GB
Chipset	Intel® Atom™ D525 + ICH8M
Ethernet	Intel® 82574L controller, Gigabit Ethernet x 6 with 1 pair (optional 2 pairs) LAN bypass function
BIOS	AMI BIOS
Serial ATA	SATA 3.0Gb/s x 2
SSD	CF-SATA x 1
Expansion Interface	Mini PCI slot x 1, PCI slot x 2
Watchdog Timer	System reset: 1~255 steps by software programming
RTC	Internal RTC
Storage	3.5" SATA HDD or 2.5" SATA HDD x 2 and CF-SATA socket
Front I/O Panel	Power LED x 1, Bypass LED x 1, Status LED x 1, HDD Active LED x 1, USB port x 2, RJ-45 port with LED x 6, DB-9 connector x 1, Parallel LCM display and

	keypad x 1, Software programmable switch x 1
Rear I/O Panel	AC power input x 1, Power switch x 1, PCI Expansion slot x 2
Color	Black
Power Supply	180W AC power input
Power Requirement	One 24-pin ATX power connector compatible with 20-pin PSU, two 4-pin DC power out connector for HDD
Dimension	16.93"(W) x 13.19"(D) x 1.73"(H) (430mm x 335mm x 44mm)
Certification	CE/FCC Class A

Display

Chipset	Intel® Atom™ D525 + ICH8M
Graphic Engine	Intel® Atom™ D525 integrated GMA 3150 graphic engine
Resolution	2048x1536
Output Interface	VGA internal box header

I/O

Serial Port	COM x 2: COM1: RS-232 with DB-9 for Console COM2: RS-232 with pin header (optional)
Keyboard & Mouse	Reserved pin header

USB USB2.0 x 4:
USB for internal pin header x 2 (optional)
USB2.0 Type A on I/O side

Environment

Operating Temperature 32°F~104°F (0°C ~40°C)

Storage Temperature -4°F~104°F (-20°C ~60°C)

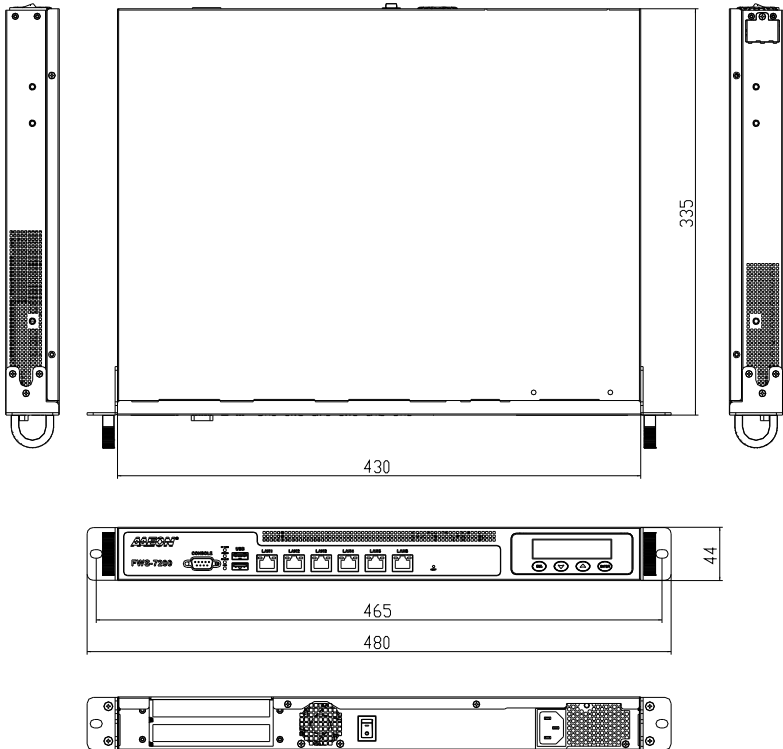
Operating Humidity 10%~80% relative humidity,
non-condensing

Storage Humidity 10%~80% @ 40°C, non-condensing

Vibration 0.5g rms/5~500Hz/ operation (3.5" HDD)
1.5g rms/5~500Hz/ non-operation

Shock 10G peak acceleration (11m sec.
duration), operation
20G peak acceleration (11m sec.
duration), non operation

1.4 General System Information



Chapter

2

**Quick
Installation
Guide**

2.1 Safety Precautions

The installation is intended for technically qualified personnel who have experience installing and configuring system boards.

The equipment can be installed in a restricted access location (RAL) only.

A restricted access location is a site location for equipment where the following criteria apply:

01. Access can only be gained by service persons or by users who have been trained on the restrictions and the precautions for this specific site.

02. Access is by means of at least one of the following, special tool, lock and key, or other means of security, and is controlled by the authority responsible for the location.

Safety Precautions:

Warning!



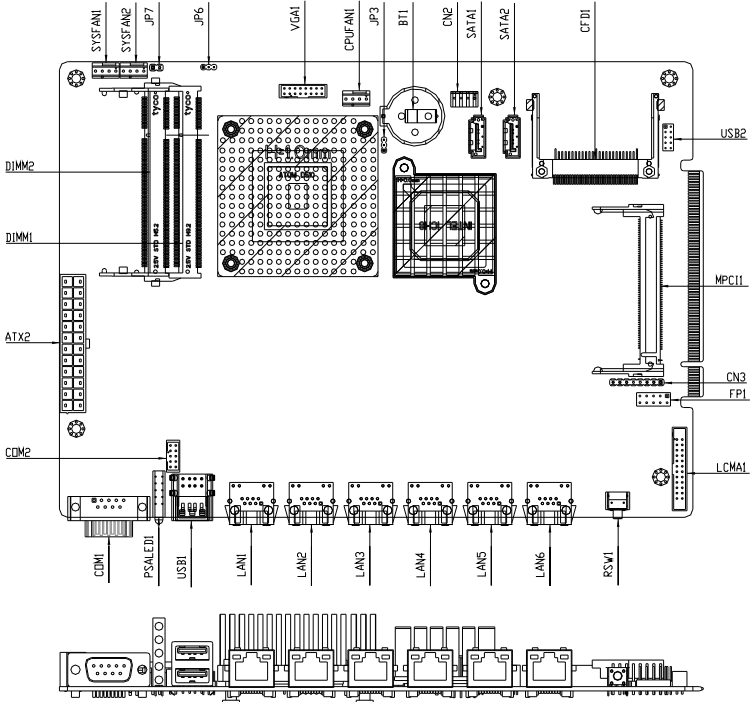
Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.

Caution!

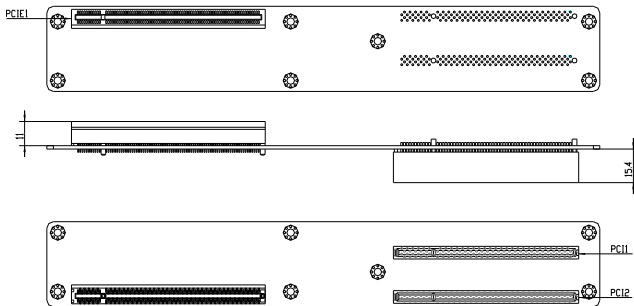


Always ground yourself to remove any static charge before touching the board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis

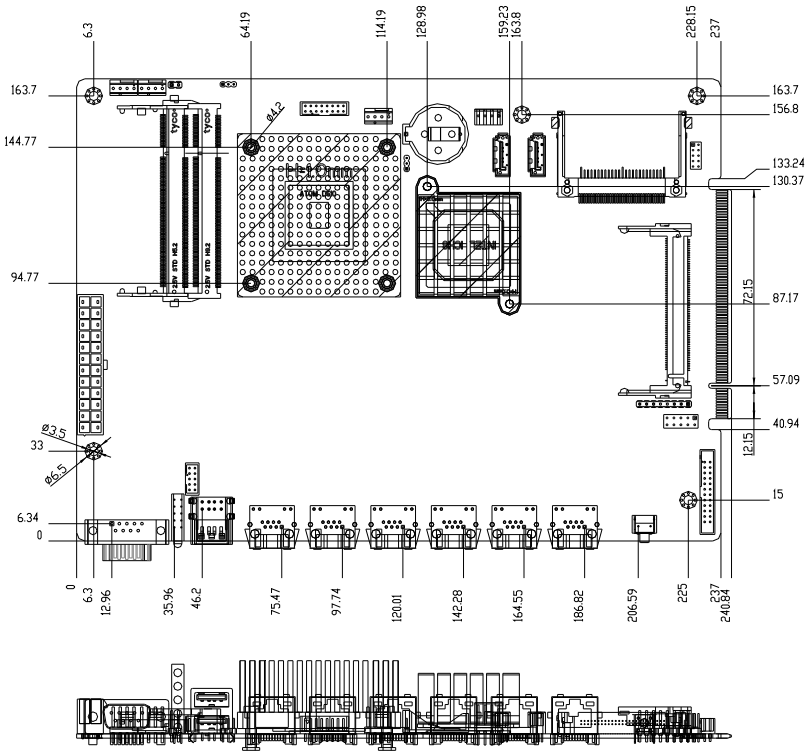
2.2 Location of Connectors of Main Board

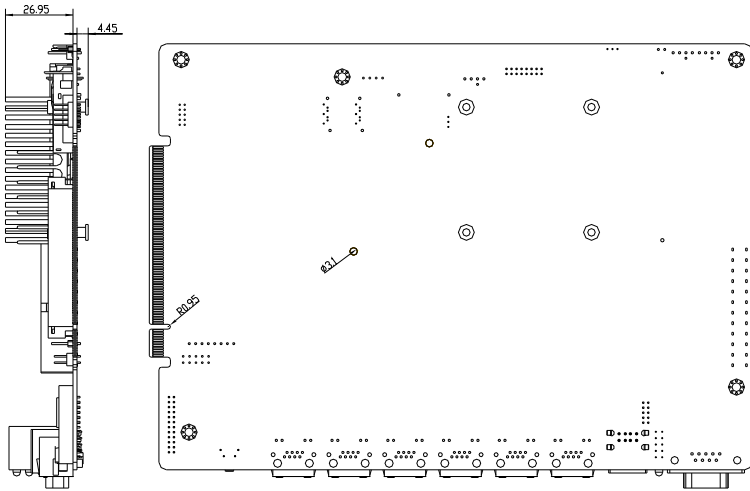


Location of Connectors of PER-T244

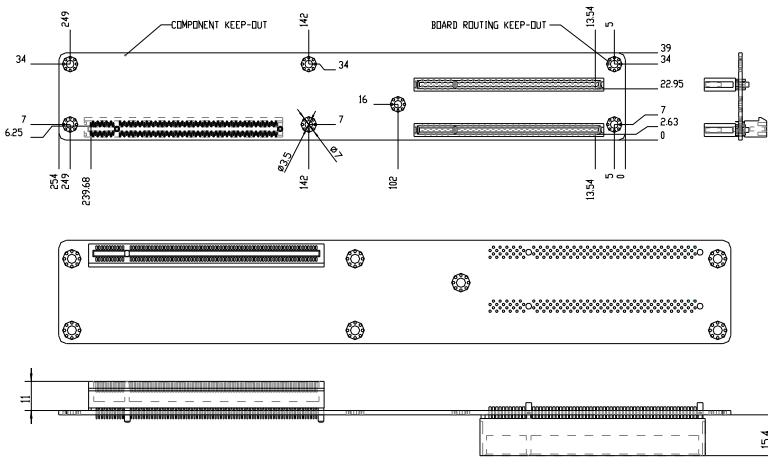


2.3 Mechanical Drawing of Main Board





Mechanical drawings of PER-T244



2.4 List of Jumpers

The board has a number of jumpers that allow you to configure your system to suit your application.

The table below shows the function of each of the board's jumpers:

Label	Function
JP3	CMOS Setting Selection
JP6	Auto PWRBTN Selection

2.5 List of Connectors

The board has a number of connectors that allow you to configure your system to suit your application. The table below shows the function of each board's connectors:

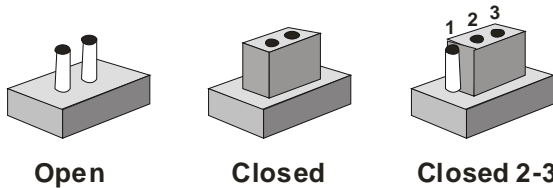
Label	Function
SO-DIMM1	DDR3 SOCKET
SO-DIMM2	DDR3 SOCKET
ATX2	24P ATX POWER SUPPLY INPUT
CN6	3P FAN
CN14	KB/MS
COM1	COM PORT
COM2	COM PORT
VGA1	Analog Display
USB1	USB 2.0 *2
USB2	USB 2.0 *2
FP1	Front Panel Pin Header
MPC11	Mini PCI Slot

SATA1	SATA INTERFACE
SATA2	SATA INTERFACE
CN2	SATA POWER
SYSFAN1	4-PIN Fan Connector
SYSFAN2	4-PIN Fan Connector
CPUFAN1	4-PIN Fan Connector
GPIO1	Digital I/O
CFD1	CF-SATA CARD SOCKET
LLED1	LAN LED Pin Header
BPLED1	Bypass LED Pin Header
RSW1	Software Programmable Button

2.6 Setting Jumpers

You configure your card to match the needs of your application by setting jumpers. A jumper is the simplest kind of electric switch. It consists of two metal pins and a small metal clip (often protected by a plastic cover) that slides over the pins to connect them. To “close” a jumper you connect the pins with the clip.

To “open” a jumper you remove the clip. Sometimes a jumper will have three pins, labeled 1, 2 and 3. In this case you would connect either pins 1 and 2 or 2 and 3.



A pair of needle-nose pliers may be helpful when working with jumpers.

If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any change.

Generally, you simply need a standard cable to make most connections.

2.7 CMOS Setting Selection (JP3)

JP3	Function
1-2	Normal (Default)
2-3	Clear CMOS

2.8 Auto PWRBTN Selection (JP6)

JP6	Function
1-2	Don't use Auto PWRBTN (Default)
2-3	Use Auto PWRBTN

2.9 24-pin ATX Power Connector (ATX2)

Pin	Signal	Pin	Signal
1	3.3V	2	3.3V
3	GND	4	+5V
5	GND	6	+5V
7	GND	8	PG-OK
9	5VSB	10	+12V
11	+12V	12	+3.3V
13	+3.3V	14	-12V
15	GND	16	PS-ON#
17	GND	18	GND
19	+5V	20	-5V
21	+5V	22	+5V
23	+5V	24	GND

2.10 Front Panel Connector (FP1)

Pin	Signal	Pin	Signal
1	Power On Button (-)	2	Power On Button (+)
3	HDD LED(-)	4	HDD LED(+)
5	External Speaker (-)	6	External Speaker (+)
7	Power LED (-)	8	Power LED (+)
9	Reset Switch (-)	10	Reset Switch (+)

2.11 Pin Header (USB2)

Pin	Signal	Pin	Signal
1	+5V	2	GND
3	USBD1-	4	GND
5	USBD1+	6	USB2+
7	GND	8	USB2-
9	GND	10	+5V
11	CD-L		

2.12 RS-232 Box Header (COM2)

Pin	Signal	Pin	Signal
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI	10	N.C

2.13 SATA Connector (SATA 1, SATA2)

Pin	Signal	Pin	Signal
1	GND	2	TXP
3	TXN	4	GND
5	RXN	6	RXP
7	GND		

2.14 CF-SATA Connector (CFD1)

Pin	Signal	Pin	Signal
1	GND	26	GND
2	PDD3	27	PDD11
3	PDD4	28	PDD12
4	PDD5	29	PDD13
5	PDD6	30	PDD14
6	PDD7	31	PDD15
7	CS1	32	CS#3
8	GND	33	GND
9	GND	34	PDIOR
10	SATA_RXP	35	PDIOW
11	SATA_RXN	36	WE#
12	GND	37	INTRQ
13	VCC	38	VCC
14	GND	39	CSEL

15	SATA_TXN	40	CF-SATA_WE
16	SATA_TXP	41	RESET
17	GND	42	PDIORDY
18	PDA2	43	PDDREQ
19	PDA1	44	PDDACK
20	PDA0	45	DASP
21	PDD0	46	PDIAG
22	PDD1	47	PDD8
23	PDD2	48	PDD9
24	NC	49	PDD10
25	GND	50	GND

2.15 Software Programmable Button (RSW1)

Pin	Signal	Pin	Signal
1	SOFTWAREPRGM-	2	GND

Button status: I/O Space 0x4BA bit 0

2.16 Analog Display (VGA1)

Pin	Signal	Pin	Signal
1	RED	2	CRTVCC
3	GREEN-	4	GND
5	BLUE	6	CRT_PLUG
7	NC	8	DDC_SDA
9	GND	10	HSYNC

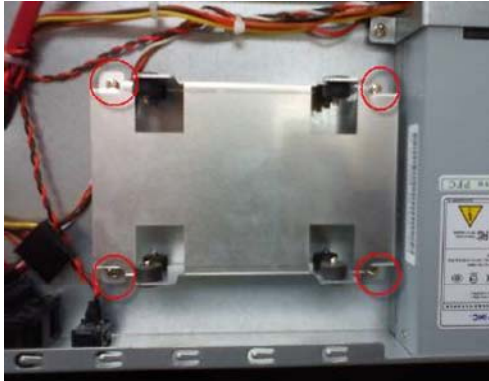
11	GND	12	VSYNC
13	GND	14	DDC_SCL
15	GND	16	NC

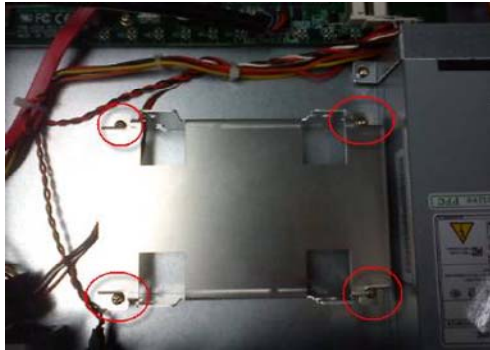
2.17 Installing the 2.5" Hard Disk Drive

Step 1: Unscrew the upper lid

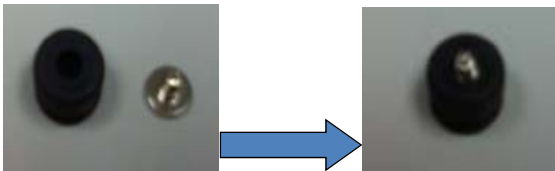


Step 2: Unfasten the four screws of the HDD bracket

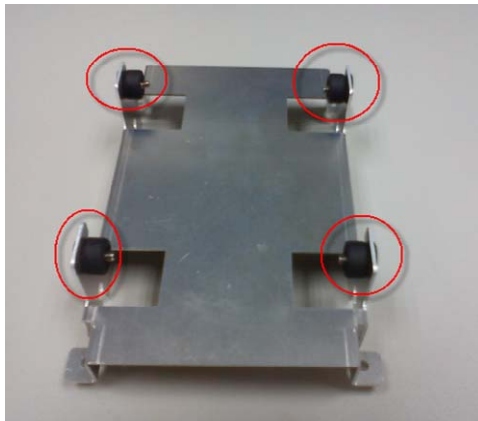




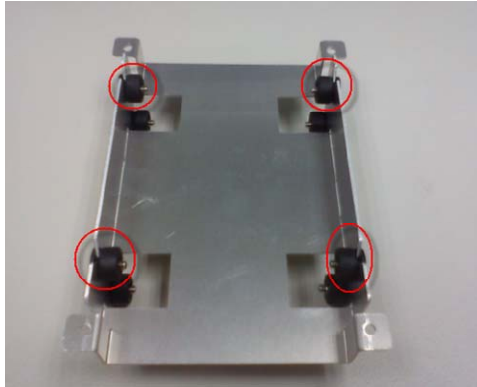
Step 3: put screw into cushion



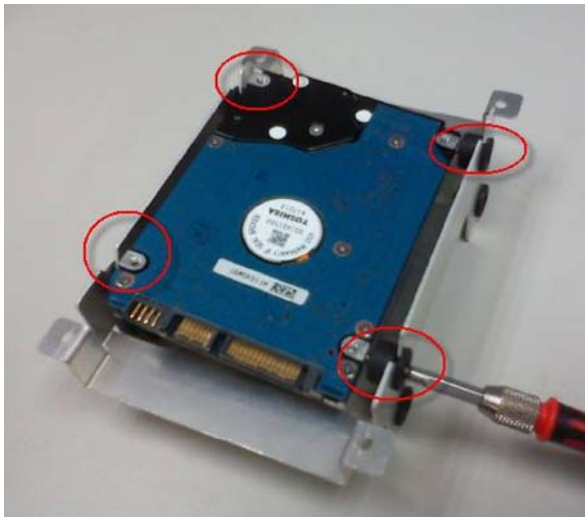
Step 4: put assembled cushions on the upper HDD bracket



Step 5: put assembled cushions on the bottom HDD bracket



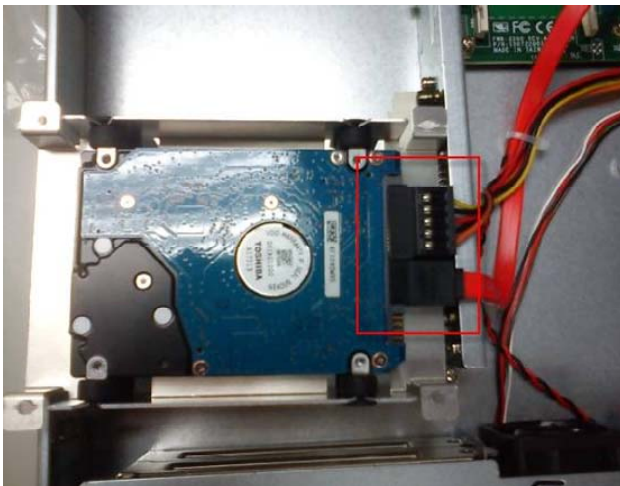
Step 6: Lock HDD on the bottom bracket with four screws



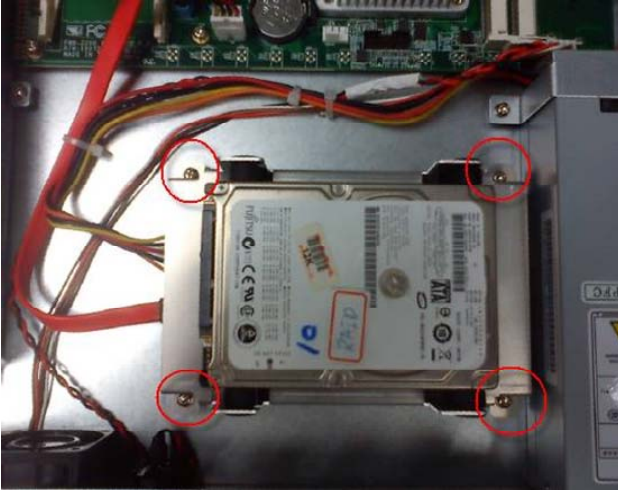
Step 7: Lock the HDD on the upper bracket with four screws



Step 8: Connect the SATA cable and power cable to the HDD



Step 9: Lock HDD bracket on the chassis with four screws



Step 10: Connect the SATA cable and power cable to the Hard Disk

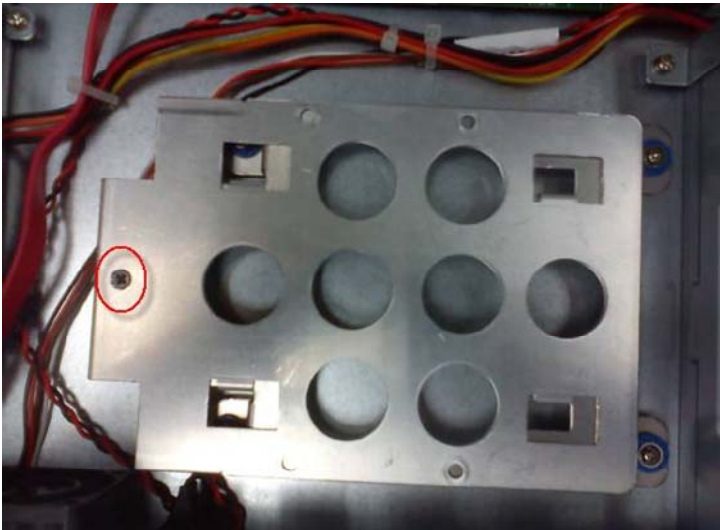


2.18 Installing the 3.5" Hard Disk Drive

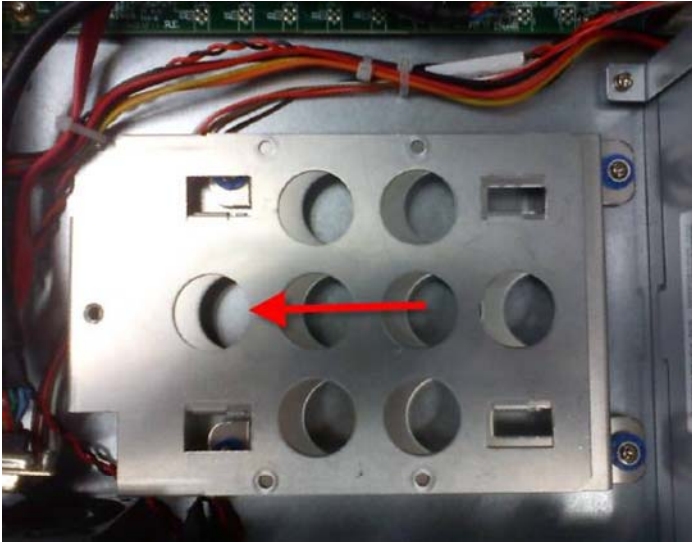
Step 1: Unscrew the upper lid



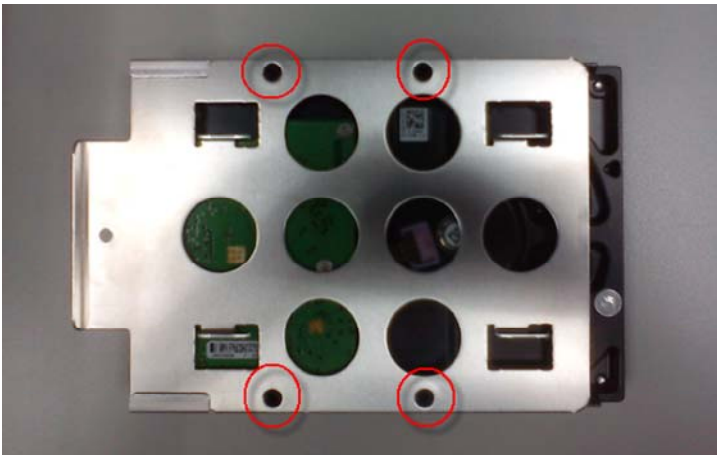
Step 2: Unfasten the screw



Step 3: Slide the upper HDD bracket and separate the two pieces of HDD brackets



Step 4: Put on the HDD in the drive bay and lock with four screws



Step 5: Reverse the HDD to another side and push it into the bracket until locked



Step 6: Lock the HDD bracket with a screw



Step 7: Connect the SATA cable and power cable to the HDD



2.19 Installing the Expansion Card

Step 1: Unscrew the upper lid



Step 2: Unfasten the screw and take off the cover bracket



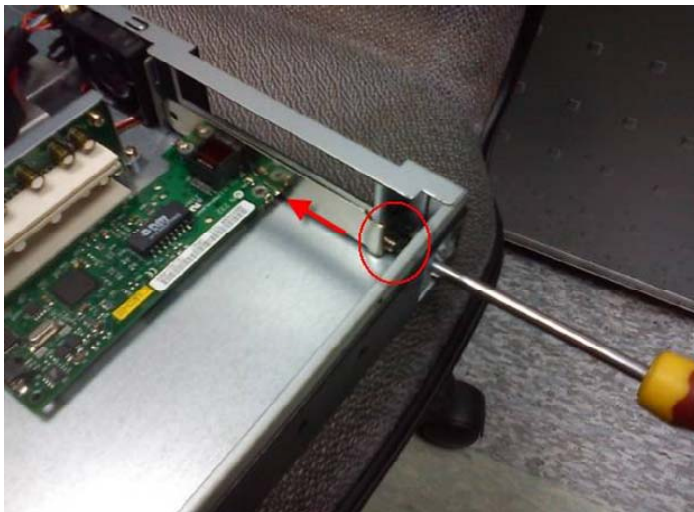
Step 3: Unfasten the screw and lift up the upper I/O bracket



Step 4: Unfasten the screw and lift up the lower I/O bracket



Step 5: Lift down the lower expansion card and push into the slot. Fix the expansion card with screws



Step 6: Lift down the upper expansion card and push into the slot. Fix the expansion card with screws



Step 7: Close the cover bracket and fasten the cover with screws



Below Table for China RoHS Requirements

产品中有毒有害物质或元素名称及含量

AAEON Boxer/ Industrial System

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板 及其电子组件	×	○	○	○	○	○
外部信号 连接器及线材	×	○	○	○	○	○
外壳	×	○	○	○	○	○
中央处理器 与内存	×	○	○	○	○	○
硬盘	×	○	○	○	○	○
电源	×	○	○	○	○	○
<p>O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。</p> <p>X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。</p> <p>备注： 一、此产品所标示之环保使用期限，系指在一般正常使用状况下。 二、上述部件物质中央处理器、内存、硬盘、电源为选购品。</p>						

Chapter

3

**AMI
BIOS Setup**

3.1 System Test and Initialization

These routines test and initialize board hardware. If the routines encounter an error during the tests, you will either hear a few short beeps or see an error message on the screen. There are two kinds of errors: fatal and non-fatal. The system can usually continue the boot up sequence with non-fatal errors.

System configuration verification

These routines check the current system configuration stored in the CMOS memory and BIOS NVRAM. If system configuration is not found or system configuration data error is detected, system will load optimized default and re-boot with this default system configuration automatically.

There are four situations in which you will need to setup system configuration:

1. You are starting your system for the first time
2. You have changed the hardware attached to your system
3. The system configuration is reset by Clear-CMOS jumper
4. The CMOS memory has lost power and the configuration information has been erased.

The FWS-7200 CMOS memory has an integral lithium battery backup for data retention. However, you will need to replace the complete unit when it finally runs down.

3.2 AMI BIOS Setup

AMI BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This type of information is stored in battery-backed CMOS RAM and BIOS NVRAM so that it retains the Setup information when the power is turned off.

Entering Setup

Power on the computer and press or <F2> immediately. This will allow you to enter Setup.

Main

Set the date, use tab to switch between date elements.

Advanced

Enable/disable boot option for legacy network devices.

Chipset

Host bridge parameters.

Boot

Enables/disables quiet boot option.

Security

Set setup administrator password.

Save & Exit

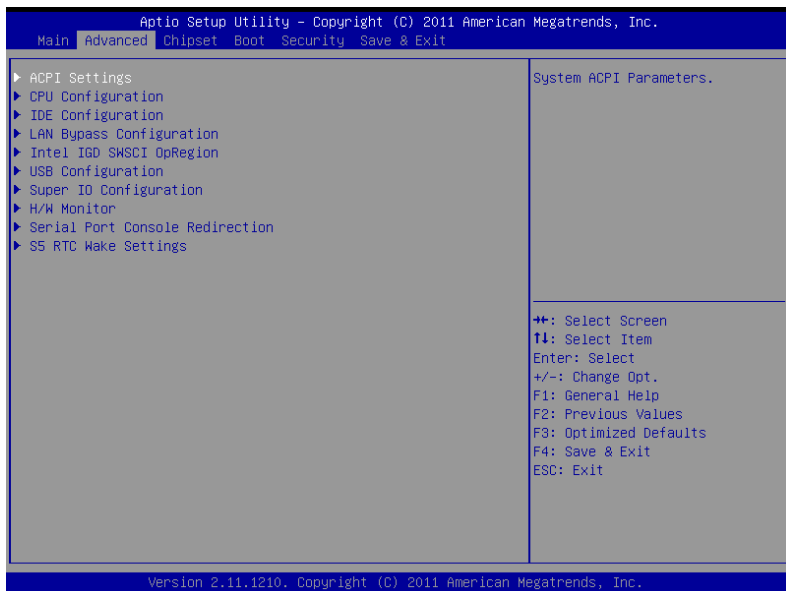
Exit system setup after saving the changes.

Setup Menu

Main

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.	
Main Advanced Chipset Boot Security Save & Exit	
BIOS Information FWS-7200 R1.0(FW72AM10) (07/25/2012)	Set the Date. Use Tab to switch between Data elements.
BIOS Vendor: American Megatrends	
Core Version: 4.6.4.0 x64	
Compliance: UEFI 2.0	
System Date: [Wed 07/25/2012]	
System Time: [13:27:30]	
Access Level: Administrator	
	++ : Select Screen ↑↓ : Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.11.1210. Copyright (C) 2011 American Megatrends, Inc.	

Advanced



ACPI Settings

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.

Advanced

ACPI Sleep State	[S1 & S3 (Auto)]	Select the highest ACPI sleep state the system will enter, when the SUSPEND button is pressed.
		++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

Version 2.11.1210. Copyright (C) 2011 American Megatrends, Inc.

Options summary :

Suspend mode	Suspend Disabled	
	S1 (CPU Stop Clock)	
	S3 (Suspend to RAM)	
	S1 & S3 (Auto)	Default
Select the ACPI state used for System Suspend		

CPU Configuration

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.

Advanced

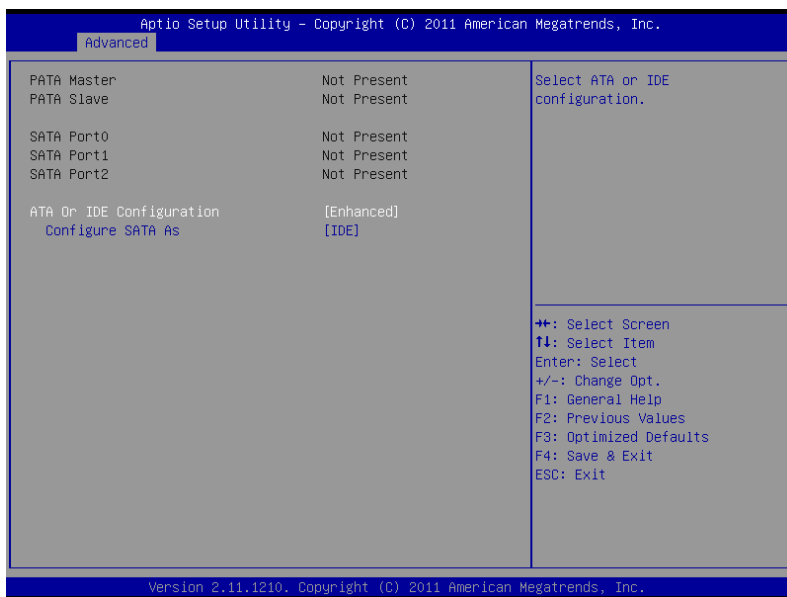
CPU Configuration		Enabled for Windows XP and Linux (OS optimized for Hyper-Threading Technology) and Disabled for other OS (OS not optimized for Hyper-Threading Technology). ++: Select Screen T1: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Processor Type	Intel(R) Atom(TM) CPU	
EMT64	Supported	
Processor Speed	1800 MHz	
System Bus Speed	800 MHz	
Ratio Status	9	
Actual Ratio	9	
System Bus Speed	800 MHz	
Processor Stepping	106ca	
Microcode Revision	263	
L1 Cache RAM	2x56 k	
L2 Cache RAM	2x512 k	
Processor Core	Dual	
Hyper-Threading	Supported	
Hyper-Threading	[Enabled]	

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Options summary :

Hyper-Threading	Disabled	
	Enabled	Default
En/Disable Intel Hyper-Threading Technology.		

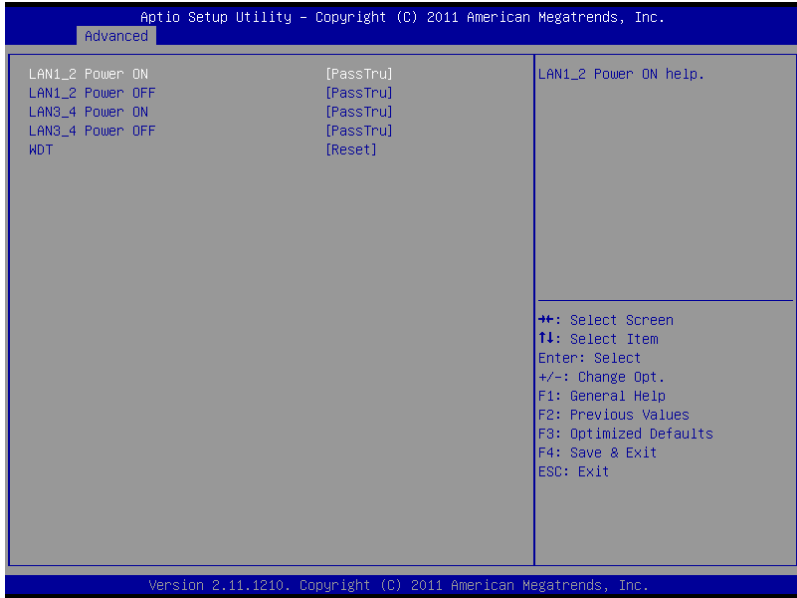
IDE Configuration



Options summary :

ATA Or IDE Configuration	Disabled	
	Compatible	Default
	Enhanced	
Select ATA or IDE Configuration.		
Configure SATA As	IDE	Default
	AHCI	
Select SATA Controller mode.		

LAN Bypass Configuration

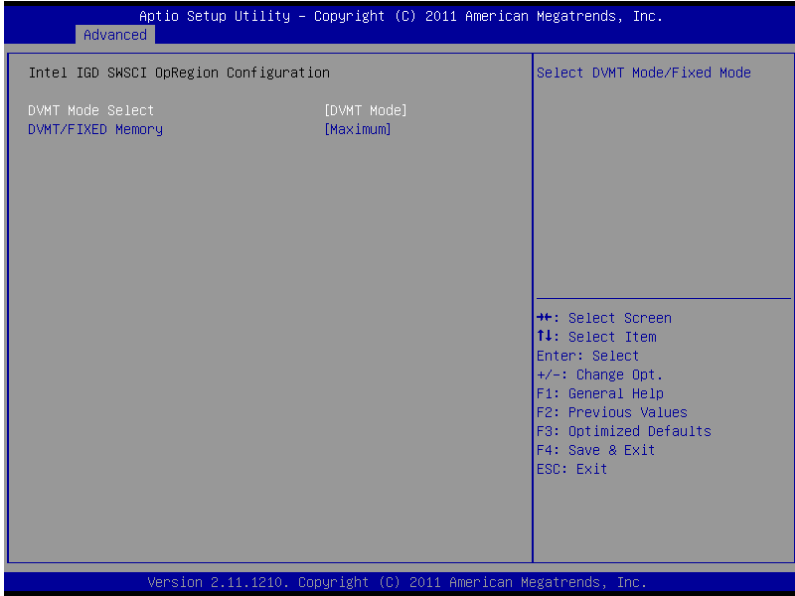


Options summary :

LAN1_2 Power ON	ByPass	
	PassTru	Default
Select LAN1 / 2 operation mode when system is Power On.		
LAN1_2 Power OFF	ByPass	
	PassTru	Default
Select LAN1 / 2 operation mode when system is Power Off.		
LAN3_4 Power ON	ByPass	
	PassTru	Default
Select LAN3 / 4 operation mode when system is Power On.		

LAN3_4 Power OFF	ByPass	
	PassTru	Default
Select LAN3 / 4 operation mode when system is Power Off.		
WDT	ByPass	
	Reset	Default
Select Watch Dog function as normal system reset or LAN ByPass.		
WDT BYPASS	LAN1_2	Default
SELECT	LAN3_4	
	LAN1_2 AND LAN3_4	
Select which pair LAN ByPass control by WDT.		

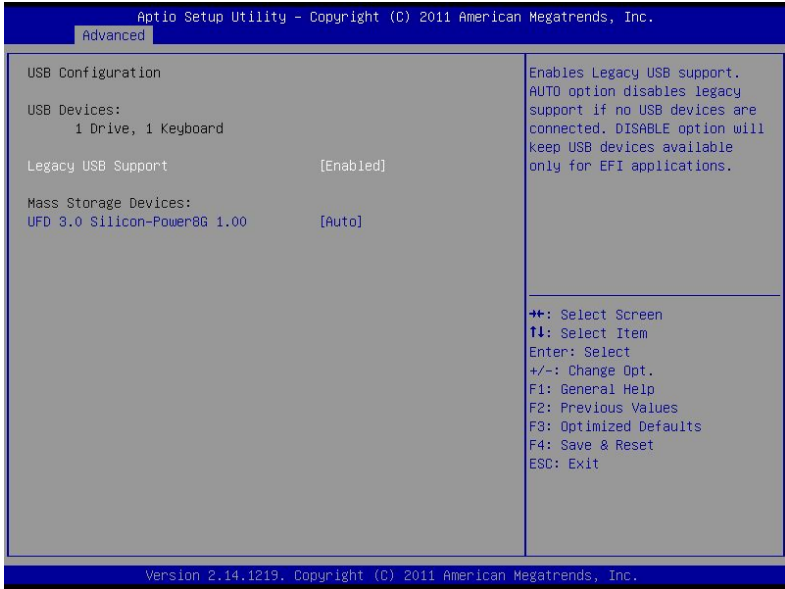
Intel IGD SWSCI OpRegion



Options summary :

DVMT Mode Select	Fixed Mode	Default
	DVMT Mode	
Select DVMT Mode/Fixed Mode.		
DVMT/FIXED Memory	128MB	Default
	256MB	
	Maximum	
Select DVMT/FIXED Mode Memory size used by Internal Graphics Device.		

USB Configuration



Options summary :

Legacy USB Support	Enabled	Default
	Disabled	
	Auto	
<p>Enables BIOS Support for Legacy USB Support. When enabled, USB can be functional in legacy environment like DOS.</p> <p>AUTO option disables legacy support if no USB devices are connected</p>		

Super IO Configuration

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.

Advanced

Super IO Configuration	Set Parameters of Serial Port 1 (COMA)
Super IO Chip Winbond W83627DHG	
Serial Port 1 Configuration	
Serial Port 2 Configuration	
Parallel Port Configuration	

++: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

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Serial Port Configuration

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Advanced

Serial Port 1 Configuration	Enable or Disable Serial Port (COM)
Serial Port [Enabled]	
Device Settings IO=3F8h; IRQ=4;	
Change Settings [Auto]	

++: Select Screen
t1: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Reset
ESC: Exit

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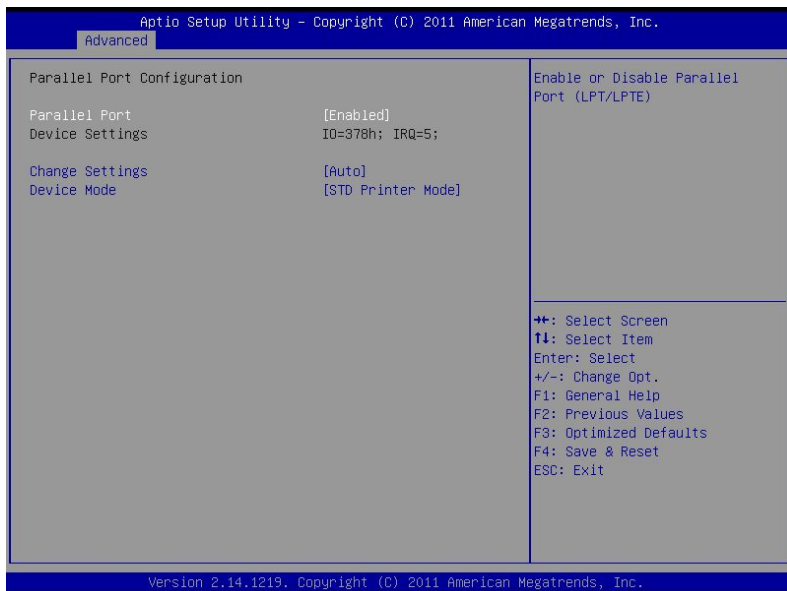
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Advanced

Serial Port 2 Configuration		Enable or Disable Serial Port (COM)
Serial Port	[Enabled]	
Device Settings	ID=2F8h; IRQ=3;	
Change Settings	[Auto]	
RS232/422,485	[RS232]	

++: Select Screen
t1: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Reset
ESC: Exit

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Options summary :

Serial Port	Disabled	
	Enabled	Default
Allows BIOS to En/Disable correspond serial port.		
Change Settings (Serial Port 1)	Auto	Default
	IO=3F8h; IRQ=4;	
	IO=3F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=2F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=3E8h; IRQ=3,4,5,6,7,10,11,12;	

	IO=2E8h; IRQ=3,4,5,6,7,10,11,12;	
Allows BIOS to Select Serial Port resource.		
Change Settings (Serial Port 2)	Auto	Default
	IO=2F8h; IRQ=3;	
	IO=3F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=2F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=3E8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=2E8h; IRQ=3,4,5,6,7,10,11,12;	
Allows BIOS to Select Serial Port resource.		
Parallel Port	Disabled	
	Enabled	Default
Allows BIOS to En/Disable Parallel Port.		
Change Settings (Parallel Port)	Auto	Default
	IO=378h; IRQ=5;	
	IO=378h; IRQ=5,6,7,10,11,12;	
	IO=278h; IRQ=5,6,7,10,11,12;	
	IO=3BCh; IRQ=5,6,7,10,11,12;	
Allows BIOS to Select Parallel Port resource.		
Device Mode (Parallel Port)	STD Printer Mode	Default
	SPP Mode	
	EPP-1.9 and SPP Mode	
	EPP-1.7 and SPP Mode	

	ECP Mode
	ECP -1.9 and EPP Mode
	ECP -1.7 and EPP Mode
Allows BIOS to Select Parallel Port resource.	

H/W Monitor

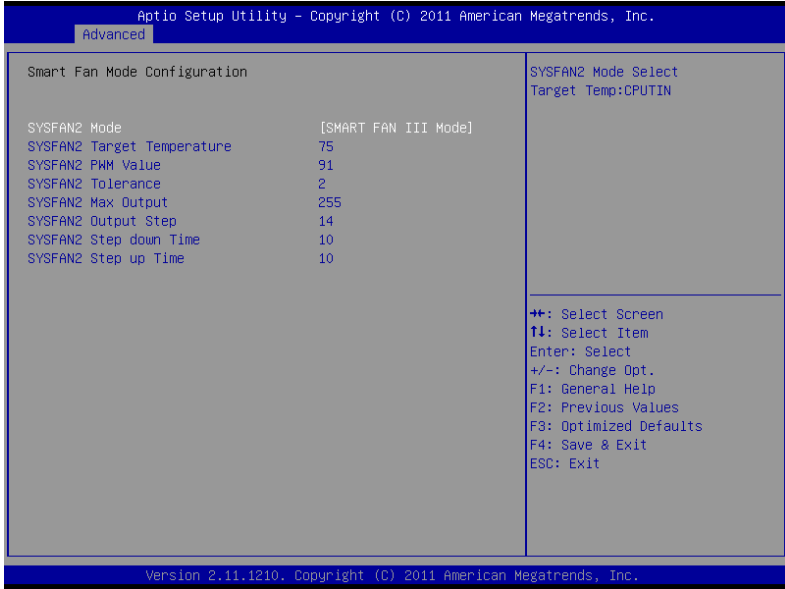
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Advanced

<p>Pc Health Status</p> <p>▶ Smart Fan Mode Configuration</p> <p>System temperature : +42 C CPUTIN temperature : +52 C SYSFAN2 Speed : N/A CPUVCORE : +1.184 V +1.5V_DDR : +1.512 V AVCC : +3.376 V 3VCC : +3.360 V +5V : +5.299 V +1.8V : +1.840 V +12V : +12.249 V 3VSB : +3.376 V VBAT : +3.088 V</p>	<p>Smart Fan Mode Select</p> <p>↑↑: Select Screen ↓↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</p>
---	--

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Smart Fan Mode Configuration



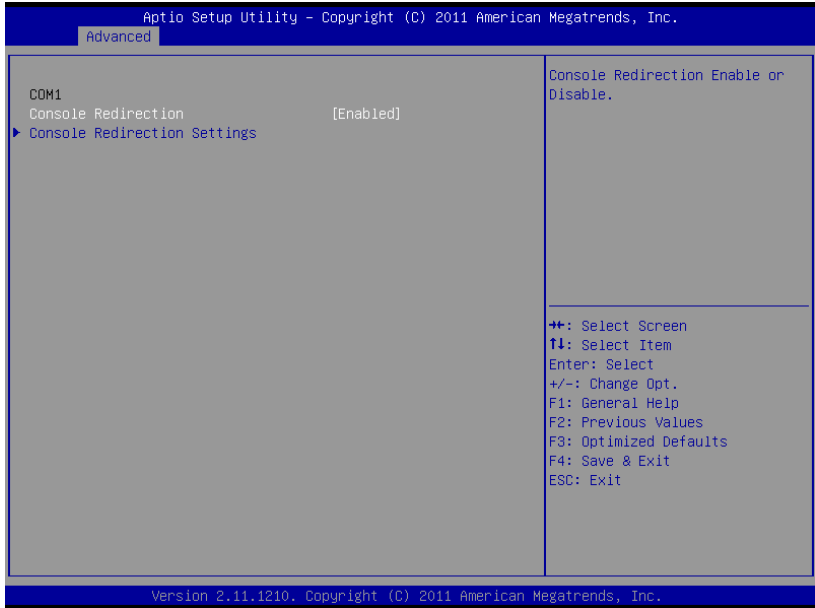
Options summary :

SYSFAN2 Mode	Manual Mode	
	Thermal Cruise Mode	
	SMART FAN III Mode	Default
SYSFAN2 Mode Select Target Temp:CPUTIN.		
SYSFAN2 PWM Value	91 (Default)	
Input expect PWM Output Value (Range:0 - 255)		

SYSFAN2 Target Temperature	75 (Default)
Input SYSFAN2 Target Temperature (Range:0 -127)	
SYSFAN2 Tolerance	2 (Default)
Input Tolerance of Target Temperature (Range:0 -15)	
SYSFAN2 Max Output	255 (Default)
SYSFAN2 PWM max output value (Range:0 -255)	
SYSFAN2 Output Step	14 (Default)
SYSFAN2 output step value (Range:0 -255)	
SYSFAN2 Step down Time	10 (Default)
SYSFAN2 step down time value,unit is 0.1,default is 1 second (Range:0 -255)	
SYSFAN2 Step up Time	10 (Default)

SYSFAN2 step up time value,unit is 0.1,default is 1 second (Range:0-255)

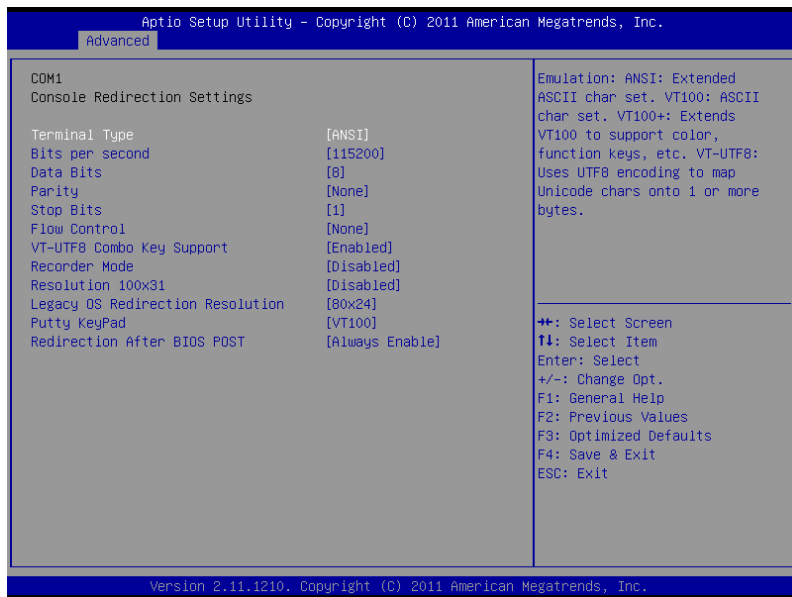
Serial Port Console Redirection



Options summary :

Console Redirection	Disabled	
	Enabled	Default
Console Redirection Enable or Disable.		

Console Redirection Settings



Options summary :

Terminal Type	VT100	
	VT100+	
	VT-UTF8	
	ANSI	Default

Emulation:

ANSI: Extended ASCII char set.

VT100: ASCII char set.

VT100+: Extends VT100 to support color, functionkeys, etc.

VT-UTF8: Uses UTF8 encoding to map Unicode chars onto 1 or more bytes.

Bits per second	9600	
	19200	
	38400	
	57600	
	115200	Default

Selects serial port transmission speed. The speed must be matched on the other side. Long or noisy lines may require lower speeds.

Dat Bits	7	
	8	Default

Set Serial Port transmission data bits

Parity	None	Default
	Even	
	Odd	
	Mark	
	Space	

A parity bit can be sent with the data bits to detect some transmission errors. Even: Parity bit is 0 if the num of 1's in the data bits is even.

Odd: Parity bit is 0 if num of 1's in the data bits is odd.

Mark: Parity bit is always 1.

Space: Parity bit is always 0.

Mark and Space Parity do not allow for error detection.

Stop Bits	1	Default
	2	

Stop bits indicate the end of a serial data packet. (A start bit indicates the beginning).

The standard setting is 1 stop bit. Communication with slow devices may require more than 1 stop bit.

Flow Control	None	Default
	Hardware RTS/CTS	

Flow control can prevent data loss from buffer overflow. When sending data, if the receiving buffers are full, a 'stop' signal can be sent to stop the data flow. Once the buffers are empty, a 'start' signal can be sent to re-start the flow. Hardware flow control uses two wires to send start/stop signals.

VT-UTF8 Combo Key Support	Disabled	
	Enabled	Default

Enable VT-UTF8 Combination Key Support for ANSI/VT100 terminals.

Recorder Mode	Disabled	Default
	Enabled	

On this mode enabled only text will be send. This is to capture Terminal data.

Resolution 100x31	Disabled	Default
	Enabled	

Enables or disables extended terminal resolution.

Legacy OS Redirection Resolution	80x24	Default
	80x25	

On Legacy OS, the Number of Rows and Columns supported redirection.

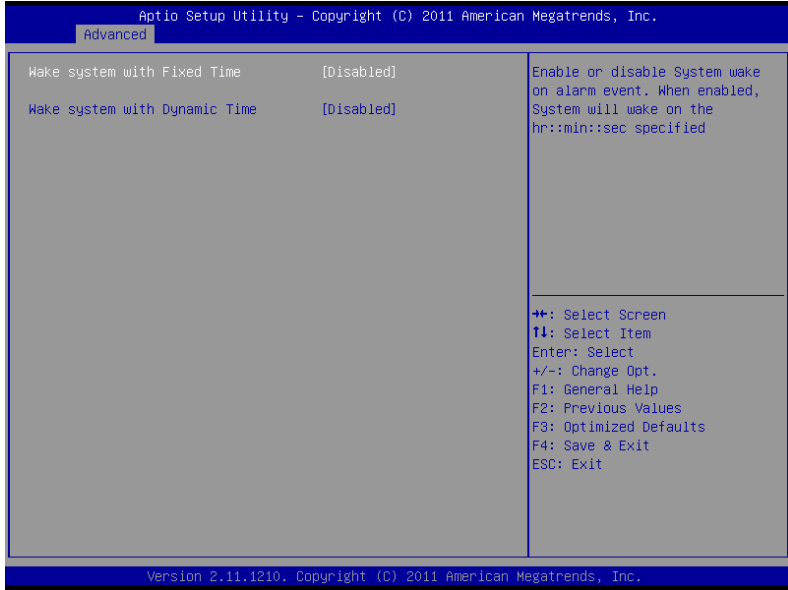
Putty Keypad	VT100	Default
	LINUX	
	XTERMR6	
	SCO	
	ESCN	
	VT400	

Select FunctionKey and KeyPad on Putty.

Redirection After BIOS POST	Always Enable	Default
	BootLoader	

The Settings spectify if BootLoader is selected than Legacy console redirection is disabled before booting to Legacy OS. Default value is Always Enable which means Legacy Console Redirection is enabled for Legacy OS.

S5 RTC WSAke Settings

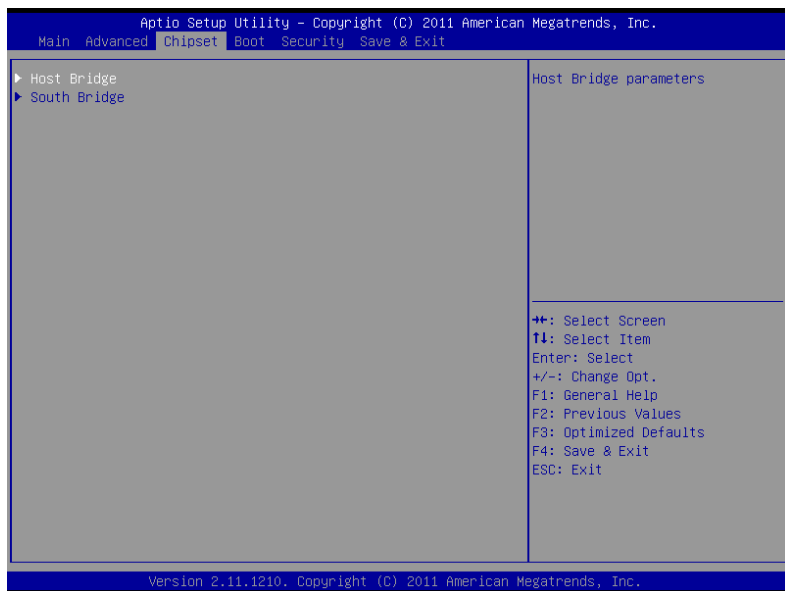


Options summary :

Wake system with Fixed Time	Disabled	Default
	Enabled	
Enable or disable System wake on alarm event. When enabled, System will wake on the hr::min::sec specified.		
Wake up day	0 (Default)	
Select 0 for daily system wake up 1-31 for which day of the month that you would like the system to wake up		
Wake up hour	0 (Default)	
select 0-23 For example enter 3 for 3am and 15 for 3pm		

Wake up minute	0 (Default)	
select 0-59 for minute of an hour.		
Wake up second	0 (Default)	
select 0-59 for second of a minute.		
Wake system with Dynamic Time	Disabled	Default
	Enabled	
Enable or disable System wake on alarm event. When enabled, System will wake on the current time + Increase minute(s)		
Wake up minute increase	0 (Default)	
select 1 - 5 for minute(s).		

Chipset



North Bridge

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Chipset

▶ OnChip VGA Configuration

Initiate Graphic Adapter	[PCI/IGD]
--------------------------	-----------

***** Memory Information *****

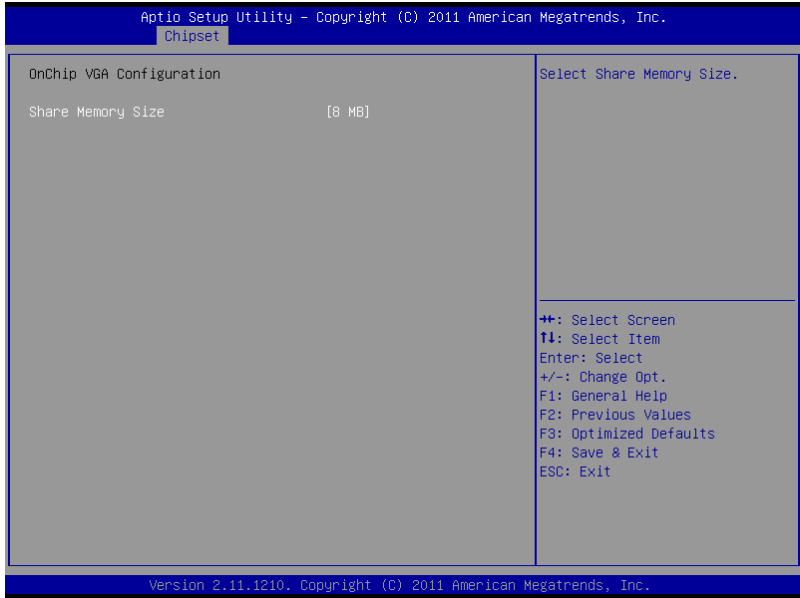
Memory Frequency	800 Mhz
Total Memory	2048 MB
DIMM#0	Not Present
DIMM#1	2048 MB

Config On Chip VGA Settings.

++: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

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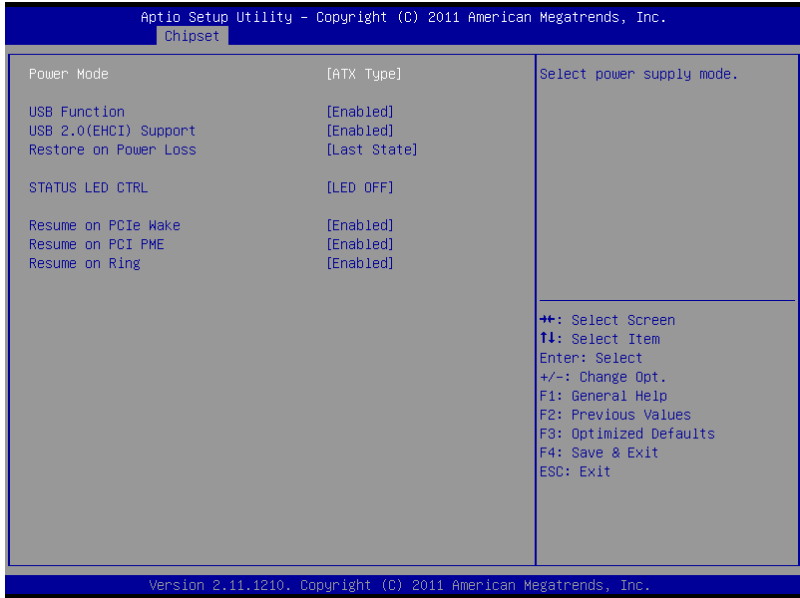
OnChip VGA Configuration



Options summary :

Initate Graphic Adapter	IGD	Default
	PCI/IGD	
Select which graphics controller to use as the primary boot device.		
Share Memory Size	Disabled	Default
	1 MB	
	8 MB	
Select Share Memory Size.		

South Bridge



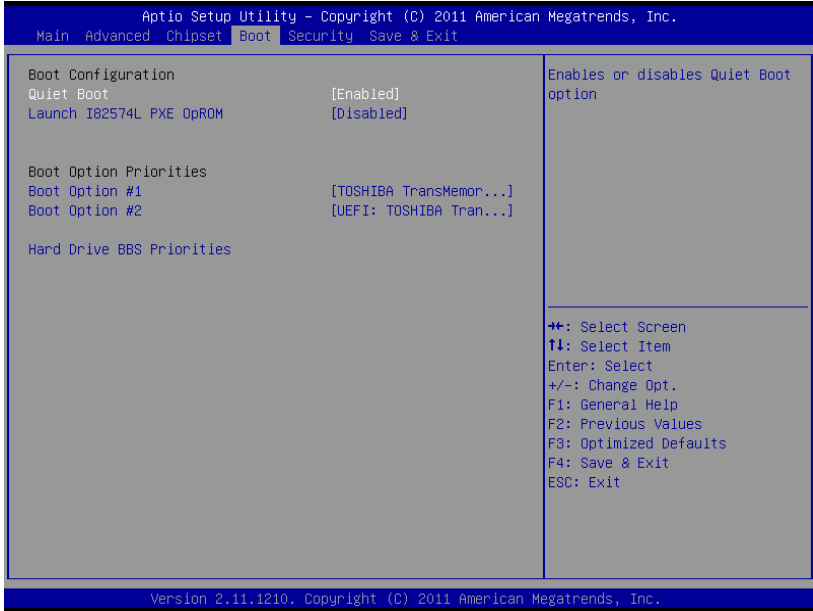
Options summary :

Power Mode	ATX	Default
	AT	
Select Power supply mode: ATX: Normal ACPI support AT: Suspend/Sleep disabled, and Always On when restoring from power failure.		
USB Function	Disabled	Default
	Enabled	
Enable or disable USB Function.		

USB 2.0(EHCI) Support	Enabled	Default
	Disabled	
Enable or disable USB 2.0 (EHCI) Support.		
Restore on Power Loss	Power Off	Default
	Power On	
	Last State	
Select power state when power is re-applied after a power failure.		
STATUS LED CTRL	LED OFF	Default
	RED LED ON	
	RED LED BLINK	
	RED LED FAST BLINK	
	GREEN LED ON	
	GREEN LED BLINK	
	GREEN LED FAST BLINK	
Select the Status LED default action.		
Resume on PCIe Wake	Disabled	Default
	Enabled	
Enables or Disables resuming from PCIe wake message and WAKE# signal.		
Resume on PCI PME	Disabled	Default
	Enabled	
Enables or Disables resuming from PCI PME# signal.		

Resume on Ring	Disabled	
	Enabled	Default
Enables or Disables resuming from RI# signal.		

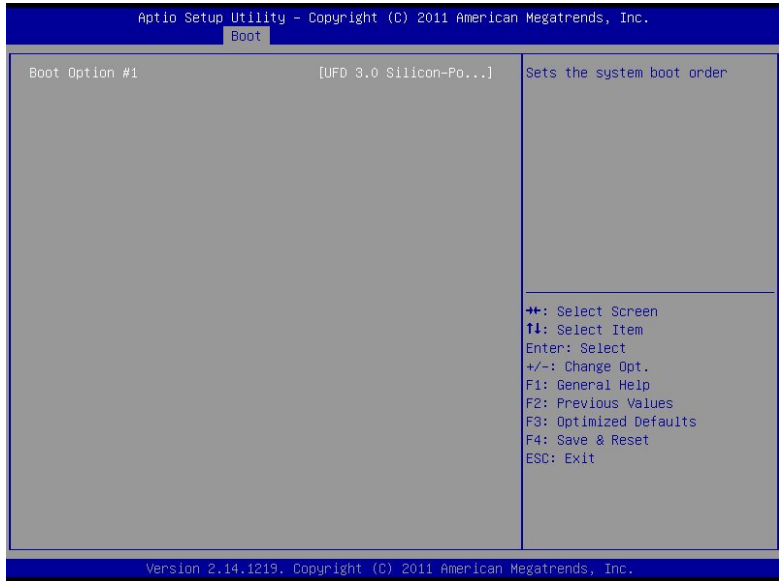
Boot



Options summary :

Quiet Boot	Disabled	
	Enabled	Default
En/Disable showing boot logo.		
Launch I82574L PXE OpROM	Disabled	Default
	Enabled	
En/Disable Boot Option for Legacy Network Devices		

BBS Priorities



Security



Change User/Supervisor Password

You can install a Supervisor password, and if you install a supervisor password, you can then install a user password. A user password does not provide access to many of the features in the Setup utility.

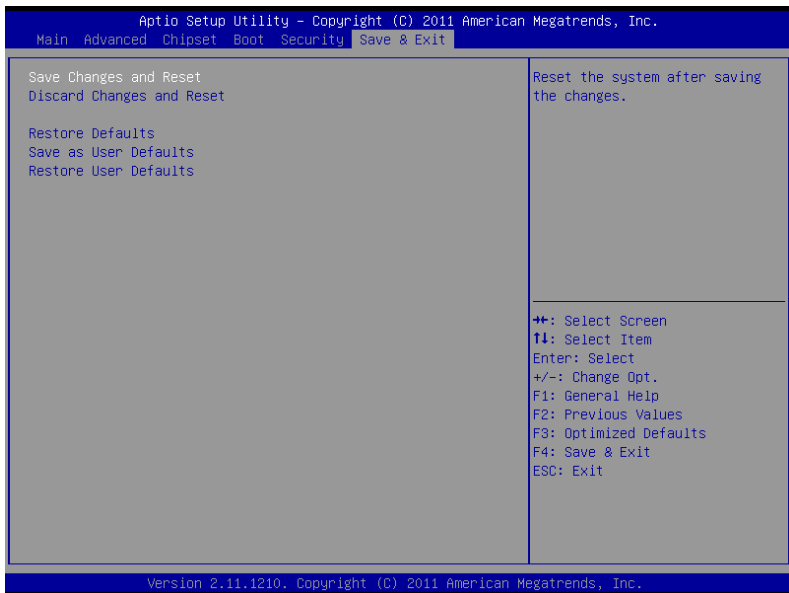
If you highlight these items and press Enter, a dialog box appears which lets you enter a password. You can enter no more than six letters or numbers. Press Enter after you have typed in the password. A second dialog box asks you to retype the password for confirmation. Press Enter after you have retyped it correctly. The password is required at boot time, or when the user enters the

Setup utility.

Removing the Password

Highlight this item and type in the current password. At the next dialog box press Enter to disable password protection.

Exit



Save Changes and Reset

Reset the system after saving the changes. This is the suggested method to exit BIOS setup menu that if you have modify any settings.

Discard Changes and Reset

Reset system setup without saving any changes. It will continue system booting without reset.

Restore Defaults

Restore/Load Default values for all the setup options.

Save as User Defaults

Save the changes done so far as User Defaults.

Restore User Defaults

Restore the User Defaults to all the setup options.

Chapter

4

**Driver
Installation**

The FWS-7200 comes with an AutoRun CD-ROM that contains all drivers and utilities that can help you to install the driver automatically.

Insert the driver CD, the driver CD-title will auto start and show the installation guide. If not, please follow the sequence below to install the drivers.

Follow the sequence below to install the drivers:

Step 1 – Install Chipset Driver

Step 2 – Install VGA Driver

Step 3 – Install LAN Driver

Step 4 – Install AHCI Driver

Please read instructions below for further detailed installations.

4.1 Installation:

Insert the FWS-7200 CD-ROM into the CD-ROM drive and install the drivers from Step 1 to Step 4 in order.

Step 1 – Install INF Driver

1. Click on the **Step 1-Chipset** folder and double click on the ***infinst_autol.exe***
2. Follow the instructions that the window shows
3. The system will help you install the driver automatically

Step 2 – Install VGA Driver

1. Click on the **Step 2 –VGA** folder and select the OS folder your system is
2. Double click on **.exe** located in each OS folder
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

Step 3 – Install LAN Driver

1. Click on the **Step 3 –LAN** folder and select the OS folder your system is
2. Double click on **.exe** file located in each OS folder
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

Step 4 – Install AHCI Driver

Please refer to Appendix D AHCI Settings

Appendix

A

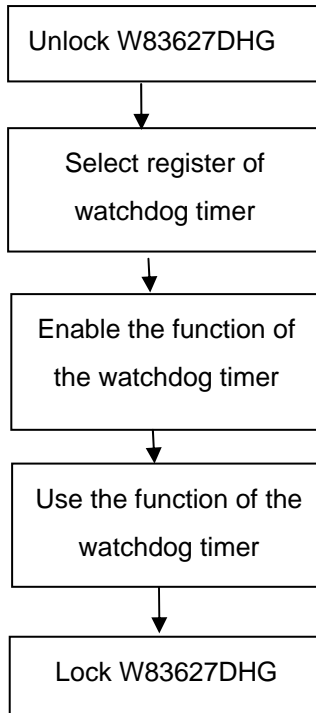
Programming the Watchdog Timer

A.1 Programming

FWS-7200 utilizes W83627DHG chipset as its watchdog timer controller.

Below are the procedures to complete its configuration and the AAEMON initial watchdog timer program is also attached based on which you can develop customized program to fit your application.

Configuring Sequence Description



There are three steps to complete the configuration setup:

- (1) Enter the W83627DHG config Mode
- (2) Modify the data of configuration registers

- (3) Exit the W83627DHG config Mode. Undesired result may occur if the config Mode is not exited normally.

(1) Enter the W83627DHG config Mode

To enter the W83627DHG config Mode, two special I/O write operations are to be performed during Wait for Key state. To ensure the initial state of the key-check logic, it is necessary to perform two write operations to the Special Address port (2EH). The different enter keys are provided to select configuration ports (2EH/2Fh) of the next step.

	Address Port	Data Port
87h,87h:	2Eh	2Fh

(2) Modify the Data of the Registers

All configuration registers can be accessed after entering the config Mode. Before accessing a selected register, the content of Index 07h must be changed to the LDN to which the register belongs, except some Global registers.

(3) Exit the W83627DHG config Mode

The exit key is provided to select configuration ports (2EH/2Fh) of the next step.

	Address Port	Data Port
0aah:	2Eh	2Fh

CR 30h. (Default 02h)

BIT	READ/WRITE	DESCRIPTION
7~3	Reserved.	
2	R/W	0: GPIO6 is inactive. 1: GPIO6 is active.

1	R/W	0: GPIO5 is inactive. 1: GPIO5 is active.
0	R/W	0: WDTO# and PLED are inactive. 1: WDTO# and PLED are inactive.

CR F5h. (WDTO# and KBC P20 Control Mode Register; Default 00h)

BIT	READ/WRITE	DESCRIPTION
7~5	Reserved.	
4	R/W	1000 time faster in WDTO# count mode. 0: Disable. 1: Enable. (If bit-3 is Second Mode, the count mode is 1/1000 Sec.) (If bit-3 is Minute Mode, the count mode is 1/1000 Min.)
3	R/W	Select WDTO# count mode. 0: Second Mode. 1: Minute Mode.
2	R/W	Enable the rising edge of KBC reset (P20) to issue time-out event. 0: Disable. 1: Enable.
1	R/W	Disable/ Enable the WDTO# output low pulse to the KBRST# pin (PIN60) 0: Disable. 1: Enable.
0	Reserved.	

CR F6h. (WDTO# Counter Register; Default 00h)

BIT	READ/WRITE	DESCRIPTION
7~0	R/W	Watch Dog Timer Time-out value. Writing a non-zero value to this register causes the counter to load the value to Watch Dog Counter and start counting down. If bits 7 and 6 of CR F7h are set, any Mouse Interrupt or Keyboard Interrupt event will also cause the reload of previously-loaded non-zero value to Watch Dog Counter and start counting down. Reading this register returns current value in Watch Dog Counter instead of Watch Dog Timer Time-out value. 00h: Time-out Disable

		01h: Time-out occurs after 1 second/minute 02h: Time-out occurs after 2 second/minutes 03h: Time-out occurs after 3 second/minutes FFh: Time-out occurs after 255 second/minutes
--	--	--

CR F7h. (WDTO# Control & Status Register; Default 00h)

BIT	READ/WRITE	DESCRIPTION
7	R/W	Mouse interrupt reset watch-dog timer enable 0: Watchdog timer is not affected by mouse interrupt. 1: Watchdog timer is reset by mouse interrupt.
6	R/W	Keyboard interrupt reset watch-dog timer enable 0: Watchdog timer is not affected by keyboard interrupt. 1: Watchdog timer is reset by keyboard interrupt.
5	Write "1" Only	Trigger WDTO# event. This bit is self-clearing.
4	R/W Write "0" Clear	WDTO# status bit 0: Watchdog timer is running. 1: Watchdog timer issue time-out event.
3~0	R/W	These bits select IRQ resource for WDTO#. (02h for SMI# event.)

A.2 W83627DHG Watchdog Timer Initial Program

	LDN	Register	Bit	Description
WDT Timer value	0x07	0xF6	Bit [7-0]	00h: Time-out Disable 01h: Time-out occurs after 1 minute only. 02h: Time-out occurs after 2 second/minutes 03h: Time-out occurs after 3 second/minutes FFh: Time-out occurs after 255 second/minutes (The deviation is approx 1 second.)
WDT Unit	0x07	0xF5	Bit3	Select WDTO# count mode. 0: Second Mode. 1: Minute Mode.

```
#include <stdio.h>
#include <conio.h>
```

```
#define SIOIndex    0x2E //Modify for project support 2E/4E
#define SIOData     0x2F //Modify for project support 2F/4F
#define void AaeonWDTConfig(void);
#define void AaeonWDTEnable(Byte Timer, boolean Unit);
```

```
void Main(){
    // Procedure : AaeonWDTConfig
    // This procdure will enable the WDT counting.
    AaeonWDTConfig (void);

    // Procedure : AaeonWDTEnable
    // (byte)Timer      : Time of WDT timer.(0x00~0xFF)
    // (boolean)Unit    : Select time unit(0: second, 1: minute).
    AaeonWDTEnable(Byte Timer, boolean Unit);
}
```

```
*****
// Procedure : AaeonWDTConfig
void AaeonWDTConfig (void){
    Byte val;
    //Super I/O Entry Key
    outportb(SIOIndex,0x87);
    outportb(SIOIndex,0x87);

    //Setting WDT Pin.
    outportb(SIOIndex,0x2D);
    val = inportb((SIOData);
    outportb(SIOIndex,0x2D);
    outportb(SIOData,val & 0xFE);

    // Enable WatchDog function
    outportb(SIOIndex,0x07);
    outportb(SIOData,0x08);
    outportb(SIOIndex,0x30);
    outportb(SIOData, 0x01);
}
*****
**
```

```
// Procedure :
void AaeonWDTEnable (Byte Timer, boolean Unit){
    Byte val;

    //Super I/O Entry Key
    outputb(SIOIndex,0x87);
    outputb(SIOIndex,0x87);

    // Select Logic Device Number Register
    outputb(SIOIndex,0x07);
    outputb(SIOData,0x08);

    // Setting WDT Operation Mode
    outputb(SIOIndex,0xF5);
    val = inportb((SIOData);
    outputb(SIOIndex,0xF5);
    outputb(SIOData, val | Unit << 3 );

    // Setting WDT Counter
    outputb(SIOIndex,0xF6);
    outputb(SIOData,Timer);
}
```
















































Appendix

B

I/O Information

B.1 I/O Address Map

Input/output (I/O)	
[00000000 - 0000000F]	Direct memory access controller
[00000000 - 00000CF7]	PCI bus
[00000010 - 0000001F]	Motherboard resources
[00000020 - 00000021]	Programmable interrupt controller
[00000022 - 0000003F]	Motherboard resources
[00000040 - 00000043]	System timer
[00000044 - 0000005F]	Motherboard resources
[00000060 - 00000060]	Standard PS/2 Keyboard
[00000061 - 00000061]	System speaker
[00000062 - 00000063]	Motherboard resources
[00000064 - 00000064]	Standard PS/2 Keyboard
[00000065 - 0000006F]	Motherboard resources
[00000070 - 00000071]	System CMOS/real time clock
[00000072 - 0000007F]	Motherboard resources
[00000080 - 00000080]	Motherboard resources
[00000081 - 00000083]	Direct memory access controller
[00000084 - 00000086]	Motherboard resources
[00000087 - 00000087]	Direct memory access controller
[00000088 - 00000088]	Motherboard resources
[00000089 - 0000008B]	Direct memory access controller
[0000008C - 0000008E]	Motherboard resources
[0000008F - 0000008F]	Direct memory access controller
[00000090 - 0000009F]	Motherboard resources
[000000A0 - 000000A1]	Programmable interrupt controller
[000000A2 - 000000BF]	Motherboard resources
[000000C0 - 000000DF]	Direct memory access controller
[000000E0 - 000000EF]	Motherboard resources
[000000F0 - 000000FF]	Numeric data processor
[00000170 - 00000177]	ATA Channel 1
[000001F0 - 000001F7]	ATA Channel 0
[00000295 - 000002A4]	Motherboard resources
[000002F8 - 000002FF]	Communications Port (COM2)
[00000376 - 00000376]	ATA Channel 1
[000003B0 - 000003BB]	Intel(R) Graphics Media Accelerator 3150
[000003C0 - 000003DF]	Intel(R) Graphics Media Accelerator 3150
[000003F6 - 000003F6]	ATA Channel 0
[000003F8 - 000003FF]	Communications Port (COM1)
[00000480 - 000004BF]	Motherboard resources
[000004D0 - 000004D1]	Motherboard resources
[00000800 - 0000087F]	Motherboard resources
[00000D00 - 0000FFFF]	PCI bus
[00009000 - 00009FFF]	Intel(R) ICH8 Family PCI Express Root Port 6 - 2849
[0000A000 - 0000AFFF]	Intel(R) ICH8 Family PCI Express Root Port 5 - 2847
[0000B000 - 0000BFFF]	Intel(R) ICH8 Family PCI Express Root Port 4 - 2845
[0000C000 - 0000CFFF]	Intel(R) ICH8 Family PCI Express Root Port 3 - 2843
[0000D000 - 0000DFFF]	Intel(R) ICH8 Family PCI Express Root Port 2 - 2841
[0000E000 - 0000EFFF]	Intel(R) ICH8 Family PCI Express Root Port 1 - 283F
[0000F000 - 0000F01F]	Intel(R) ICH8 Family SMBus Controller - 283E

















































	[00000080 - 00000080] Motherboard resources
	[00000081 - 00000083] Direct memory access controller
	[00000084 - 00000086] Motherboard resources
	[00000087 - 00000087] Direct memory access controller
	[00000088 - 00000088] Motherboard resources
	[00000089 - 0000008B] Direct memory access controller
	[0000008C - 0000008E] Motherboard resources
	[0000008F - 0000008F] Direct memory access controller
	[00000090 - 0000009F] Motherboard resources
	[000000A0 - 000000A1] Programmable interrupt controller
	[000000A2 - 000000BF] Motherboard resources
	[000000C0 - 000000DF] Direct memory access controller
	[000000E0 - 000000EF] Motherboard resources
	[000000F0 - 000000FF] Numeric data processor
	[00000170 - 00000177] ATA Channel 1
	[000001F0 - 000001F7] ATA Channel 0
	[00000295 - 000002A4] Motherboard resources
	[000002F8 - 000002FF] Communications Port (COM2)
	[00000376 - 00000376] ATA Channel 1
	[000003B0 - 000003BB] Intel(R) Graphics Media Accelerator 3150
	[000003C0 - 000003DF] Intel(R) Graphics Media Accelerator 3150
	[000003F6 - 000003F6] ATA Channel 0
	[000003F8 - 000003FF] Communications Port (COM1)
	[00000480 - 000004BF] Motherboard resources
	[000004D0 - 000004D1] Motherboard resources
	[00000800 - 0000087F] Motherboard resources
	[00000D00 - 0000FFFF] PCI bus
	[00009000 - 00009FFF] Intel(R) ICH8 Family PCI Express Root Port 6 - 2849
	[0000A000 - 0000AFFF] Intel(R) ICH8 Family PCI Express Root Port 5 - 2847
	[0000B000 - 0000BFFF] Intel(R) ICH8 Family PCI Express Root Port 4 - 2845
	[0000C000 - 0000CFFF] Intel(R) ICH8 Family PCI Express Root Port 3 - 2843
	[0000D000 - 0000DFFF] Intel(R) ICH8 Family PCI Express Root Port 2 - 2841
	[0000E000 - 0000EFFF] Intel(R) ICH8 Family PCI Express Root Port 1 - 283F
	[0000F000 - 0000F01F] Intel(R) ICH8 Family SMBus Controller - 283E
	[0000F020 - 0000F03F] Intel(R) ICH8 Family USB Universal Host Controller - 2832
	[0000F040 - 0000F05F] Intel(R) ICH8 Family USB Universal Host Controller - 2831
	[0000F060 - 0000F07F] Intel(R) ICH8 Family USB Universal Host Controller - 2830
	[0000F080 - 0000F09F] Intel(R) ICH8 Family USB Universal Host Controller - 2835
	[0000F0A0 - 0000F0BF] Intel(R) ICH8 Family USB Universal Host Controller - 2834
	[0000F0C0 - 0000F0CF] Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828
	[0000F0D0 - 0000F0DF] Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828
	[0000F0E0 - 0000F0E3] Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828
	[0000F0F0 - 0000F0F7] Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828
	[0000F100 - 0000F103] Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828
	[0000F110 - 0000F117] Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828
	[0000F120 - 0000F12F] Intel(R) ICH8M Ultra ATA Storage Controllers - 2850
	[0000F170 - 0000F177] Intel(R) Graphics Media Accelerator 3150

















































B.2 Memory Address Map

Memory	
[000A0000 - 000BFFFF]	Intel(R) Graphics Media Accelerator 3150
[000A0000 - 000BFFFF]	PCI bus
[7F700000 - FFFFFFFF]	PCI bus
[E0000000 - EFFFFFFF]	Intel(R) Graphics Media Accelerator 3150
[F0000000 - F3FFFFFF]	System board
[FE300000 - FE3FFFFFF]	Intel(R) Graphics Media Accelerator 3150
[FE440000 - FE4FFFFFF]	Intel(R) ICH8 Family PCI Express Root Port 6 - 2849
[FE460000 - FE463FFF]	Intel(R) Gigabit CT Desktop Adapter #2
[FE500000 - FE5FFFFFF]	Intel(R) ICH8 Family PCI Express Root Port 5 - 2847
[FE540000 - FE55FFFF]	Intel(R) Gigabit CT Desktop Adapter #6
[FE560000 - FE563FFF]	Intel(R) Gigabit CT Desktop Adapter #6
[FE600000 - FE6FFFFFF]	Intel(R) ICH8 Family PCI Express Root Port 4 - 2845
[FE640000 - FE65FFFF]	Intel(R) Gigabit CT Desktop Adapter #5
[FE660000 - FE663FFF]	Intel(R) Gigabit CT Desktop Adapter #5
[FE700000 - FE7FFFFFF]	Intel(R) ICH8 Family PCI Express Root Port 3 - 2843
[FE740000 - FE75FFFF]	Intel(R) Gigabit CT Desktop Adapter #4
[FE760000 - FE763FFF]	Intel(R) Gigabit CT Desktop Adapter #4
[FE800000 - FE8FFFFFF]	Intel(R) ICH8 Family PCI Express Root Port 2 - 2841
[FE840000 - FE85FFFF]	Intel(R) Gigabit CT Desktop Adapter #3
[FE860000 - FE863FFF]	Intel(R) Gigabit CT Desktop Adapter #3
[FE900000 - FE9FFFFFF]	Intel(R) ICH8 Family PCI Express Root Port 1 - 283F
[FE940000 - FE95FFFF]	Intel(R) Gigabit CT Desktop Adapter
[FE960000 - FE963FFF]	Intel(R) Gigabit CT Desktop Adapter
[FEA00000 - FEA7FFFF]	Intel(R) Graphics Media Accelerator 3150
[FEA80000 - FEAFFFFF]	Intel(R) Graphics Media Accelerator 3150
[FEB00000 - FEB000FF]	Intel(R) ICH8 Family SMBus Controller - 283E
[FEB01000 - FEB013FF]	Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836
[FEB02000 - FEB023FF]	Intel(R) ICH8 Family USB2 Enhanced Host Controller - 283A
[FEC00000 - FEC00FFF]	Motherboard resources
[FED00000 - FED003FF]	High precision event timer
[FED14000 - FED19FFF]	System board
[FED1C000 - FED1FFFF]	Motherboard resources
[FED20000 - FED8FFFF]	Motherboard resources
[FEE00000 - FEE00FFF]	Motherboard resources
[FFC00000 - FFFFFFFF]	Motherboard resources

B.3 IRQ Mapping Chart



Interrupt request (IRQ)	
(ISA) 0x00000000 (00)	High precision event timer
(ISA) 0x00000001 (01)	Standard PS/2 Keyboard
(ISA) 0x00000003 (03)	Communications Port (COM2)
(ISA) 0x00000004 (04)	Communications Port (COM1)
(ISA) 0x00000008 (08)	High precision event timer
(ISA) 0x0000000C (12)	Microsoft PS/2 Mouse
(ISA) 0x0000000D (13)	Numeric data processor
(ISA) 0x0000000E (14)	ATA Channel 0
(ISA) 0x0000000F (15)	ATA Channel 1
(ISA) 0x00000051 (81)	Microsoft ACPI-Compliant System
(ISA) 0x00000052 (82)	Microsoft ACPI-Compliant System
(ISA) 0x00000053 (83)	Microsoft ACPI-Compliant System
(ISA) 0x00000054 (84)	Microsoft ACPI-Compliant System
(ISA) 0x00000055 (85)	Microsoft ACPI-Compliant System
(ISA) 0x00000056 (86)	Microsoft ACPI-Compliant System
(ISA) 0x00000057 (87)	Microsoft ACPI-Compliant System
(ISA) 0x00000058 (88)	Microsoft ACPI-Compliant System
(ISA) 0x00000059 (89)	Microsoft ACPI-Compliant System
(ISA) 0x0000005A (90)	Microsoft ACPI-Compliant System
(ISA) 0x0000005B (91)	Microsoft ACPI-Compliant System
(ISA) 0x0000005C (92)	Microsoft ACPI-Compliant System
(ISA) 0x0000005D (93)	Microsoft ACPI-Compliant System
(ISA) 0x0000005E (94)	Microsoft ACPI-Compliant System
(ISA) 0x0000005F (95)	Microsoft ACPI-Compliant System
(ISA) 0x00000060 (96)	Microsoft ACPI-Compliant System
(ISA) 0x00000061 (97)	Microsoft ACPI-Compliant System
(ISA) 0x00000062 (98)	Microsoft ACPI-Compliant System
(ISA) 0x00000063 (99)	Microsoft ACPI-Compliant System
(ISA) 0x00000064 (100)	Microsoft ACPI-Compliant System
(ISA) 0x00000065 (101)	Microsoft ACPI-Compliant System
(ISA) 0x00000066 (102)	Microsoft ACPI-Compliant System
(ISA) 0x00000067 (103)	Microsoft ACPI-Compliant System
(ISA) 0x00000068 (104)	Microsoft ACPI-Compliant System
(ISA) 0x00000069 (105)	Microsoft ACPI-Compliant System
(ISA) 0x0000006A (106)	Microsoft ACPI-Compliant System
(ISA) 0x0000006B (107)	Microsoft ACPI-Compliant System
(ISA) 0x0000006C (108)	Microsoft ACPI-Compliant System
(ISA) 0x0000006D (109)	Microsoft ACPI-Compliant System
(ISA) 0x0000006E (110)	Microsoft ACPI-Compliant System
(ISA) 0x0000006F (111)	Microsoft ACPI-Compliant System
(ISA) 0x00000070 (112)	Microsoft ACPI-Compliant System
(ISA) 0x00000071 (113)	Microsoft ACPI-Compliant System
(ISA) 0x00000072 (114)	Microsoft ACPI-Compliant System
(ISA) 0x00000073 (115)	Microsoft ACPI-Compliant System
(ISA) 0x00000074 (116)	Microsoft ACPI-Compliant System
(ISA) 0x00000075 (117)	Microsoft ACPI-Compliant System
(ISA) 0x00000076 (118)	Microsoft ACPI-Compliant System
(ISA) 0x00000077 (119)	Microsoft ACPI-Compliant System

	(ISA) 0x00000078 (120)	Microsoft ACPI-Compliant System
	(ISA) 0x00000079 (121)	Microsoft ACPI-Compliant System
	(ISA) 0x0000007A (122)	Microsoft ACPI-Compliant System
	(ISA) 0x0000007B (123)	Microsoft ACPI-Compliant System
	(ISA) 0x0000007C (124)	Microsoft ACPI-Compliant System
	(ISA) 0x0000007D (125)	Microsoft ACPI-Compliant System
	(ISA) 0x0000007E (126)	Microsoft ACPI-Compliant System
	(ISA) 0x0000007F (127)	Microsoft ACPI-Compliant System
	(ISA) 0x00000080 (128)	Microsoft ACPI-Compliant System
	(ISA) 0x00000081 (129)	Microsoft ACPI-Compliant System
	(ISA) 0x00000082 (130)	Microsoft ACPI-Compliant System
	(ISA) 0x00000083 (131)	Microsoft ACPI-Compliant System
	(ISA) 0x00000084 (132)	Microsoft ACPI-Compliant System
	(ISA) 0x00000085 (133)	Microsoft ACPI-Compliant System
	(ISA) 0x00000086 (134)	Microsoft ACPI-Compliant System
	(ISA) 0x00000087 (135)	Microsoft ACPI-Compliant System
	(ISA) 0x00000088 (136)	Microsoft ACPI-Compliant System
	(ISA) 0x00000089 (137)	Microsoft ACPI-Compliant System
	(ISA) 0x0000008A (138)	Microsoft ACPI-Compliant System
	(ISA) 0x0000008B (139)	Microsoft ACPI-Compliant System
	(ISA) 0x0000008C (140)	Microsoft ACPI-Compliant System
	(ISA) 0x0000008D (141)	Microsoft ACPI-Compliant System
	(ISA) 0x0000008E (142)	Microsoft ACPI-Compliant System
	(ISA) 0x0000008F (143)	Microsoft ACPI-Compliant System
	(ISA) 0x00000090 (144)	Microsoft ACPI-Compliant System
	(ISA) 0x00000091 (145)	Microsoft ACPI-Compliant System
	(ISA) 0x00000092 (146)	Microsoft ACPI-Compliant System
	(ISA) 0x00000093 (147)	Microsoft ACPI-Compliant System
	(ISA) 0x00000094 (148)	Microsoft ACPI-Compliant System
	(ISA) 0x00000095 (149)	Microsoft ACPI-Compliant System
	(ISA) 0x00000096 (150)	Microsoft ACPI-Compliant System
	(ISA) 0x00000097 (151)	Microsoft ACPI-Compliant System
	(ISA) 0x00000098 (152)	Microsoft ACPI-Compliant System
	(ISA) 0x00000099 (153)	Microsoft ACPI-Compliant System
	(ISA) 0x0000009A (154)	Microsoft ACPI-Compliant System
	(ISA) 0x0000009B (155)	Microsoft ACPI-Compliant System
	(ISA) 0x0000009C (156)	Microsoft ACPI-Compliant System
	(ISA) 0x0000009D (157)	Microsoft ACPI-Compliant System
	(ISA) 0x0000009E (158)	Microsoft ACPI-Compliant System
	(ISA) 0x0000009F (159)	Microsoft ACPI-Compliant System
	(ISA) 0x000000A0 (160)	Microsoft ACPI-Compliant System
	(ISA) 0x000000A1 (161)	Microsoft ACPI-Compliant System
	(ISA) 0x000000A2 (162)	Microsoft ACPI-Compliant System
	(ISA) 0x000000A3 (163)	Microsoft ACPI-Compliant System
	(ISA) 0x000000A4 (164)	Microsoft ACPI-Compliant System
	(ISA) 0x000000A5 (165)	Microsoft ACPI-Compliant System
	(ISA) 0x000000A6 (166)	Microsoft ACPI-Compliant System
	(ISA) 0x000000A7 (167)	Microsoft ACPI-Compliant System

	(ISA) 0x000000A8 (168)	Microsoft ACPI-Compliant System
	(ISA) 0x000000A9 (169)	Microsoft ACPI-Compliant System
	(ISA) 0x000000AA (170)	Microsoft ACPI-Compliant System
	(ISA) 0x000000AB (171)	Microsoft ACPI-Compliant System
	(ISA) 0x000000AC (172)	Microsoft ACPI-Compliant System
	(ISA) 0x000000AD (173)	Microsoft ACPI-Compliant System
	(ISA) 0x000000AE (174)	Microsoft ACPI-Compliant System
	(ISA) 0x000000AF (175)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B0 (176)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B1 (177)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B2 (178)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B3 (179)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B4 (180)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B5 (181)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B6 (182)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B7 (183)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B8 (184)	Microsoft ACPI-Compliant System
	(ISA) 0x000000B9 (185)	Microsoft ACPI-Compliant System
	(ISA) 0x000000BA (186)	Microsoft ACPI-Compliant System
	(ISA) 0x000000BB (187)	Microsoft ACPI-Compliant System
	(ISA) 0x000000BC (188)	Microsoft ACPI-Compliant System
	(ISA) 0x000000BD (189)	Microsoft ACPI-Compliant System
	(ISA) 0x000000BE (190)	Microsoft ACPI-Compliant System
	(PCI) 0x00000005 (05)	Intel(R) ICH8 Family SMBus Controller - 283E
	(PCI) 0x00000010 (16)	Intel(R) Graphics Media Accelerator 3150
	(PCI) 0x00000010 (16)	Intel(R) ICH8 Family USB Universal Host Controller - 2834
	(PCI) 0x00000012 (18)	Intel(R) ICH8 Family USB Universal Host Controller - 2832
	(PCI) 0x00000012 (18)	Intel(R) ICH8 Family USB2 Enhanced Host Controller - 283A
	(PCI) 0x00000012 (18)	Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828
	(PCI) 0x00000013 (19)	Intel(R) ICH8 Family USB Universal Host Controller - 2831
	(PCI) 0x00000015 (21)	Intel(R) ICH8 Family USB Universal Host Controller - 2835
	(PCI) 0x00000017 (23)	Intel(R) ICH8 Family USB Universal Host Controller - 2830
	(PCI) 0x00000017 (23)	Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836
	(PCI) 0xFFFFFE1 (-31)	Intel(R) Gigabit CT Desktop Adapter #2
	(PCI) 0xFFFFFE2 (-30)	Intel(R) Gigabit CT Desktop Adapter #2
	(PCI) 0xFFFFFE3 (-29)	Intel(R) Gigabit CT Desktop Adapter #2
	(PCI) 0xFFFFFE4 (-28)	Intel(R) Gigabit CT Desktop Adapter #2
	(PCI) 0xFFFFFE5 (-27)	Intel(R) Gigabit CT Desktop Adapter #6
	(PCI) 0xFFFFFE6 (-26)	Intel(R) Gigabit CT Desktop Adapter #6
	(PCI) 0xFFFFFE7 (-25)	Intel(R) Gigabit CT Desktop Adapter #6
	(PCI) 0xFFFFFE8 (-24)	Intel(R) Gigabit CT Desktop Adapter #6
	(PCI) 0xFFFFFE9 (-23)	Intel(R) Gigabit CT Desktop Adapter #5
	(PCI) 0xFFFFFEA (-22)	Intel(R) Gigabit CT Desktop Adapter #5
	(PCI) 0xFFFFFEB (-21)	Intel(R) Gigabit CT Desktop Adapter #5
	(PCI) 0xFFFFFEC (-20)	Intel(R) Gigabit CT Desktop Adapter #5
	(PCI) 0xFFFFFED (-19)	Intel(R) Gigabit CT Desktop Adapter #4
	(PCI) 0xFFFFFEE (-18)	Intel(R) Gigabit CT Desktop Adapter #4
	(PCI) 0xFFFFFEF (-17)	Intel(R) Gigabit CT Desktop Adapter #4

	(PCI) 0xFFFFFFF0 (-16)	Intel(R) Gigabit CT Desktop Adapter #4
	(PCI) 0xFFFFFFF1 (-15)	Intel(R) Gigabit CT Desktop Adapter #3
	(PCI) 0xFFFFFFF2 (-14)	Intel(R) Gigabit CT Desktop Adapter #3
	(PCI) 0xFFFFFFF3 (-13)	Intel(R) Gigabit CT Desktop Adapter #3
	(PCI) 0xFFFFFFF4 (-12)	Intel(R) Gigabit CT Desktop Adapter #3
	(PCI) 0xFFFFFFF5 (-11)	Intel(R) Gigabit CT Desktop Adapter
	(PCI) 0xFFFFFFF6 (-10)	Intel(R) Gigabit CT Desktop Adapter
	(PCI) 0xFFFFFFF7 (-9)	Intel(R) Gigabit CT Desktop Adapter
	(PCI) 0xFFFFFFF8 (-8)	Intel(R) Gigabit CT Desktop Adapter
	(PCI) 0xFFFFFFF9 (-7)	Intel(R) ICH8 Family PCI Express Root Port 6 - 2849
	(PCI) 0xFFFFFFFA (-6)	Intel(R) ICH8 Family PCI Express Root Port 5 - 2847
	(PCI) 0xFFFFFFFB (-5)	Intel(R) ICH8 Family PCI Express Root Port 4 - 2845
	(PCI) 0xFFFFFFFC (-4)	Intel(R) ICH8 Family PCI Express Root Port 3 - 2843
	(PCI) 0xFFFFFFFD (-3)	Intel(R) ICH8 Family PCI Express Root Port 2 - 2841
	(PCI) 0xFFFFFFE (-2)	Intel(R) ICH8 Family PCI Express Root Port 1 - 283F

B.4 DMA Channel Assignments

-  Direct memory access (DMA)
 -  4 Direct memory access controller

Appendix

C

Standard Firewall Platform Setting

C.1 Standard Firewall Platform Setting

Status LED Control Table.

	I/O 0x048E bit1	I/O 0x048E bit4	I/O 0x048F bit3
LED Off	0	0	0
Red LED On	1	0	0
Red LED Blink	0	0	1
Red LED Fast Blink	1	0	1
Green LED On	1	1	1
Green LED Blink	1	1	0
Green LED Fast Blink	0	1	1

LAN ByPass Config Table

	I/O 0x048C bit6	I/O 0x048C bit7	I/O 0x048D bit0	I/O 0x4B8 bit5
LAN1_2 Power On ByPass Mode	X	X	1	0
LAN1_2 Power On Pass Through Mode	X	X	0	0
LAN1_2 Power Off ByPass Mode	X	1	X	0
LAN1_2 Power Off Pass Through Mode	X	0	X	0
LAN3_4 Power On	X	X	1	1

ByPass Mode				
LAN3_4 Power On Pass Through Mode	X	X	0	1
LAN3_4 Power Off ByPass Mode	X	1	X	1
LAN3_4 Power Off Pass Through Mode	X	0	X	1
WDT for LAN1_2 ByPass	1	X	X	0
WDT for LAN3_4 ByPass	1	X	X	1
WDT for system Reset Mode	0	X	X	0 or 1

Note : "X" means that no affected.

C.2 Status LED Sample Code

```
#define LED_BASE_ADDR    0x48E

// LED Off
VOID LED_OFF()
{
    UINT16    TEMP16;

    TEMP16 = IoIn16(LED_BASE_ADDR) & 0xF7ED;
    IoOut16(LED_BASE_ADDR, TEMP16);
}

// Red LED On
VOID RED_LED_ON()
{
    UINT16    TEMP16;

    TEMP16 = IoIn16(LED_BASE_ADDR) & 0xF7ED;
    TEMP16 |= 0x0002;
    IoOut16(LED_BASE_ADDR, TEMP16);
}

// Red LED Blink
VOID RED_LED_BLINK()
```

```
{  
    UINT16    TEMP16;  
  
    TEMP16 = IoIn16(LED_BASE_ADDR) & 0xF7ED;  
    TEMP16 |= 0x0800;  
    IoOut16(LED_BASE_ADDR, TEMP16);  
}  
  
// Red LED Fast Blink  
VOID RED_LED_FBLINK()  
{  
    UINT16    TEMP16;  
  
    TEMP16 = IoIn16(LED_BASE_ADDR) & 0xF7ED;  
    TEMP16 |= 0x0802;  
    IoOut16(LED_BASE_ADDR, TEMP16);  
}  
  
// Green LED On  
VOID GREEN_LED_ON()  
{  
    UINT16    TEMP16;  
  
    TEMP16 = IoIn16(LED_BASE_ADDR) & 0xF7ED;  
    TEMP16 |= 0x0812;
```

```
    IoOut16(LED_BASE_ADDR, TEMP16);
}

// Green LED Blink
VOID GREEN_LED_BLINK()
{
    UINT16    TEMP16;

    TEMP16 = IoIn16(LED_BASE_ADDR) & 0xF7ED;
    TEMP16 |= 0x0012;
    IoOut16(LED_BASE_ADDR, TEMP16);
}

// Green LED Fast Blink
VOID GREEN_LED_FBLINK()
{
    UINT16    TEMP16;

    TEMP16 = IoIn16(LED_BASE_ADDR) & 0xF7ED;
    TEMP16 |= 0x0810;
    IoOut16(LED_BASE_ADDR, TEMP16);
}
```

C.3 LAN Bypass Mode Sample Code

```
#define LANBP_BASE_ADDR      0x48C
#define PAIR_SEL_BASE_ADDR   0x4B8

/*
Select LAN Pair I or II
PAIR_NUM =      0x00 - PAIR I
              0x01 - PAIR II
*/
VOID SEL_PAIR(
    IN  UINT8    PAIR_NUM;
)
{
    UINT8    TEMP8;

    PAIR_NUM = PAIR_NUM << 5;
    TEMP8 = IoIn8(PAIR_SEL_BASE_ADDR) & 0xDF;
    TEMP8 |= PAIR_NUM;
    IoOut8(PAIR_SEL_BASE_ADDR, TEMP8);
}

/*
Execute LAN ByPass Settings
```



```
*/  
VOID EXE_SET()  
{  
    UINT8    TEMP8;  
  
    TEMP8 = IoIn8(LANBP_BASE_ADDR + 3) | 0x10;  
    IoOut8(LANBP_BASE_ADDR + 3, TEMP8);  
    Sleep(500);  
    IoOut8(LANBP_BASE_ADDR + 3, TEMP8 & 0xEF);  
}  
  
/*  
LAN1 & 2 Power On ByPass Mode Set  
BP_MODE = 0x00 - Pass Through Mode  
          = 0x01 - By Pass Mode  
*/  
VOID LAN12_PWRON_BP()  
{  
    UINT8    TEMP8;  
  
    SEL_PAIR(0x00);    // Select Pair I  
    TEMP8 = IoIn8(LANBP_BASE_ADDR + 1) & 0xFE;  
    TEMP8 |= BP_MODE;
```

```
IoOut8(LANBP_BASE_ADDR + 1, TEMP8);

EXE_SET();           // Execute Set
}

/*
LAN1 & 2 Power Off ByPass Mode Set
BP_MODE = 0x00 - Pass Through Mode
           = 0x01 - By Pass Mode
*/
VOID LAN12_PWROFF_BP()
{
    UINT8    TEMP8;

    SEL_PAIR(0x00) ;    // Select Pair I
    TEMP8 = IoIn8(LANBP_BASE_ADDR) & 0x7F;
    TEMP8 |= BP_MODE << 7;
    IoOut8(LANBP_BASE_ADDR, TEMP8);

    EXE_SET();           // Execute Set
}

/*
```

LAN3 & 4 Power On ByPass Mode Set

BP_MODE = 0x00 - Pass Through Mode

= 0x01 - By Pass Mode

*/

VOID LAN34_PWRON_BP()

{

 UINT8 TEMP8;

 SEL_PAIR(0x01); // Select Pair II

 TEMP8 = IoIn8(LANBP_BASE_ADDR + 1) & 0xFE;

 TEMP8 |= BP_MODE;

 IoOut8(LANBP_BASE_ADDR + 1, TEMP8);

 EXE_SET(); // Execute Set

}

/*

LAN3 & 4 Power Off ByPass Mode Set

BP_MODE = 0x00 - Pass Through Mode

= 0x01 - By Pass Mode

*/

VOID LAN34_PWROFF_BP()

{

 UINT8 TEMP8;

```
SEL_PAIR(0x01);      // Select Pair II
TEMP8 = IoIn8(LANBP_BASE_ADDR) & 0x7F;
TEMP8 |= BP_MODE << 7;
IoOut8(LANBP_BASE_ADDR, TEMP8);

EXE_SET();           // Execute Set
}

/*
Set Watch Dog as LAN1 & 2 By Pass mode
*/
VOID WDT_LAN12_BP()
{
    UINT8    TEMP8;

    SEL_PAIR(0x00);  // Select Pair I
    TEMP8 = IoIn8(LANBP_BASE_ADDR) | 0x40;
    IoOut8(LANBP_BASE_ADDR, TEMP8);

    EXE_SET();       // Execute Set
}
```

```
/*  
Set Watch Dog as LAN3 & 4 By Pass mode  
*/  
VOID WDT_LAN34_BP()  
{  
    UINT8    TEMP8;  
  
    SEL_PAIR(0x01);    // Select Pair II  
    TEMP8 = IoIn8(LANBP_BASE_ADDR) | 0x40;  
    IoOut8(LANBP_BASE_ADDR, TEMP8);  
  
    EXE_SET();        // Execute Set  
}
```

```
/*  
Set Watch Dog as system reset mode  
*/  
VOID WDT_RESET()  
{  
    UINT8    TEMP8;  
  
    SEL_PAIR(0x00);    // Select Pair I  
    TEMP8 = IoIn8(LANBP_BASE_ADDR) & 0xBF;  
    IoOut8(LANBP_BASE_ADDR, TEMP8);
```

```
SEL_PAIR(0x00);      // Select Pair II
IoOut8(LANBP_BASE_ADDR, TEMP8);

EXE_SET();           // Execute Set
}
```

C.4 Console Redirection

Console redirection allows you to maintain a system from a remote location by re-directing keyboard input and text output through the serial port. This section will tell you how to use the console redirection.

1. Please insert console cable between on FWS-7200 and remote client system.

2. Setup BIOS in FWS-7200

BIOS >> Advanced >> Serial Port Console Redirection >>

Console Redirection: Enabled (Default)

Enabled Attempt to redirect console via COM port

Disabled Console redirection function

BIOS >> Advanced >> Serial Port Console Redirection >> Serial Redirection Settings >> Bits per second: 115200 (Default)

3. Configure Console redirection on client system. This example is for Windows platform.

Step1 - Click the Start button, point to programs >> Accessories >> Communication, and click Hyper Terminal

Step2 - Enter any name for the new connection and select any icon

Step3 - Click OK

Step4 - From the connect to pull-down menu, select a COM port available on your client system and click OK

Step5 - Select Baud Rate >> 19200, Flow control >> None, Data bit >>8, Parity cheek >> None, Stop bit>>1

4. Power on FWS-7200 and it will display the BIOS information on the client system.

Appendix

D

AHCI Settings

D.1 Setting AHCI

OS installation to setup AHCI Mode

Step 1: Copy the files below from “**Driver CD -> Step 4 - AHCI-> winxp_32 or winxp_64**” to Disk



P6Readme
文字文件
8 KB



iaAHCI
安全性目錄
9 KB



iaAHCI
安裝資訊
9 KB



iaStor
安全性目錄
8 KB



iaStor
安裝資訊
8 KB



iaStor
系統檔案
423 KB



license
文字文件
5 KB



TXTSETUP.OEM
OEM 檔案
6 KB

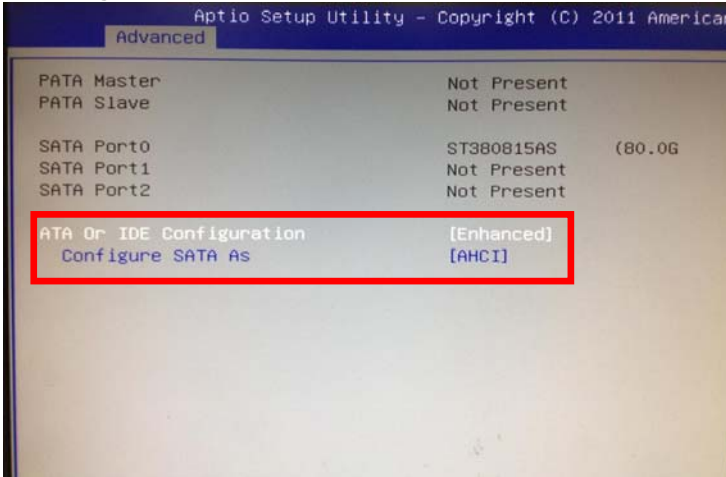
Step 2: Connect the USB Floppy (disk with AHCI files) to the board



Step 3: The setting procedures "In BIOS Setup Menu"

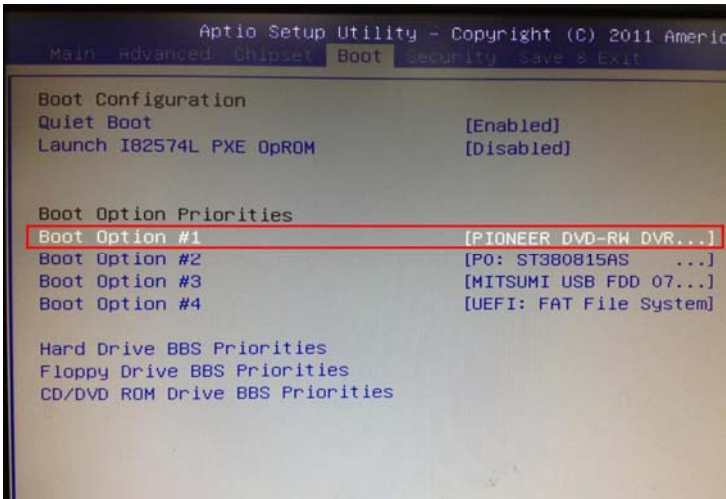
A: Advanced -> IDE Configuration -> ATA Or IDE Configuration -> Enhanced

B: Configure SATA As -> AHCI



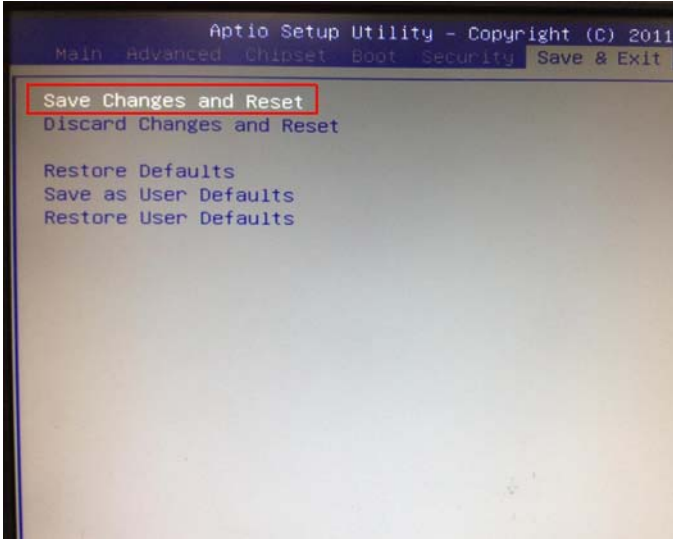
Step 4: The setting procedures "In BIOS Setup Menu"

B: Boot -> Boot Option #1 -> DVD-ROM Type



Step 5: The setting procedures “In BIOS Setup Menu”

C: Save & Exit -> Save Changes and Exit



Step 6: Setup OS

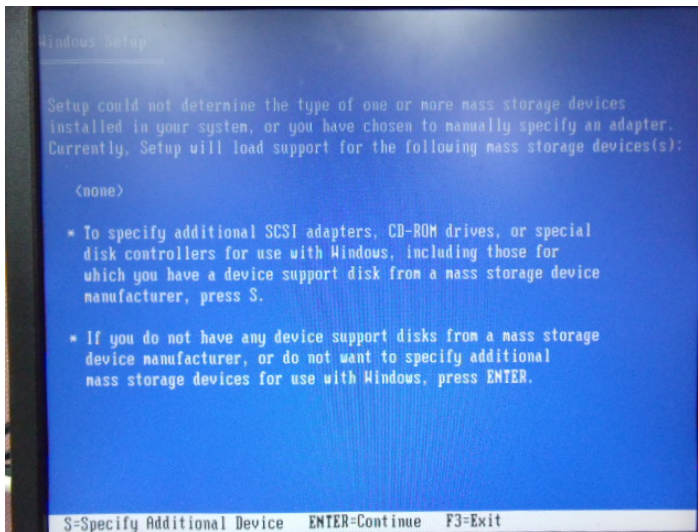
Setup is inspecting your computer's hardware configuration...



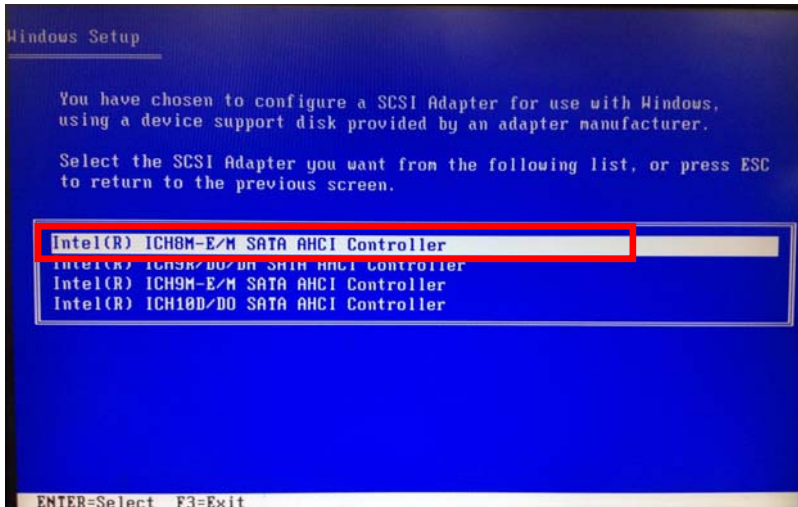
Step 7: Press "F6"



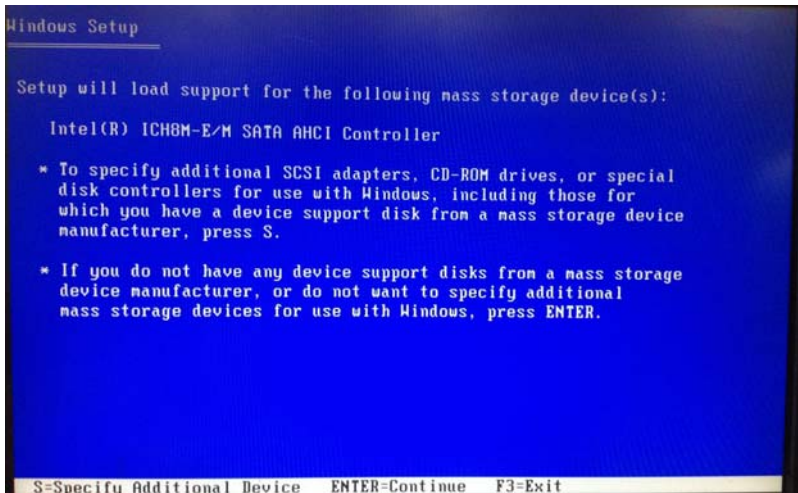
Step 8: Choose "S"



Step 9: Choose "Intel(R) ICH8M-E/M SATA AHCI Controller"



Step 10: It will show the model number you select and then press "ENTER"



Step 11: Setup is loading files

