

XTX-CV

Intel® Atom™ D2550/N2600 Processor

Intel® NM10

10/100Base-TX Ethernet

3 SATA 3.0Gb/s, 6 USB2.0

1 PATA, 4 PCI-E[x1], 4 PCI

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Packing List

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

- 4 M2.5 Screw
- 1 CD-ROM for manual (in PDF format) and drivers
- 1 XTX-CV

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

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Chapter

1

**General
Information**

1.1 Introduction

AAEON, a leading embedded board manufacturer, is pleased to announce the debut of their new generation XTX CPU Module—XTX-CV. The XTX-CV is a cutting-edge product that provides high performance and low power consumption in the embedded market.

XTX-CV adopts the latest Intel® Atom™ D2550/N2600 processor. The system memory deploys with onboard 204-pin DDR3 800/1066 memory up to 4 GB (D2550: Max. 4 GB; N2600: Max. 2 GB). In addition, Realtek RTL 8105E supports 10/100Base-TX Ethernet that allows network connections. This model applies four PCI-Express[x1], four PCI, one LPC bus, and one SMBus. Moreover, two SATA 3.0Gb/s are configured on the XTX-CV. XTX-CV also equips six USB2.0 and one parallel port for flexible I/O expansions.

The display of XTX-CV supports CRT/LCD simultaneous and dual view displays. This brand new XTX CPU Module is developed to cater to the requirements of Automation, Medical, ticket machine, transportation, gaming, KIOSK, and POS/POI applications.

1.2 Features

- Onboard Intel® Atom™ D2550(1.86GHz)/N2600(1.6GHz) Processor
- Intel® NM10
- SODIMM DDR3 1066 Memory, Max. 4 GB
- 10/100Base-TX Ethernet
- CRT, Up to 24-bit Dual Channel LVDS LCD
- High Definition Audio Interface
- PATA x 1, SATA 3.0Gb/s x 2, SATA SSD (Optional)
- USB2.0 x 6
- PCI-Express[x1] x 4, PCI x 4
- +5V Operating Voltage

1.3 Specifications

System

- **Form Factor** XTX
- **Processor** Intel® Atom™ D2550/N2600 processor,
D2550: 1.86 GHz
N2600: 1.6 GHz
- **System Memory** 204-pin DDR3 800/1066 SODIMM x 1,
Max. 4 GB
D2550: DDR3 1066, Max. 4 GB
N2600: DDR3 800, Max. 2 GB
- **Chipset** Intel® NM10
- **I/O Chipset** Winbond W83627DHG/PT
- **Ethernet** Realtek RTL8105E, 10/100Base-TX
- **BIOS** AMI BIOS SPI type, 8MB ROM
- **EEPROM** Atmel® AT24C02, save BIOS and
configuration data (Optional)
- **Wake On LAN** Yes
- **Watchdog Timer** Winbond W83627DHG/PT
- **H/W Status
Monitoring** Supports CPU temperature monitoring
- **Expansion Interface** PCI-Express [x1] x 4
32-bit PCI x 4
LPC bus x 1
SMBus x 1
- **Power Requirement** Nominal: +5V
- **Board Size** 4.49”(L) x 3.74”(W) (114mm x 95mm)
- **Gross Weight** 0.66 lb (0.3 Kg)
- **Operating
Temperature** 32°F ~ 140°F (0°C ~ 60°C)

- **Storage Temperature** -40°F ~ 176°F (-40°C ~ 85°C)
- **Operating Humidity** 0% ~ 90% relative humidity, non-condensing

Display: Supports CRT/LCD Simultaneous/ dual view displays

- **Chipset** Intel® Atom™ D2550/N2600 processor integrated, includes AVC/H.264, VC1/WMV9, MPEG2 decoder
- **Memory** Shared system memory up to 256MB/ DVMT 4.0
- **Resolution** Up to 1920x1080 for CRT
Up to 1920x1080 for LCD (D2550)
Up to 1366x768 for LCD (N2600)
- **LCD Interface** Up to 18/24-bit dual-channel LVDS

I/O

- **Storage** SATA 3.0Gb/s x 2, SATA SSD x 1 (Optional), IDE x 1 (optional, one device)
- **Serial Port** UART x 2 (Tx/Rx only)
- **USB** USB2.0 x 6
- **Audio** High definition audio
- **Parallel Port** 1

Chapter

2

**Quick
Installation
Guide**

2.1 Safety Precautions

Warning!

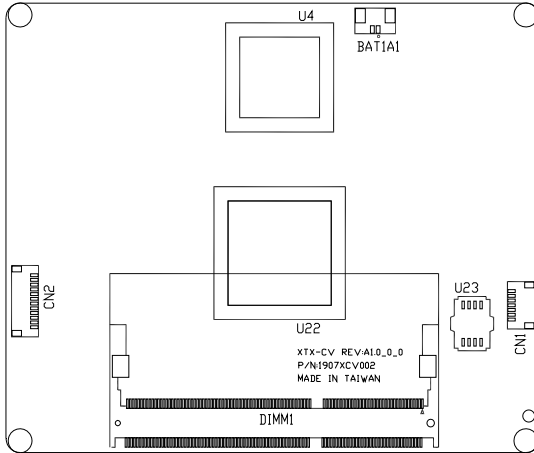
Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.

Caution!

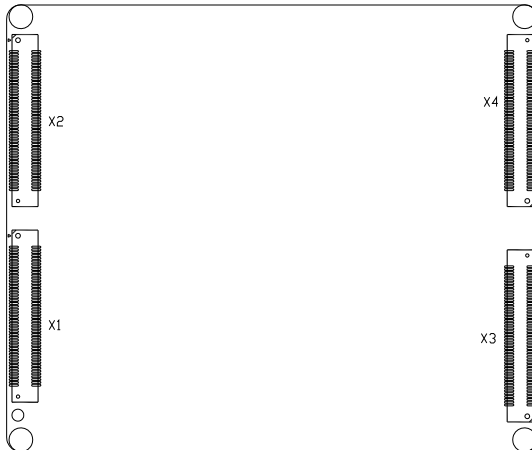
Always ground yourself to remove any static charge before touching the board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not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

2.2 Location of Connectors and Switches

Component Side

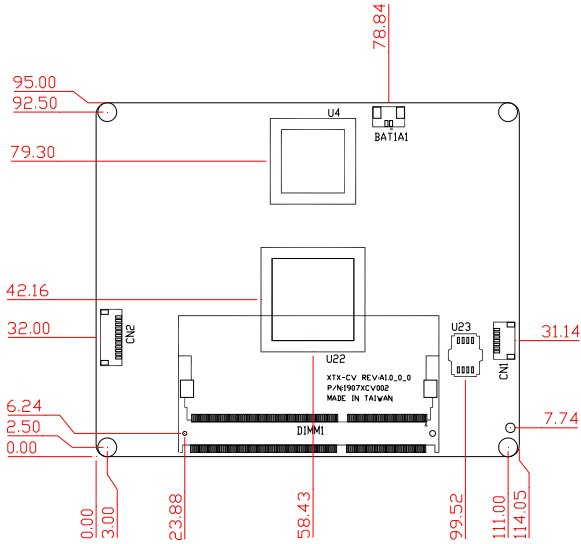


Solder Side

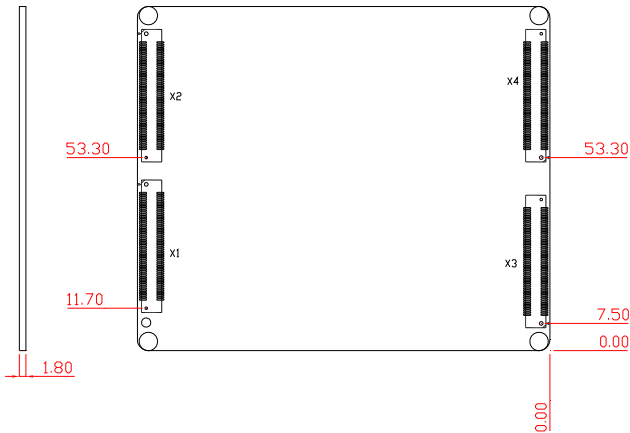


2.3 Mechanical Drawings of Connectors and Switches

Component Side



Solder Side



2.4 List of Switch

There is a switch on the board that allows you to configure your system to suit your application. The table below shows the function of the switch.

Label	Function
SW1	ATX/AT Mode Selection & Clear CMOS

2.5 List of Connectors

There are a number of connectors of the board that allow you to configure your system to suit your application. The table below shows the function of each connector in the board:

Label	Function
CN1	BIOS Programming Connector
CN2	LPC Expansion I/F
X1	X1 Connector
X2	X2 Connector
X3	X3 Connector
X4	X4 Connector
DIMM1	DDR3 SODIMM connector

2.6 AT/ATX Selection and Clear CMOS (SW1)

Pin	ON	OFF
1	AT Mode	ATX Mode (Default)
2	Clear CMOS	Normal (Default)

2.7 BIOS Programming Connector (CN1)

Pin	Signal
1	SPI_SO
2	GND
3	SPI_CLK
4	+3V3
5	SPI_SI
6	SPI_CS#
7	N/C

2.8 LPC Expansion I/F Connector (CN2)

Pin	Signal
1	LPC_AD0
2	LPC_AD1
3	LPC_AD2
4	LPC_AD3
5	+3V3
6	LPC_FRAME#
7	PLTRST#

8	GND
9	LPC_CLK
10	LPC_DRQ#0
11	LPC_DRQ#1
12	SERIRQ

2.9 X1 Connector (X1)

Pin	Signal	Pin	Signal
1	GND	2	GND
3	PCICLK3	4	PCICLK4
5	GND	6	GND
7	PCICLK1	8	PCICLK2
9	PCI_REQ#3	10	PCI_GNT#3
11	PCI_GNT#2	12	N/C
13	PCI_REQ#2	14	PCI_GNT#1
15	PCI_REQ#1	16	N/C
17	PCI_GNT#0	18	N/C
19	+5V_EXT	20	+5V_EXT
21	SERIRQ	22	PCI_REQ#0
23	PCI_AD0	24	N/C
25	PCI_AD1	26	PCI_AD2
27	PCI_AD4	28	PCI_AD3
29	PCI_AD6	30	PCI_AD5
31	PCI_C/BE#0	32	PCI_AD7

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33	PCI_AD8	34	PCI_AD9
35	GND	36	GND
37	PCI_AD10	38	LIN_L
39	PCI_AD11	40	MIC_IN
41	PCI_AD12	42	LIN_R
43	PCI_AD13	44	ASVCC
45	PCI_AD14	46	LOUT_L
47	PCI_AD15	48	ASGND
49	PCI_C/BE#1	50	LOUT_R
51	+5V_EXT	52	+5V_EXT
53	PCI_PAR	54	PCI_SERR#
55	PCI_PERR#	56	N/C
57	PCI_PME#	58	USBP2N
59	PCI_LOCK#	60	PCI_DEVSEL#
61	PCI_TRDY#	62	USBP3N
63	PCI_IRDY#	64	PCI_STOP#
65	PCI_FRAME#	66	USBP2P
67	GND	68	GND
69	PCI_AD16	70	PCI_C/BE#2
71	PCI_AD17	72	USBP3P
73	PCI_AD19	74	PCI_AD18
75	PCI_AD20	76	USBP0N
77	PCI_AD22	78	PCI_AD21
79	PCI_AD23	80	USBP1N

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81	PCI_AD24	82	PCI_C/BE#3
83	+5V_EXT	84	+5V_EXT
85	PCI_AD25	86	PCI_AD26
87	PCI_AD28	88	USBP0P
89	PCI_AD27	90	PCI_AD29
91	PCI_AD30	92	USBP1P
93	PCIRST#	94	PCI_AD31
95	INT_PIRQ#C	96	INT_PIRQ#D
97	INT_PIRQ#A	98	INT_PIRQ#B
99	GND	100	GND

2.10 X2 Connector (X2)

Pin	Signal	Pin	Signal
1	GND	2	GND
3	PCIE_CLK	4	SATA0_RXP
5	PCIE_CLK#	6	SATA0_RXN
7	GND	8	GND
9	PCIE_TXP3	10	SATA0_TXN
11	PCIE_TXN3	12	SATA0_TXP
13	GND	14	+5VSB_EXT
15	PCIE_RXP3	16	SATA1_RXP
17	PCIE_RXN3	18	SATA1_RXN
19	+5V_EXT	20	+5VSB_EXT
21	EXC1_CPPE#	22	SATA1_TXN

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23	EXC1_RST#	24	SATA1_TXP
25	USBP5P	26	GND
27	USBP5N	28	N/C
29	GND	30	N/C
31	PCIE_TXP2	32	SUS_STAT#
33	PCIE_TXN2	34	CLKRUN#
35	GND	36	GND
37	PCIE_RXP2	38	N/C
39	PCIE_RXN2	40	N/C
41	EXC0_CPPE#	42	GND
43	EXC0_RST#	44	N/C
45	USBP4P	46	N/C
47	USBP4N	48	N/C
49	SLP_S3#	50	SATA_LED#
51	+5V_EXT	52	+5V_EXT
53	PCIE_RXN1	54	N/C
55	PCIE_RXP1	56	N/C
57	GND	58	IL_SATA#
59	PCIE_TXN1	60	N/C
61	PCIE_TXP1	62	N/C
63	WAKE#	64	N/C
65	SLP_S5#	66	N/C
67	GND	68	GND
69	PCIE_RXN0	70	N/C

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71	PCIE_RXP0	72	N/C
73	GND	74	+5V_EXT
75	PCIE_TXN0	76	N/C
77	PCIE_TXP0	78	N/C
79	N/C	80	+5V_EXT
81	HDA_RST#	82	HDA_SDOOUT
83	+5V_EXT	84	+5V_EXT
85	HDA_SYNC	86	N/C
87	N/C	88	N/C
89	HDA_BIT_CLK	90	FAN_TAC
91	LPC_AD0	92	FAN_CTL
93	LPC_AD1	94	LPC_FRAME#
95	LPC_AD2	96	LPC_DRQ#0
97	LPC_AD3	98	LPC_DRQ#1
99	GND	100	GND

2.11 X3 Connector (X3)

Pin	Signal	Pin	Signal
1	GND	2	GND
3	CRT_RED	4	CRT_BLUE
5	HSYNC	6	CRT_GREEN
7	VSYNC	8	CRT_DDC_CLK
9	N/C	10	CRT_DDC_DATA
11	LVDS_B_CLKN	12	LVDS_B_TX#3

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13	LVDS_B_CLKP	14	LVDS_B_TX3
15	GND	16	GND
17	LVDS_B_TX1	18	LVDS_B_TX2
19	LVDS_B_TX#1	20	LVDS_B_TX#2
21	GND	22	GND
23	LVDS_A_TX#3	24	LVDS_B_TX0
25	LVDS_A_TX3	26	LVDS_B_TX#0
27	GND	28	GND
29	LVDS_A_TX#2	30	LVDS_A_CLKP
31	LVDS_A_TX2	32	LVDS_A_CLKN
33	GND	34	GND
35	LVDS_A_TX0	36	LVDS_A_TX1
37	LVDS_A_TX#0	38	LVDS_A_TX#1
39	+5V_EXT	40	+5V_EXT
41	LVDS_DDC_DATA	42	N/C
43	LVDS_DDC_CLK	44	BLON
45	LVDS_BKLCTL	46	LVDS_VDDEN
47	N/C	48	N/C
49	N/C	50	N/C
51	N/C	52	N/C
53	+5V_EXT	54	GND
55	STB#	56	AFD#
57	N/C	58	PD7
59	N/C	60	ERR#

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61	N/C	62	PD6
63	RXDB	64	INIT#
65	GND	66	GND
67	RTSB#	68	PD5
69	DTRB#	70	SLIN#
71	DCDB#	72	PD4
73	DSRB#	74	PD3
75	CTSB#	76	PD2
77	TXDB	78	PD1
79	RIB#	80	PD0
81	+5V_EXT	82	+5V_EXT
83	RXDA	84	ACK#
85	RTSA#	86	BUSY
87	DTRA#	88	PE
89	DCDA#	90	SLCT
91	DSRA#	92	MSCLK
93	CTSA#	94	MSDAT
95	TXDA	96	KBCLK
97	RIA#	98	KBDAT
99	GND	100	GND

2.12 X4 Connector (X4)

Pin	Signal	Pin	Signal
1	GND	2	GND
3	+5VSB_EXT	4	HWRST#
5	PERSON#	6	SPKR
7	PWRBTN#	8	RTCBAT
9	N/C	10	LINK_LED#
11	N/C	12	ACT_LED#
13	N/C	14	10_100_LED#
15	N/C	16	N/C
17	+5V_EXT	18	+5V_EXT
19	OC#	20	N/C
21	N/C	22	N/C
23	SMBCLK	24	SMBDATA
25	N/C	26	SMBALERT#
27	N/C	28	DASP_S
29	N/C	30	IDE_CS3#
31	N/C	32	IDE_CS1#
33	GND	34	GND
35	N/C	36	IDE_A2
37	N/C	38	IDE_A0
39	N/C	40	IDE_A1
41	N/C	42	N/C

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43	N/C	44	IDE_INTRQ
45	N/C	46	IDE_ACK#
47	N/C	48	IDE_RDY
49	+5V_EXT	50	+5V_EXT
51	N/C	52	IDE_IOR#
53	N/C	54	IDE_IOW#
55	N/C	56	IDE_DRQ
57	N/C	58	IDE_D15
59	N/C	60	IDE_D0
61	N/C	62	IDE_D14
63	N/C	64	IDE_D1
65	GND	66	GND
67	N/C	68	IDE_D13
69	N/C	70	IDE_D2
71	N/C	72	IDE_D12
73	N/C	74	IDE_D3
75	N/C	76	IDE_D11
77	N/C	78	IDE_D4
79	N/C	80	IDE_D10
81	+5V_EXT	82	+5V_EXT
83	N/C	84	IDE_D5
85	N/C	86	IDE_D9
87	N/C	88	IDE_D6
89	NM_RI#	90	CBLID_P#

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91	RDN	92	IDE_D8
93	RDP	94	N/C
95	TDN	96	IDE_D7
97	TDP	98	IDE_RST#
99	GND	100	GND

2.13 DDR3 SODIMM Connector (DIMM1)

Standard DDR3 SODIMM Connector

Below Table for China RoHS Requirements

产品中有毒有害物质或元素名称及含量

AAEON Main Board/ Daughter Board/ Backplane

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	X	○	○	○	○	○
外部信号 连接器及线材	X	○	○	○	○	○
<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：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。</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 XTX-CV 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	
<p>BIOS Information XTX-CV R1.0 (XTCVAM10) (05/18/2012)</p> <p>BIOS Vendor: American Megatrends Core Version: 4.6.5.3 Compliancy: UEFI 2.3; PI 1.2</p> <p>System Date: [Mon 05/21/2012] System Time: [16:47:29]</p> <p>Access Level: Administrator</p>	<p>Set the Date. Use Tab to switch between Date elements.</p> <hr/> <p> ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit </p>
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.	

Advanced

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.	
Main Advanced Chipset Boot Security Save & Exit	
<ul style="list-style-type: none"> ▶ ACPI Settings ▶ SS RTC Wake Settings ▶ CPU Configuration ▶ IDE Configuration ▶ USB Configuration ▶ Second Super IO Configuration ▶ W83627DHG Super IO Configuration ▶ W83627DHG HW Monitor 	<p>System ACPI Parameters.</p> <hr/> <p> ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit </p>
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.	

Advanced -> ACPI Settings

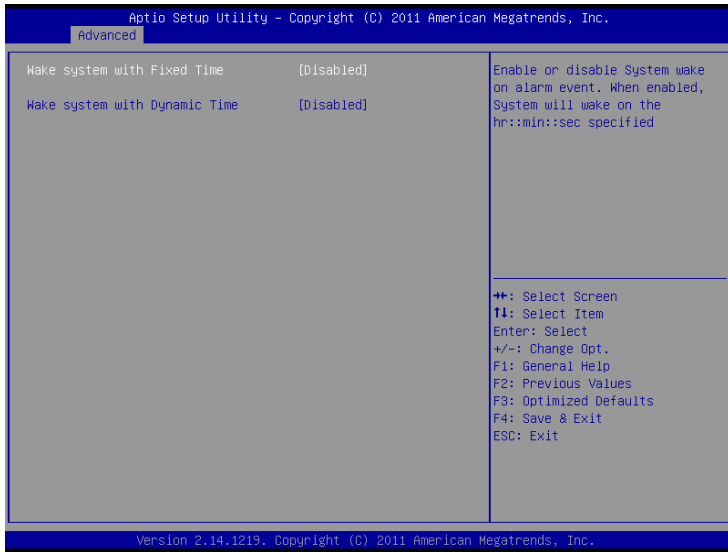


Options summary:

Hibernation	Enable	Optimal Default, Failsafe Default
	Disable	
Enables or Disables System ability to Hibernate (OS/S4 Sleep State). This option may be not effective with some OS.		
Suspend mode	Suspend Disabled	
	S1 (CPU Stop Clock)	

	S3 (Suspend to RAM)	Optimal Default, Failsafe Default
Select the ACPI state used for System Suspend		

Advanced -> S5 RTC Wake Settings



Wake system with Fixed Time	Enable	
	Disable	Optimal Default, Failsafe Default
Enable or disable System wake on alarm event. When enabled, System will wake on the hr::min::sec specified		
Wake system with Dynamic Time	Enable	
	Disable	Optimal Default,

		Failsafe Default
Enable or disable System wake on alarm event. When enabled, System will wake on the current time + Increase minute(s)		

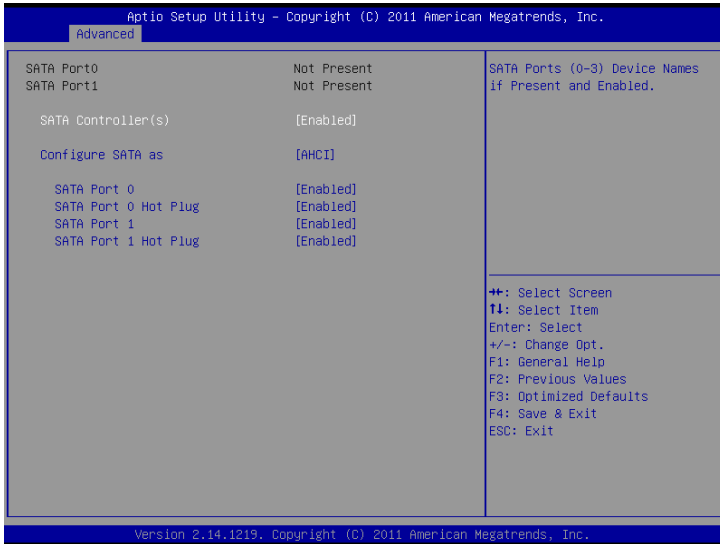
Advanced -> CPU Configuration



Hyper-Threading	Enable	Optimal Default, Failsafe Default
	Disable	
Enabled for Windows XP and Linux (OS optimized for Hyper-Threading Technology) and Disabled for other OS (OS not optimized for Hyper-Threading Technology).		
Limit CPUID Maximum	Enable	Optimal Default, Failsafe Default

	Disable	
Disabled for Windows XP		

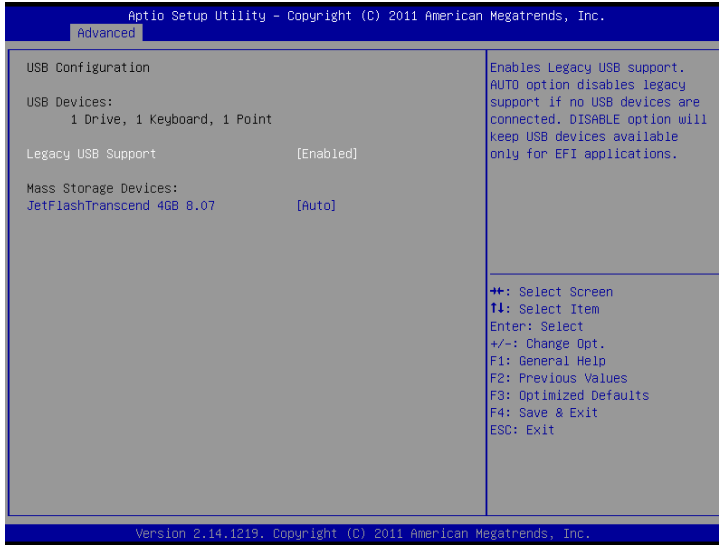
Advanced -> IDE Configuration



SATA Controller(s)	Enable	Optimal Default, Failsafe Default
	Disable	
Enable/Disable SATA Device.		
Configure SATA as	IDE	
	AHCI	Optimal Default, Failsafe Default
Select a configuration for SATA Controller.		
SATA Port 0	Enable	Optimal Default,

		Failsafe Default
	Disable	
Enable or Disable SATA Port.		
SATA Port 0 Hot Plug	Enable	Optimal Default, Failsafe Default
	Disable	
Designates this port as Hot Pluggable.		
SATA Port 1	Enable	Optimal Default, Failsafe Default
	Disable	
Enable or Disable SATA Port.		
SATA Port 1 Hot Plug	Enable	Optimal Default, Failsafe Default
	Disable	
Designates this port as Hot Pluggable.		

Advanced -> USB Configuration

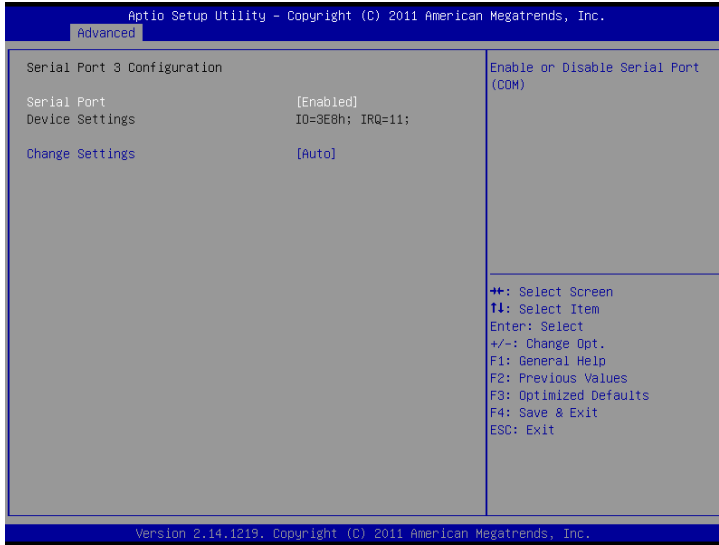


Legacy USB Support	Enable	Optimal Default, Failsafe Default
	Disable	
<p>Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications</p>		

Advanced -> Second Super IO Configuration



Advanced -> Second Super IO Configuration -> Serial Port 3 Configuration

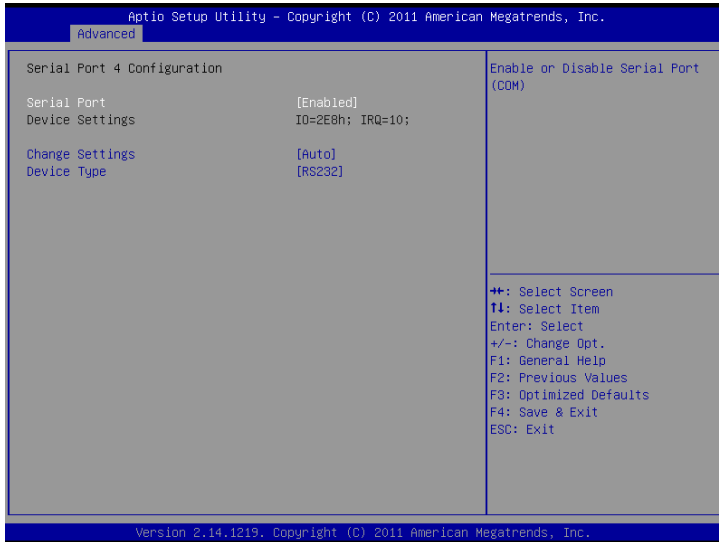


Serial Port	Enable	Optimal Default, Failsafe Default
	Disable	
Enable or Disable Serial Port (COM)		
Change Settings	Auto	Optimal Default, Failsafe Default

	IO=3E8h; IRQ=11;	
	IO=3F8h;IRQ=3,4,5,6,7,9,10,11,12;	
	IO=2F8h;IRQ=3,4,5,6,7,9,10,11,12	
	IO=3E8h;IRQ=3,4,5,6,7,9,10,11,12	
	IO=2E8h;IRQ=3,4,5,6,7,9,10,11,12	

Select an optimal setting for Super IO device

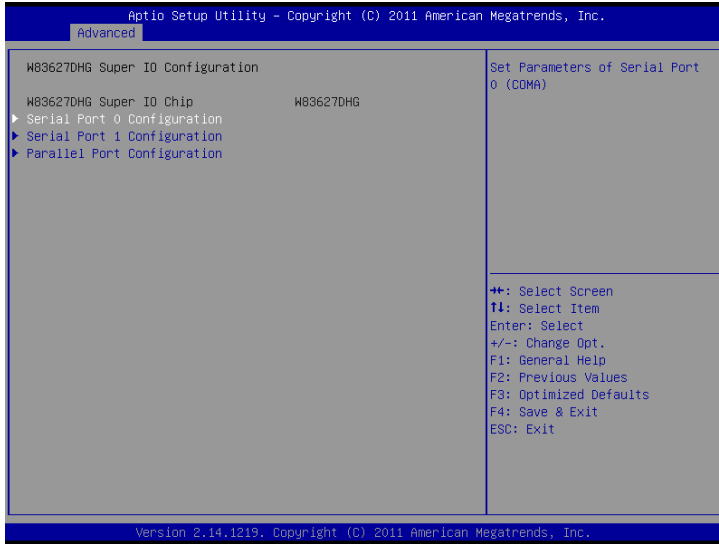
Advanced -> Second Super IO Configuration -> Serial Port 4 Configuration



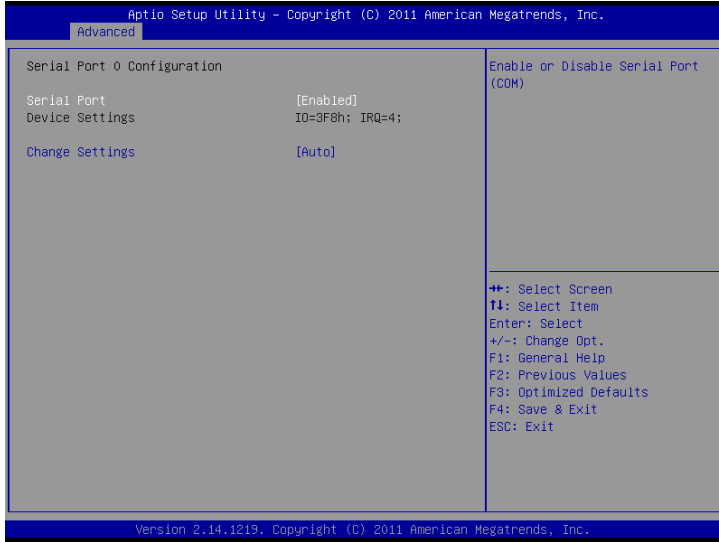
Serial Port	Enable	Optimal Default, Failsafe Default
-------------	--------	--

	Disable	
Enable or Disable Serial Port (COM)		
Change Settings	Auto	Optimal Default, Failsafe Default
	IO=2E8h; IRQ=10;	
	IO=3F8h;IRQ=3,4,5,6,7,9,10,11,12;	
	IO=2F8h;IRQ=3,4,5,6,7,9,10,11,12	
	IO=3E8h;IRQ=3,4,5,6,7,9,10,11,12	
	IO=2E8h;IRQ=3,4,5,6,7,9,10,11,12	
Select an optimal setting for Super IO device		
Device Type	RS232	Optimal Default, Failsafe Default
	RS422	
	RS485	
Select RS232, RS422 or RS485		

Advanced -> H83627DHG Super IO Configuration



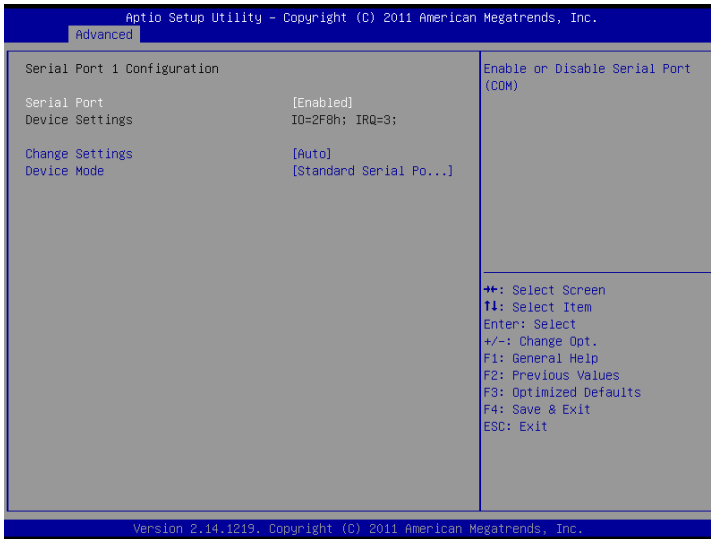
Advanced -> H83627DHG Super IO Configuration -> Serial Port 0 Configuration



Serial Port	Enable	Optimal Default, Failsafe Default
	Disable	
Enable or Disable Serial Port (COM)		
Change Settings	Auto	Optimal Default, Failsafe 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	

Advanced -> H83627DHG Super IO Configuration -> Serial Port 1 Configuration

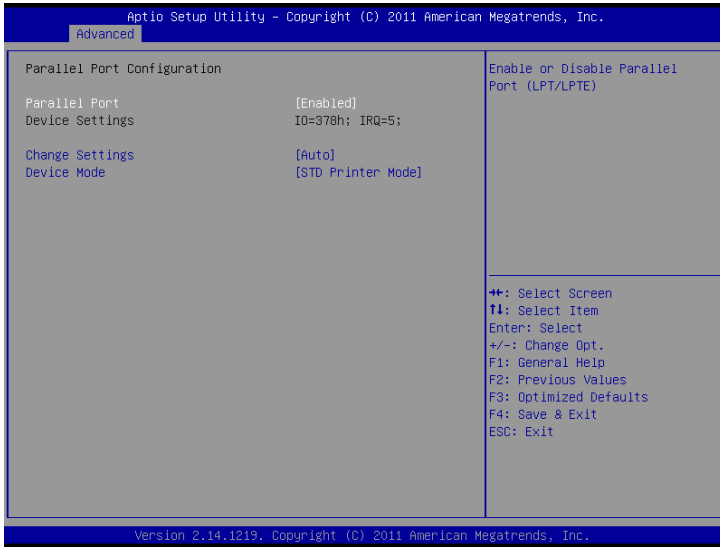


Serial Port	Enable	Optimal Default, Failsafe Default
	Disable	

Enable or Disable Serial Port (COM)		
Change Settings	Auto	Optimal Default, Failsafe 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	
Select an optimal setting for Super IO device		
Device Mode	Standard Serial Port Mode	Optimal Default, Failsafe Default
	IrDA Active pulse 1.6 uS	
	IrDA Active pulse 3/16 bit time	
	ASK-IR Inverting IRTX, Routed to IRRX	
	ASK-IR Inverting IRTX &500KHz, Routed to IRRX	
	ASK-IR Inverting IRTX, Demodulation to IRRX	
	ASK-IR Inverting IRTX&500KHz,	

	Demodulation to IRRX	
Change the Serial Port mode. Select <High Speed> or <Normal mode> mode		

Advanced -> H83627DHG Super IO Configuration -> Parallel Port Configuration



Parallel Port	Enable	Optimal Default, Failsafe Default
	Disable	
Enable or Disable Parallel Port (LPT/LPTE)		
Change Settings	Auto	Optimal Default,

		Failsafe Default
	IO=378h; IRQ=5;	
	IO=337h;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	
Select an optimal setting for Super IO device		
Device Mode	STD Printer Mode	Optimal Default, Failsafe Default
	SPP Mode	
	EPP-1.9 and SPP Mode	
	EPP-1.7 and SPP Mode	
	ECP Mode	
	ECP and EPP 1.9 Mode	
	ECP and EPP 1.7 Mode	
Change the Printer Port mode.		

Advanced -> H83627HG HW Monitor

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Advanced

Pc Health Status	
CPU_TEMP	: +50 °C
NM_TEMP	: +42 °C
SVS_TEMP	: +34 °C
CPU Fan Speed	: N/A
system Fan Speed	: N/A
VCCORE	: +1.056 V
+1.5V	: +1.512 V
+5V	: +5.070 V
+1.5V_DDR	: +1.536 V
+1.05V	: +1.064 V
+3.3V	: +3.264 V
+3.3V_Dual	: +3.307 V
VBAT	: +3.162 V

++: 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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Chipset

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Main Advanced **Chipset** Boot Security Save & Exit

<ul style="list-style-type: none"> ▶ Host Bridge ▶ South Bridge 	<p>Host Bridge Parameters</p>
---	-------------------------------

++: 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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Chipset -> Host Bridge

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Chipset

<p>Intel IGD Configuration</p> <p>***** Memory Information *****</p> <table> <tr> <td>Memory Frequency</td> <td>800 MHz(DDR3)</td> </tr> <tr> <td>Total Memory</td> <td>4096 MB</td> </tr> <tr> <td>DIMM#1</td> <td>4096 MB</td> </tr> </table>	Memory Frequency	800 MHz(DDR3)	Total Memory	4096 MB	DIMM#1	4096 MB	<p>Config Intel IGD Settings.</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>
Memory Frequency	800 MHz(DDR3)						
Total Memory	4096 MB						
DIMM#1	4096 MB						

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Chipset -> Host Bridge -> Intel IGD Configuration

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Chipset

<p>Intel IGD Configuration</p> <table> <tr> <td>IGFX - Boot Type</td> <td>[vBIOS Default]</td> </tr> <tr> <td>LCD Panel Type</td> <td>[1024x768 18Bit]</td> </tr> <tr> <td>Active LFP</td> <td>[LVDS(eDP)]</td> </tr> <tr> <td>Fixed Graphics Memory Size</td> <td>[256MB]</td> </tr> </table>	IGFX - Boot Type	[vBIOS Default]	LCD Panel Type	[1024x768 18Bit]	Active LFP	[LVDS(eDP)]	Fixed Graphics Memory Size	[256MB]	<p>Select the Video Device which will be activated during POST. This has no effect if external graphics present.</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>
IGFX - Boot Type	[vBIOS Default]								
LCD Panel Type	[1024x768 18Bit]								
Active LFP	[LVDS(eDP)]								
Fixed Graphics Memory Size	[256MB]								

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IGFX - Boot Type	VBIOS Default		Optimal Default, Failsafe Default
	CRT		
	LVDS(eDP)		
	CRT + LVDS(eDP)		
Select the Video Device which will be activated during POST. This has no effect if external graphics present.			
LCD Panel Type	640x480	18Bit	
	800x600	18Bit	
	1024x768	18Bit	Optimal Default, Failsafe Default
	1280x768	18Bit	
	1024x768	24Bit	
	1280x768	24Bit	
	1280x1024	48Bit	
	1366x768	24Bit	
	1600x1200	48Bit	
	1920x1080	48Bit	
Select LCD2 panel used by CH7511 by selecting the appropriate setup item.			
Active LFP	No LVDS		
	LVDS(eDP)		Optimal Default, Failsafe Default
Select the Active LFP Configuration			

No LVDS:VBIOS does not enable LVDS.

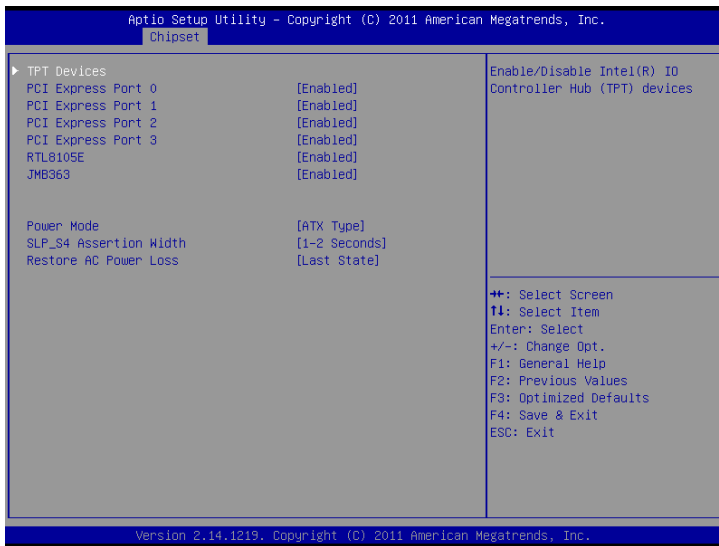
Int-LVDS:VBIOS enables LVDS driver by Integrated encoder.

SDVO LVDS:VBIOS enables LVDS driver by SDVO encoder.

eDP Port-A:LFP Driven by Int-DisplayPort encoder from Port-A.

eDP Port-D:LFP Driven by Int-DisplayPort encoder from Port-D(through PCH).

Chipset -> South Bridge



PCI Express Port 0	Disable	
	Enable	Optimal Default, Failsafe Default
Enable / Disable PCI Express Root Port 0.		
PCI Express Port 1	Disable	

	Enable	Optimal Default, Failsafe Default
Enable / Disable PCI Express Root Port 1.		
PCI Express Port 2	Disable	
	Enable	Optimal Default, Failsafe Default
Enable / Disable PCI Express Root Port 2.		
PCI Express Port 3	Disable	
	Enable	Optimal Default, Failsafe Default
Enable / Disable PCI Express Root Port 3.		
RTL8105E	Disable	
	Enable	Optimal Default, Failsafe Default
Enable / Disable RTL8105E.		
JMB363	Disable	
	Enable	Optimal Default, Failsafe Default
Enable / Disable JMB363.		
Power Mode	ATX Type	
	AT Type	Optimal Default, Failsafe Default
Select the power type used on the system		
SLP_S4 Assertion	1-2 Seconds	Optimal Default,

Width		Failsafe Default
	2-3 Seconds	
	3-4 Seconds	
	4-5 Seconds	
Select a minimum assertion width of the SLP_S4# signal		
Restore AC Power Loss	Always OFF	
	Always ON	
	Last State	Optimal Default, Failsafe Default
Select AC power state when power is re-applied after a power failure.		

Chipset -> South Bridge -> TPT Devices

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Chipset

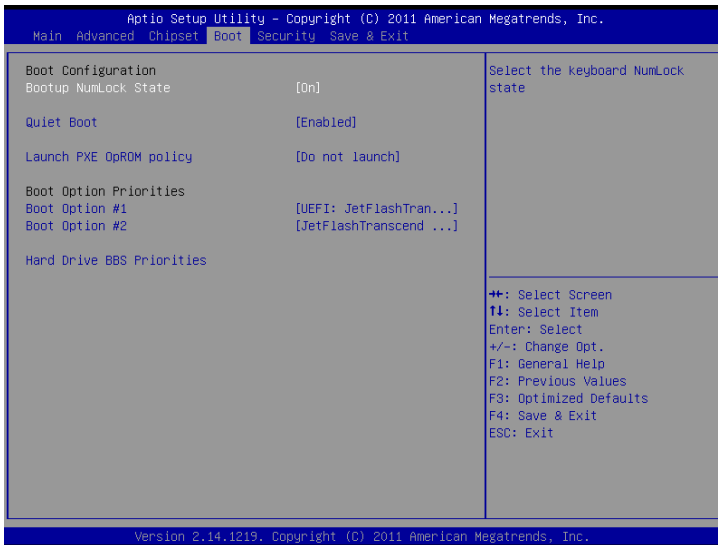
Azalia Controller Select USB Mode UHCI #1 (ports 0 and 1) UHCI #2 (ports 2 and 3) UHCI #3 (ports 4 and 5) UHCI #4 (ports 6 and 7) USB 2.0(EHCI) Support	[HD Audio] [By Controllers] [Enabled] [Enabled] [Enabled] [Enabled] [Enabled]	Azalia Controller ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
---	---	---

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Azalia Controller	Disable	
	HD Audio	Optimal Default, Failsafe Default
Select a On Board Azalia Configuration.		
Select USB Mode	By Ports	
	By Controllers	Optimal Default, Failsafe Default
Select USB mode to control USB ports.		
UHCI #1 (ports 0 and 1)	Disable	
	Enable	Optimal Default, Failsafe Default
Control the USB UHCI (USB 1.1) functions. Disable from highest to lowest controller.		
UHCI #1 (ports 2 and 3)	Disable	
	Enable	Optimal Default, Failsafe Default
Control the USB UHCI (USB 1.1) functions. Disable from highest to lowest controller.		
UHCI #1 (ports 4 and 5)	Disable	
	Enable	Optimal Default, Failsafe Default
Control the USB UHCI (USB 1.1) functions. Disable from highest to lowest controller.		

UHCI #1 (ports 6 and 7)	Disable	
	Enable	Optimal Default, Failsafe Default
Control the USB UHCI (USB 1.1) functions. Disable from highest to lowest controller.		
USB 2.0(EHCI) Support	Disable	
	Enable	Optimal Default, Failsafe Default
Enable or Disable USB 2.0 (EHCI) Support.		

Boot



Bootup NumLock	Off	
State	On	Optimal Default,

		Failsafe Default
Select the keyboard NumLock state		
Disable	Disable	
	Enable	Optimal Default, Failsafe Default
Enables or disables Quiet Boot option		
Launch PXE OpROM policy	Do not launch	Optimal Default, Failsafe Default
	UEFI only	
	Legacy Only	
Controls the execution of UEFI and Legacy PXE OpROM		

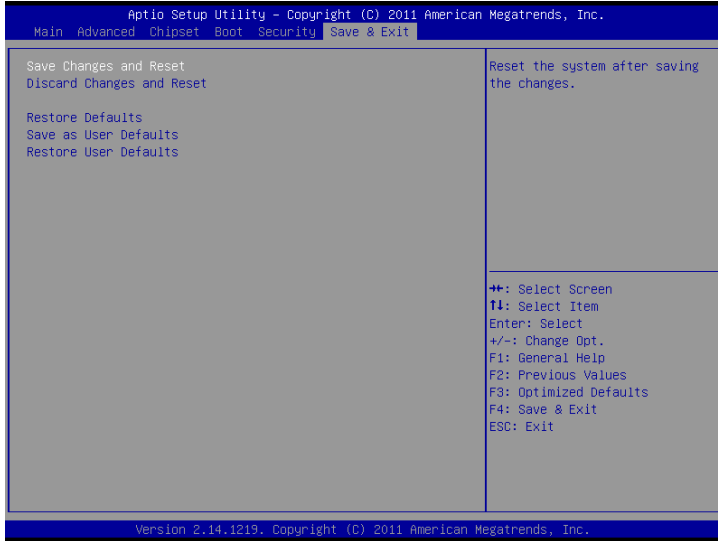
Security

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 Main Advanced Chipset Boot Security Save & Exit

<p>Password Description</p> <p>If ONLY the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup. If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights. The password length must be in the following range: Minimum length 3 Maximum length 20</p> <p>Administrator Password User Password</p>	<p>Set Administrator Password</p> <p>++: Select Screen T1: 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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Save & Exit



Chapter

4

**Driver
Installation**

The XTX-CV comes with a CD-ROM that contains all drivers your need.

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 Audio Driver

Step 5 – Install AHCI Driver

Step 6 – Install JMB363 Driver

Please read following instructions for detailed installations.

4.1 Installation:

Insert the XTX-CV CD-ROM into the CD-ROM Drive. And install the drivers from Step 1 to Step 6 in order.

Step 1 – Install Chipset Driver

1. Click on the **STEP1 - CHIPSET** folder and double click on ***infinst_autol.exe*** file
2. Follow the instructions that the window shows
3. The system will help you to install the driver automatically

Step 2 – Install VGA Driver

1. Click on the **STEP2 - VGA** folder and double click on ***Setup.exe*** file
2. Follow the instructions that the window shows
3. The system will help you to install the driver automatically

Step 3 – Install LAN Driver

1. Click on the **STEP3 - LAN_RTL8105E** folder and double click on ***setup.exe*** file
2. Follow the instructions that the window shows
3. The system will help you to install the driver automatically

Step 4 – Install Audio Driver

1. Click on the **STEP4 - AUDIO** folder and double click on ***32bit_Vista_Win7_R265.exe*** file
2. Follow the instructions that the window shows

3. The system will help you to install the driver automatically

Step 5 – Install AHCI Driver

1. Click on the **STEP5 - AHCI** folder and double click on **setup.exe** file
2. Follow the instructions that the window shows
3. The system will help you to install the driver automatically

Step 6 – Install JMB363 Driver

1. Click on the **STEP6 - JMB363** folder and double click on **setup.exe** file
2. Follow the instructions that the window shows
3. The system will help you to install the driver automatically

Appendix

A

Programming the Watchdog Timer

A.1 W83627DHG Watchdog Timer Initial Program

```
;Enter Config mode  
  
mov dx, 2Eh  
  
mov al, 87h  
  
out dx, al  
  
out dx, al  
  
  
;Set LDN 08 for WDTO#  
  
mov al, 07h  
  
out dx, al  
  
inc dx  
  
mov al, 08h  
  
out dx, al  
  
  
;Set Pin77 as WDTO#  
  
dec dx  
  
mov al, 2Dh  
  
out dx, al  
  
inc dx
```



```
in al, dx
    and al, 0FEh
out dx, al

;Set WDTO# timer
dec dx
mov al, 0F6h
out dx, al
inc dx
mov al, 05h
out dx, al

;Exit Config mode
dec dx
mov al, 0AAh
out dx, al
```




































Appendix

B

I/O Information

B.1 I/O Address Map

Input/output (IO)	
[00000000 - 0000001F]	Direct memory access controller
[00000000 - 00000CF7]	PCI bus
[00000010 - 0000001F]	Motherboard resources
[00000020 - 00000021]	Programmable interrupt controller
[00000022 - 0000003F]	Motherboard resources
[00000024 - 00000025]	Programmable interrupt controller
[00000028 - 00000029]	Programmable interrupt controller
[0000002C - 0000002D]	Programmable interrupt controller
[0000002E - 0000002F]	Motherboard resources
[00000030 - 00000031]	Programmable interrupt controller
[00000034 - 00000035]	Programmable interrupt controller
[00000038 - 00000039]	Programmable interrupt controller
[0000003C - 0000003D]	Programmable interrupt controller
[00000040 - 00000043]	System timer
[00000044 - 0000005F]	Motherboard resources
[0000004E - 0000004F]	Motherboard resources
[00000050 - 00000053]	System timer
[00000060 - 00000060]	Standard PS/2 Keyboard
[00000061 - 00000061]	Motherboard resources
[00000062 - 00000063]	Motherboard resources
[00000063 - 00000063]	Motherboard resources
[00000064 - 00000064]	Standard PS/2 Keyboard
[00000065 - 00000065]	Motherboard resources
[00000065 - 0000006F]	Motherboard resources
[00000067 - 00000067]	Motherboard resources
[00000070 - 00000070]	Motherboard resources
[00000070 - 00000077]	System CMOS/real time clock
[00000072 - 0000007F]	Motherboard resources
[00000080 - 00000080]	Motherboard resources
[00000080 - 00000080]	Motherboard resources
[00000081 - 00000091]	Direct memory access controller
[00000084 - 00000086]	Motherboard resources
[00000088 - 00000088]	Motherboard resources
[0000008C - 0000008E]	Motherboard resources

- ...  [00000090 - 0000009F] Motherboard resources
- ...  [00000092 - 00000092] Motherboard resources
- ...  [00000093 - 0000009F] Direct memory access controller
- ...  [000000A0 - 000000A1] Programmable interrupt controller
- ...  [000000A2 - 000000BF] Motherboard resources
- ...  [000000A4 - 000000A5] Programmable interrupt controller
- ...  [000000A8 - 000000A9] Programmable interrupt controller
- ...  [000000AC - 000000AD] Programmable interrupt controller
- ...  [000000B0 - 000000B1] Programmable interrupt controller
- ...  [000000B2 - 000000B3] Motherboard resources
- ...  [000000B4 - 000000B5] Programmable interrupt controller
- ...  [000000B8 - 000000B9] Programmable interrupt controller
- ...  [000000BC - 000000BD] Programmable interrupt controller
- ...  [000000C0 - 000000DF] Direct memory access controller
- ...  [000000E0 - 000000EF] Motherboard resources
- ...  [000000F0 - 000000F0] Numeric data processor
- ...  [000002A0 - 000002BF] Motherboard resources
- ...  [000002E8 - 000002EF] Communications Port (COM4)
- ...  [000002F8 - 000002FF] Communications Port (COM2)
- ...  [00000378 - 0000037F] Printer Port (LPT1)
- ...  [000003B0 - 000003BB] Standard VGA Graphics Adapter
- ...  [000003C0 - 000003DF] Standard VGA Graphics Adapter
- ...  [000003E8 - 000003EF] Communications Port (COM3)
- ...  [000003F8 - 000003FF] Communications Port (COM1)
- ...  [00000400 - 0000047F] Motherboard resources
- ...  [00000400 - 0000047F] Motherboard resources
- ...  [000004D0 - 000004D1] Motherboard resources
- ...  [000004D0 - 000004D1] Programmable interrupt controller
- ...  [00000500 - 0000053F] Motherboard resources
- ...  [00000500 - 0000057F] Motherboard resources
- ...  [00000600 - 0000061F] Motherboard resources
- ...  [00000680 - 0000069F] Motherboard resources
- ...  [000006A0 - 000006AF] Motherboard resources
- ...  [000006B0 - 000006EF] Motherboard resources
- ...  [00000A00 - 00000A0F] Motherboard resources




































- [00000A10 - 00000A1F] Motherboard resources
- [00000D00 - 0000FFFF] PCI bus
- [00001000 - 0000100F] Motherboard resources
- [0000D000 - 0000D00F] Standard Dual Channel PCI IDE Controller
- [0000D000 - 0000DFFF] Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D6
- [0000D010 - 0000D013] Standard Dual Channel PCI IDE Controller
- [0000D020 - 0000D027] Standard Dual Channel PCI IDE Controller
- [0000D030 - 0000D033] Standard Dual Channel PCI IDE Controller
- [0000D040 - 0000D047] Standard Dual Channel PCI IDE Controller
- [0000E000 - 0000E0FF] Ethernet Controller
- [0000E000 - 0000EFFF] Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D4
- [0000F000 - 0000F01F] Intel(R) 82801G (ICH7 Family) SMBus Controller - 27DA
- [0000F020 - 0000F02F] Standard AHCI 1.0 Serial ATA Controller
- [0000F040 - 0000F05F] Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CB
- [0000F060 - 0000F07F] Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CA
- [0000F080 - 0000F09F] Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C9
- [0000F0A0 - 0000F0BF] Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C8
- [0000F0C0 - 0000F0C3] Standard AHCI 1.0 Serial ATA Controller
- [0000F0D0 - 0000F0D7] Standard AHCI 1.0 Serial ATA Controller
- [0000F0E0 - 0000F0E3] Standard AHCI 1.0 Serial ATA Controller
- [0000F0F0 - 0000F0F7] Standard AHCI 1.0 Serial ATA Controller
- [0000F100 - 0000F107] Standard VGA Graphics Adapter
- [0000FFFF - 0000FFFF] Motherboard resources
- [0000FFFF - 0000FFFF] Motherboard resources




































B.2 Memory Address Map


































Address Range	Device Name
[00000000 - 00000FFF]	Motherboard resources
[00000000 - 00000FFF]	Motherboard resources
[00000000 - 00003FFF]	Motherboard resources
[000A0000 - 000BFFFF]	PCI bus
[000A0000 - 000BFFFF]	Standard VGA Graphics Adapter
[000C0000 - 000DFFFF]	PCI bus
[000E0000 - 000EFFFF]	PCI bus
[000F0000 - 000FFFFF]	PCI bus
[CF800000 - CFFFFFFF]	PCI bus
[D0000000 - FEBFFFFF]	PCI bus
[DFC00000 - DFCFFFFFFF]	Standard VGA Graphics Adapter
[DFD00000 - DFDFFFFFFF]	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D6
[DFD10000 - DFD101FF]	RAID Controller
[DFE00000 - DFE03FFF]	Ethernet Controller
[DFE00000 - DFEFFFFFFF]	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D4
[DFE04000 - DFE04FFF]	Ethernet Controller
[DFF00000 - DFF03FFF]	High Definition Audio Controller
[DFF04000 - DFF043FF]	Standard AHCI 1.0 Serial ATA Controller
[DFF05000 - DFF053FF]	Intel(R) 82801G (ICH7 Family) USB2 Enhanced Host Controller - 27CC
[E0000000 - EFFFFFFF]	System board
[FEC00000 - FEC00FFF]	Motherboard resources
[FED00000 - FED003FF]	High precision event timer
[FED14000 - FED19FFF]	System board
[FED1C000 - FED1FFFF]	Motherboard resources
[FED1C000 - FED1FFFF]	Motherboard resources
[FED20000 - FED8FFFF]	Motherboard resources
[FED45000 - FED8FFFF]	Motherboard resources
[FEE00000 - FEE00FFF]	Motherboard resources
[FF000000 - FFFFFFFF]	Intel(R) 82802 Firmware Hub Device
[FF000000 - FFFFFFFF]	Intel(R) 82802 Firmware Hub Device
[FFC00000 - FFFFFFFF]	Motherboard resources

B.3 IRQ Mapping Chart

Interrupt request (IRQ)	
(ISA) 0x00000000 (00)	System timer
(ISA) 0x00000001 (01)	Standard PS/2 Keyboard
(ISA) 0x00000003 (03)	Communications Port (COM2)
(ISA) 0x00000004 (04)	Communications Port (COM1)
(ISA) 0x00000008 (08)	System CMOS/real time clock
(ISA) 0x0000000A (10)	Communications Port (COM4)
(ISA) 0x0000000B (11)	Communications Port (COM3)
(ISA) 0x0000000C (12)	Microsoft PS/2 Mouse
(ISA) 0x0000000D (13)	Numeric data processor
(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) 0x00000007 (07)	Ethernet Controller
...		(PCI) 0x00000007 (07)	Intel(R) 82801G (ICH7 Family) SMBus Controller - 27DA
...		(PCI) 0x00000007 (07)	RAID Controller
...		(PCI) 0x00000010 (16)	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D0
...		(PCI) 0x00000010 (16)	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CB
...		(PCI) 0x00000010 (16)	Standard Dual Channel PCI IDE Controller
...		(PCI) 0x00000011 (17)	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D2
...		(PCI) 0x00000012 (18)	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D4
...		(PCI) 0x00000012 (18)	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CA
...		(PCI) 0x00000013 (19)	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D6
...		(PCI) 0x00000013 (19)	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C9
...		(PCI) 0x00000013 (19)	Standard AHCI 1.0 Serial ATA Controller
...		(PCI) 0x00000016 (22)	High Definition Audio Controller
...		(PCI) 0x00000017 (23)	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C8
...		(PCI) 0x00000017 (23)	Intel(R) 82801G (ICH7 Family) USB2 Enhanced Host Controller - 27CC
...		(PCI) 0xFFFFF7FC (-4)	PCI standard PCI-to-PCI bridge
...		(PCI) 0xFFFFF7FD (-3)	PCI standard PCI-to-PCI bridge
...		(PCI) 0xFFFFF7FE (-2)	PCI standard PCI-to-PCI bridge

B.4 DMA Channel Assignments

