



ARCHMI-7XX User Manual

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Warning!

This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, it may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Electric Shock Hazard – Do not operate the machine with its back cover removed. There are dangerous high voltages inside.

Avertissement!

Cet équipement génère, utilise et peut émettre une énergie de radiofréquence et s'il n'est pas installé et utilisé conformément au manuel d'instructions, il peut provoquer des interférences dans les communications radio. Il a été testé et approuvé conforme aux limites pour un dispositif de classe A et selon les règles de la FCC, qui sont conçues pour fournir une protection raisonnable contre de telles interférences dans un environnement commercial. Le fonctionnement de cet équipement dans une zone résidentielle est susceptible de provoquer des interférences, dans ce cas l'utilisateur, à ses propres frais, devra faire le nécessaire pour prendre toutes les mesures requises pour corriger le problème.

Risque de choc électrique - Ne pas faire fonctionner la machine avec son capot arrière enlevé. Des tensions dangereuses sont élevées à l'intérieur.

Caution

Risk of explosion if the battery is replaced with an incorrect type. Batteries should be recycled where possible. Disposal of used batteries must be in accordance with local environmental regulations.

Precaution

Risque d'explosion si la pile usagée est remplacée par une pile de type incorrect. Les piles usagée doivent être recyclées dans la mesure du possible. La mise au rebut des piles usagées doit resecter les réglementations locales en vigueur en matière de protection de l'environnement.

Disclaimer

This information in this document is subject to change without notice. In no event shall Aplex Technology Inc. be liable for damages of any kind, whether incidental or consequential, arising from either the use or misuse of information in this document or in any related materials.

Packing List

Accessories (as ticked) included in this package are:		
□ Adoptor		
☐ Adaptor		
☐ Driver & manual CD disc		
Other	(please specify)	

Safety Precautions

Follow the messages below to prevent your systems from damage:

- Avoid your system from static electricity on all occasions.
- Prevent electric shock. Don't touch any components of this card when the card is power-on. Always disconnect power when the system is not in use.
- ◆ Disconnect power when you change any hardware devices. For instance, when you connect a jumper or install any cards, a surge of power may damage the electronic components or the whole system.

Consignes de sécurité

Suivez les messages ci-dessous pour éviter que vos systèmes contre les dommages:

- ◆ Éviter votre système contre l'électricité statique sur toutes les occasions.
- ♦ Évitez les chocs électriques. Ne pas toucher les composants de cette carte lorsque la carte est sous tension. Toujours débrancher lorsque le système n'est pas en cours d'utilisation.
- ◆ Couper l'alimentation électrique lorsque vous changez tous les périphériques matériels. Par exemple, lorsque vous connectez un cavalier ou d'installer des cartes, une forte augmentation de la puissance peut endommager les composants électroniques ou l'ensemble du système.

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Chapter 1_____

Getting Started

1.1 Specifications

	ARCHMI -707(P)	ARCHMI -708(P)	ARCHMI -710(P)	ARCHM -712(P)	ARCHMI -715(P)
System	707(1)	700(1)	7 10(1)	7 12(1)	7 10(1)
CPU	Intel Atom Cedar	View N2600 1 6GE	tz Dual Core Process	ors	
010	Intel Atom Cedar View N2600 1.6GHz Dual Core Processors /Intel Atom D2550 1.8GHz (Optional for ARCHMI-712(P)/715(P) only)				
System	Intel NM10	THOUSE (Optional	, , , , , , , , , , , , , , , , , , ,	,, io(i / o.iy)	
Chipset	III.OI TAWITO				
System	Onboard DDR3 20	GB 800 MHz			
Memory		or ARCHMI-712(P)	/715(P) only)		
IO Port	, (o p	, , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
USB	2 x USB 2.0 type	Α			
Serial/		85 DB-9, COM1, D	efault RS-232		
Parallel	1 x RS-232 DB-9,		ordan NO 202		
Audio	1 x Line out phone				
LAN	2 x GbE RJ-45	- jaco.			
Power		ock connector, DC	Power input		
Storage Space	•				
HDD	1 x 1.8" SATA 2		1 x 2.5" SATA 2		
Movable	1 x Internal SD slo	ot, up to 32GB	1		
device		., .,			
Expansion					
Expansion	1 x Internal Mini-F	Cle half size	None	1 x Internal Mini-PCIe	slot half size
Slot				2 x UART via internal	CN3
				2 x USB via internal C	N3
				1 x PCIe x1 via interna	al CN3
				1 x PS/2 via internal C	N3
				4 x GPIO via internal (CN3
Optional	2 x RS-232 DB-9 +1 x Mini-PCle slot via TB-528C2ME1 (For ARCHMI-710(P)/712(P)/715(P))		2(P)/715(P))		
Outside I/O	2 x CAN bus via T	B-528CAN2 (For A	ARCHMI-710(P)/712(P)/715(P))	
Port	2 x USB 2.0 type	A +1 x Mini-PCle s	lot +1 x RS-232 DB-9	via TB-528C1U2P1 (Fo	or ARCHMI-710(P))
	2 x USB 2.0 type	A +1 x Mini-PCle s	lot via TB-528U2ME1	(For ARCHMI-712(P)/7	'15(P))
Display					
Display Type	7" TFT-LCD	8" TFT-LCD	10.1" TFT-LCD	12.1" TFT-LCD	15"TFT-LCD
Max.	800x480	800x600	1280x800	800x600	1024x768
Resolution					
Max. Color	262K	16.2M	262K	16.2M	16.2M
Luminance (cd/m²)	350	350	350	330	350
View angle(H°/V°)	140/120	140/125	160/160	160/140	170/170
Contrast Ratio	400:1	500:1		800:1	1
Backlight	20,000 Hrs	40,0	000 Hrs	50,000	Hrs

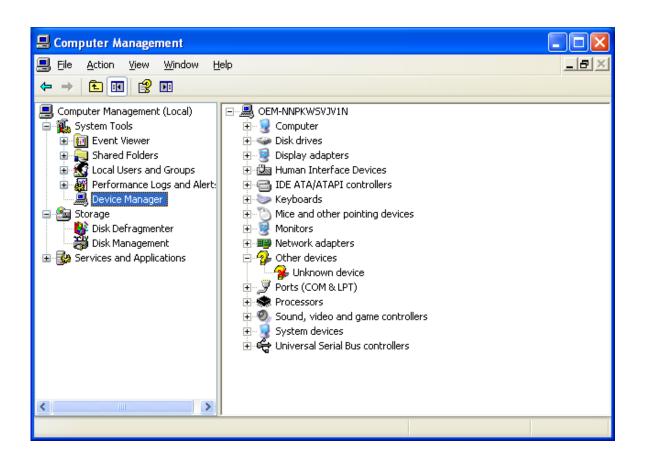
Lifetime					
Touch Screen					
Туре		Resistive Touch	/ Projected Capacitiv	e Touch (for P model)	
Interface			RS-232 / USB (for P r	nodel)	
Light			80% / 90% (for P mo	odel)	
Transmission					
(%)					
Power					
Power Input			9~36V DC		
Mechanical					
Construction		Sliver	aluminum front bezel	and chassis	
IP Rating			IP65 front panel		
Mounting	Panel mounting	ı, VESA 75 x 75	Panel	l mounting, VESA 100 x	(100
Dimension	202 x 149 x 39	231 x 176 x 51	285 x 189 x 48.9	319 x 245 x 51.68	410 x 310 x 54.67
(mm)					
Net Weight	1.2	1.8	2	2.5	4.4
(Kgs)					
Environmenta	al				
Operating	0~50°C				
Temperature					
(°C)					
Storage		-20~60°C			
temperature	ıre				
(°C)					
Storage	10 to 90% @ 40°C, non- condensing				
humidity					
Certification	CE / FCC Class A (ARCHMI-710(P))				
	CE / FCC Class A / CB / CCC (ARCHMI-707(P)/708(P)/712(P)/715(P))				
Operating	Windows XP Pro, Windows XP Embedded, Windows Embedded CE6.0(Note 1), Windows 7 pro for				
System	Embedded, Windows Embedded standard 7(Win 7 support 3D Graphic function)				
Support					

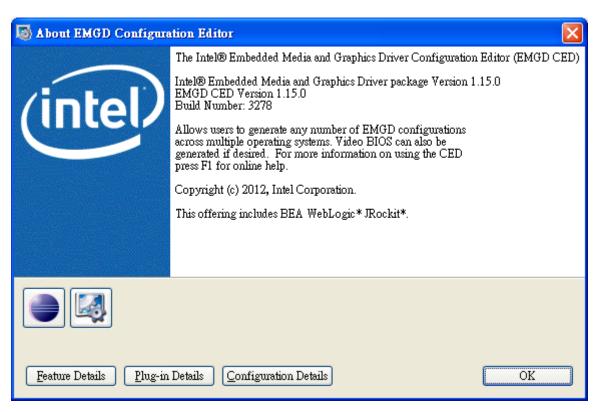
Note 1: ARCHMI series is covered by one or more of the following patents: US6, 570, 884, US6,115,776, and US6,327,625.

** Please be notice.

Due to the limitation for Intel N2000/D2000 EMGD driver, therefore ARCHMI will have some limitation under XP.

- 1. The Intel EMGD driver version is v1.15
- 2. It will have the unknown device under device management due to not support the Intel HDA device (refer to the photo below)
- 3. It will need install the correct driver by LCD panel size/resolution, totally four version: 800*480, 800*600, 1024*768(18bit), 1024*768(24bit)
- 4. The original driver not support VGA display will have to customize





1.2 Dimensions

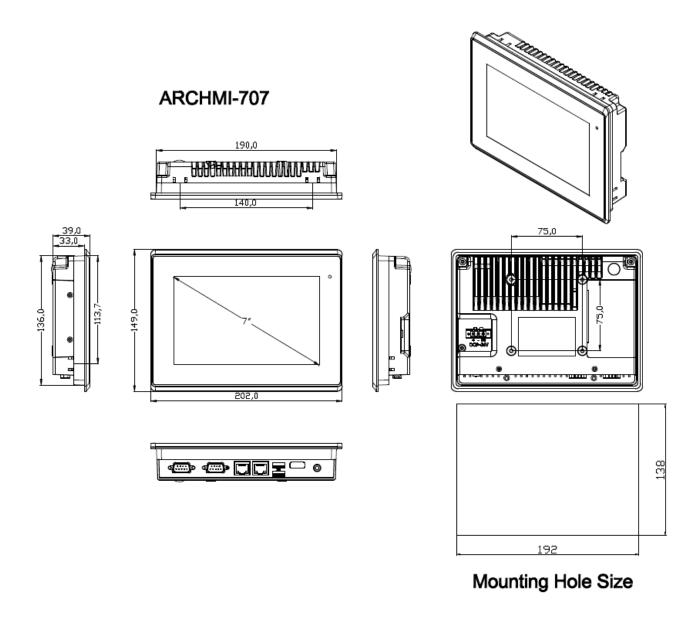


Figure 1.1: Dimensions of ARCHMI-707

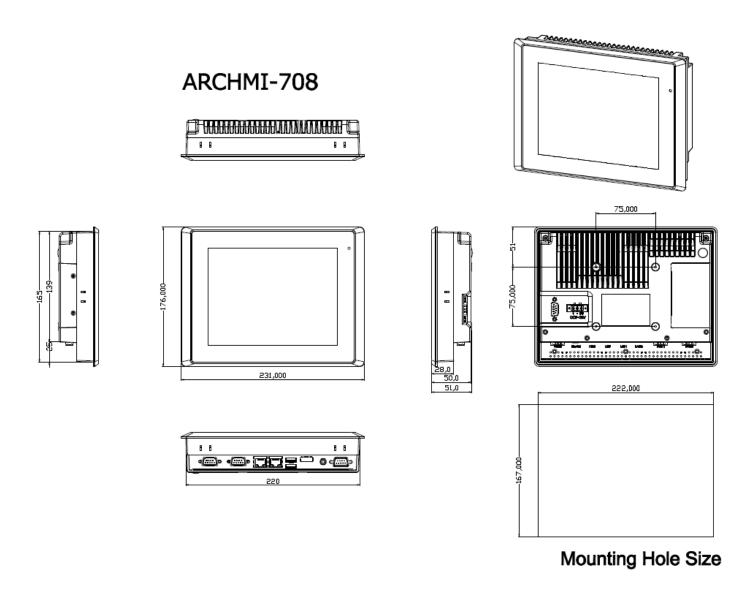


Figure 1.2: Dimensions of ARCHMI-708

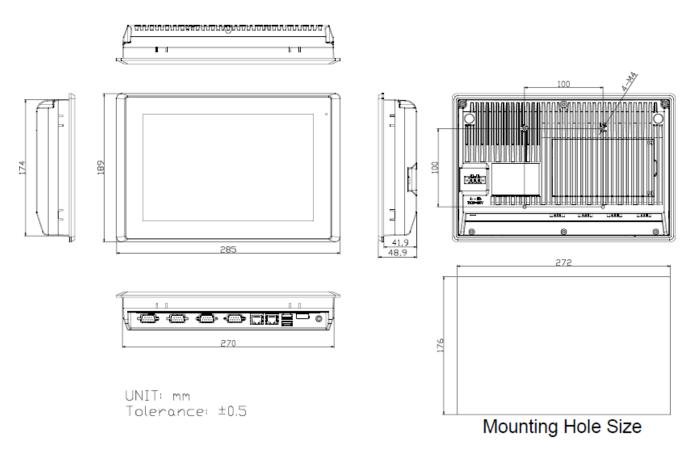


Figure 1.3: Dimensions of ARCHMI-710

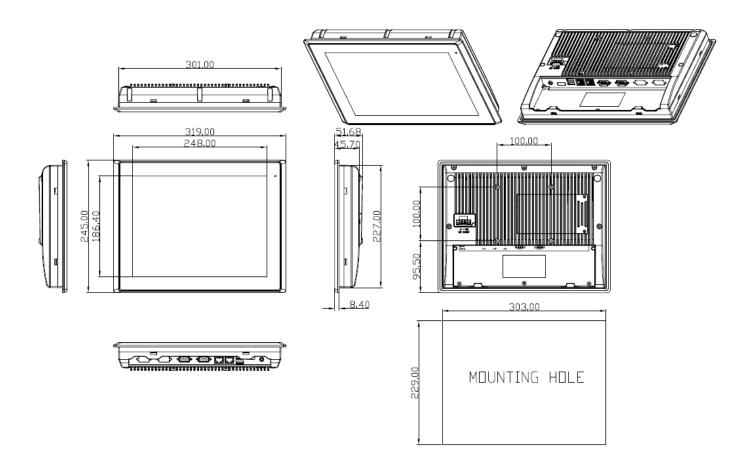


Figure 1.4: Dimensions of ARCHMI-712

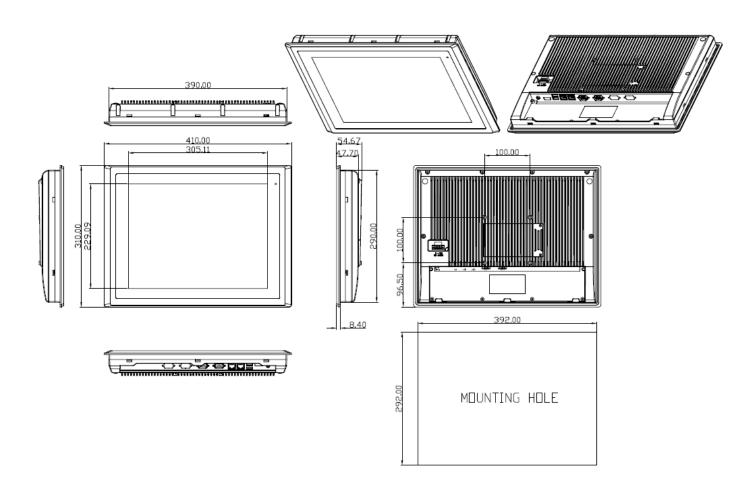


Figure 1.5: Dimensions of ARCHMI-715

1.3 Brief Description of ARCHMI Series

There are 7", 8", 10.1", 12.1", 15", Industrial Compact Size Panel PC in ARCHMI series, which comes with flat front panel touch screen and fanless design. It is powered by Intel Atom N2600 1.6GHz CPU built-in, 2GB DDR III 800 MHz, and now it also can be powered by Intel Atom D2550 1.8GHz CPU built-in, 4GB DDR III 800MHz optional for ARCHMI-712 and ARCHMI-715. ARCHMI series is 9~36VDC wide-ranging power input and IP65 compliant front panel. Optional projected capacitive touch screen support 7H anti-scratch surface is ideal for use as a PC-based controller for Industrial Automation & Factory Automation.



Figure 1.5: Front View of ARCHMI SERIES



Figure 1.6: Rear View of ARCHMI -707/ARCHMI -708



Figure 1.7: Rear View of ARCHMI-710



Figure 1.8: Rear View of ARCHMI -712/ ARCHMI- 715

1.4 Installation of HDD (ARCHMI-707/ARCHMI-708)

Step 1

There are 2 screws to deal with when enclosing or removing the chassis. Gently remove 2 screws.



Step 2

There is a SSD card in the bracket. Gently remove the screw, then carefully pull SSD card.



Step 3

Take out SSD Card bracket.

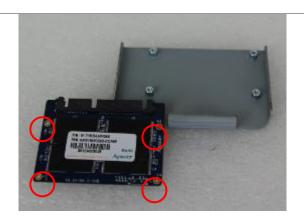


Step 4.

You can replace SSD card by unscrewing 4 screws as shown in the picture.

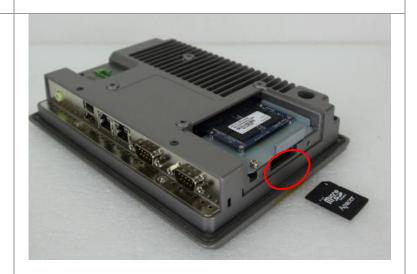
Note: 4 screws are packed in the packing

list.



Step 5

There is a SD card hole in the side of the machine. You can replace SD card from there.



Step 6.

Gently screw the screws.



1.5 Installation of HDD (ARCHMI-710)

Step 1

There are 2 screws to deal with when enclosing or removing the chassis. Gently remove 2 screws.



Step 2

Take the storage cover beside the Panel PC.



Step 3

You can put or remove HDD into the machine by pulling the HDD bracket.



Step 4.

There is a SD hole in the side of machine. You can replace SD card from there.



1.6 Installation of HDD (ARCHMI-712/ARCHMI-715)

Step 1

There are 2 screws to deal with when enclosing or removing the chassis. Gently remove 2 screws.



Step 2

You can put or remove HDD into the machine by pulling the HDD bracket.



Step 3

You can remove HDD by unscrewing 4 screws in the HDD bracket.

Note: 4 screws are packed in the packing package.



Step 4

There is a SD hole in the side of machine. You can replace SD card from there.



2.1 Mainboard

Specifications	
Board Size	170mm x 113mm
CPU Support	Intel Atom N2600 /1.60GHz (2cores,3.5W, onboard) Intel Atom D2550 /1.86GHz(2cores,10W, option)
Chipset	Intel NM10 Express
Memory Support	Onboard 2GB DDRIII SDRAM (N2600) Onboard 4GB DDRIII
Graphics	Integrated Intel GMA 3600 (N2600) Integrated Intel GMA 3650
Display Mode	1 x CRT Port 1 x HDMI Port 1 x LVDS1 (18/24-bit single LVDS)
Support Resolution	Up to 1920 x1200 for CRT Up to 1920 x1200 for HDMI Up to 1366 x768 for LVDS1
Dual Display	CRT+LVDS1 CRT+HDMI LVDS1+HD
Super I/O	Winbond W83627UHG-E
BIOS	AMIBIOS
Storage	1 x SATA Connector (7P) 1 x SATA Connector (7P+15P) 1 x SD Socket (USB to SD)
Ethernet	2 x PCIe Gbe LAN by Realtek RTL8111E
USB	2 x USB 2.0 (type A)stack ports (USB4/USB5) 2 x USB 2.0 Pin header for CN3 (USB2/USB3) 2 x USB 2.0 Pin header for CN1 (USB0/USB1) 1 x USB 2.0 for MPCIE1 (USB7)
Serial	1 x RS232/RS422/RS485 port, DB9 connector for external (COM1) pin 9 w/5V/12V/Ring select 1 x RS232 port, DB9 connector for external (COM2) pin 9 w/5V/12V/Ring select 1 x RS422/485 header for CN2 (COM3)

Digital I/O	8-bit digital I/O by Pin header (CN2) 4-bit digital Input 4-bit digital Output
Battery	Support CR2477 Li battery by 2-pin header
Audio	Support Audio via Realtek ALC662 HD audio codec Support Line-in, Line-out, MIC by 2x6-pin header
Keyboard /Mouse	1 x PS2 keyboard/mouse by 1x6 box pin header (CN3)
Expansion Bus	1 x mini-PCI-express slot 1 x PCI-express (CN3)
Touch Ctrl	1 x Touch ctrl header for TCH1 (COM4)
Power Management	Wide Range DC10V~30v input 1 x 3-pin power input connector
Switches and LED Indicators	1 x Power on/off switch (CN1) 1 x Reset switch (CN1) 1 x Power LED status (CN1) 1 x HDD LED status (CN1) 1 x Buzzer
External I/O port	2 x COM Ports (COM1/COM2) 2 x USB 2.0 Ports (stack) 2 x RJ45 GbE LAN Ports 1 x HDMI Port 1 x Stack audio Jack (Line out)
Watchdog Timer	Software programmable 1 – 255 second by Super I/O
Temperature	Operating: -20°C to 70°C Storage: -40°C to 85°C
Humidity	5% - 95%, non-condensing, operating
Power Consumption	12V /0.95A (Intel Atom N2600 processor with 2GB DDR3 DRAM)
EMI/EMS	Meet CE/FCC class A
	2 x CAN bus
TB-528CAN2	1 x SIM Card Socket
	1 x mini-PCI-express slot

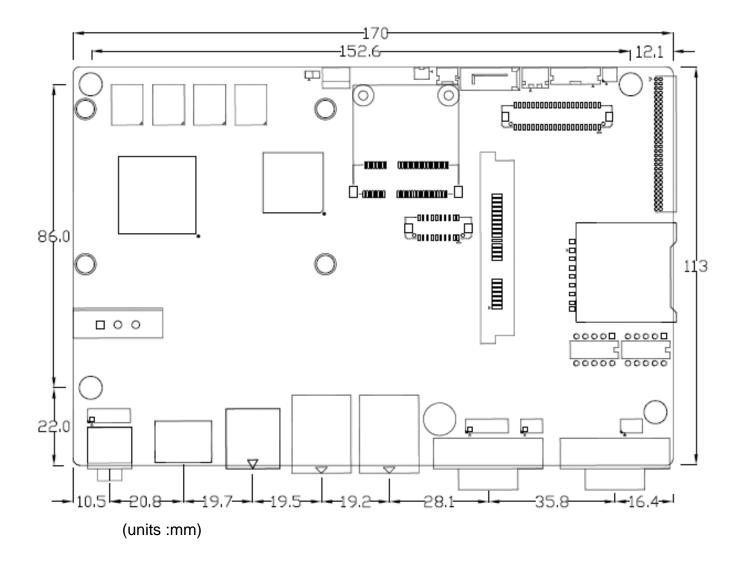


Figure 2.1: Mainboard Dimensions

2.2 Introduction

SBC-7106 is a 4" industrial motherboard developed on the basis of Intel Cedarview-M Processors and NM10, which provides abundant peripheral interfaces to meet the needs of different customers. Also, it features dual GbE ports, 3-COM ports and one Mini PCIE configuration, one VGA port, one HDMI port, one LVDS interface. To satisfy the special needs of high-end customers, CN1 and CN2 and CN3 richer extension functions. The product is widely used in various sectors of industrial control.

2.2.1 Jumpers Setting and ConnectorsBoard Top

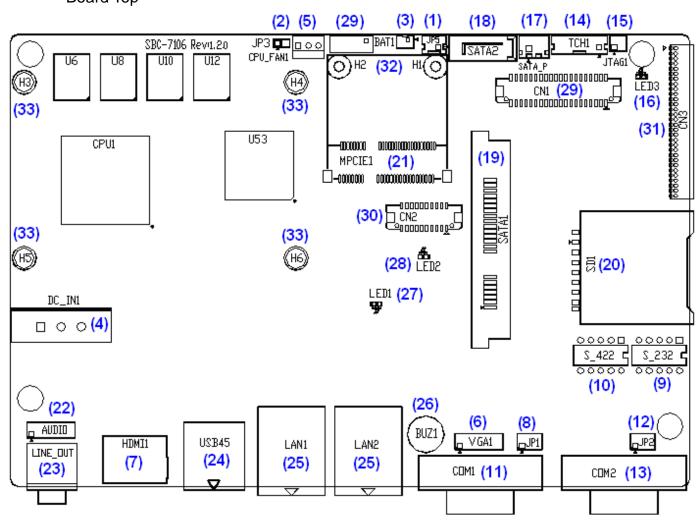


Figure 2.2: Jumpers and Connectors Location_ Board Top

Board Bottom UII U9 U7 U5

Figure 2.3: Jumpers and Connectors Location_ Board Bottom

2.3 Jumpers Setting and Connectors

1. JP5:

(2.0mm Pitch 1X2 box Pin Header), ATX Power and Auto Power on jumper setting.

JP5	Mode
Open	ATX Power
Close	Auto Power on (Default)

2. JP3:

(2.0mm Pitch 1X2 Pin Header)CMOS clear jumper, CMOS clear operation will permanently reset old BIOS settings to factory defaults.

JP3	CMOS
Open	NORMAL (Default)
Close 1-2	Clear CMOS



Procedures of CMOS clear:

- a) Turn off the system and unplug the power cord from the power outlet.
- b) To clear the CMOS settings, use the jumper cap to close pins 1 and 2 for about 3 seconds then reinstall the jumper clip back to pins open.
- c) Power on the system again.
- d) When entering the POST screen, press the <F1> or key to enter CMOS Setup Utility to load optimal defaults.
- e) After the above operations, save changes and exit BIOS Setup.

Model	JP3
SBC-7106-N2600	No
SBC-7106-N2600-P	No
SBC-7106-D2550	Yes

3. BAT1:

(1.25mm Pitch 1X2 box Pin Header) 3.0V Li battery is embedded to provide power for CMOS.

Pin#	Signal Name
Pin1	VBAT
PIN2	Ground

4. DC IN1:

(5.08mm Pitch 1x3 Pin Connector), DC9V~32V System power input connector.

Pin#	Power Input
Pin1	DC+9V~32V
Pin2	Ground
Pin3	FG

Model	DC_IN1
SBC-7106-N2600	180°Connector
SBC-7106-N2600-P	45°Connector
SBC-7106-D2550	45°Connector

5. CPU_FAN1:

(2.54mm Pitch 1x3 Pin Header), Fan connector, cooling fans can be connected directly for use. You may set the rotation condition of cooling fan in menu of BIOS CMOS Setup.



Pin#	Signal Name	
1	Ground	
2	VCC	
3	Rotation detection	



Note:

Output power of cooling fan must be limited under 5W.

Model	CPU_FAN1
SBC-7106-N2600	No
SBC-7106-N2600-P	No
SBC-7106-D2550	Yes

6. VGA1:

(CRT 2.0mm Pitch 2X6 Pin Header), Video Graphic Array Port, Provide 2x6Pin cable to VGA Port.

Signal Name	Pin#	Pin#	Signal Name
CRT_RED	1	2	Ground
CRT_GREEN	3	4	Ground
CRT_BLUE	5	6	VGA_EN
CRT_H_SYNC	7	8	CRT_DDCDATA
CRT_V_SYNC	9	10	CRT_DDCCLK
Ground	11	12	Ground

VGA hot plug setting for Windows XP:		
VGA1 (Pin Header) Function		
Pin4-Pin6 (Close)	VGA Simulation Disabled	
Pin4-Pin6 (Open) VGA Simulation Enabled		
use the 2.0mm jumper cap to close pin 4 and pin6		

7. HDMI1:

(HDMI 19P Connector), High Definition Multimedia Interface connector.



8. JP1:

(2.0mm Pitch 2x3 Pin Header), COM1 jumper setting, pin 1~6 are used to select signal out of pin 9 of COM1 port.

JP1 Pin#	Function		
Close 1-2	COM1 RI (Ring Indicator) (default)		
Close 3-4	COM1 Pin9=+5V	(option)	
Close 5-6	COM1 Pin9=+12V	(option)	

9. S_232:

(Switch), COM1 jumper setting, it provides selectable RS232 or RS422 or RS485 serial signal output.

Function	S_232 Pin#
RS232	ON:
(Default)	Pin1, Pin2, Pin3, Pin4
RS422	OFF:
(option)	Pin1, Pin2, Pin3, Pin4
RS485	OFF:
(option)	Pin1, Pin2, Pin3, Pin4



Noto

How to reach the switch position?

Step 1: Unscrew the storage cover



Step 2: Remove the storage cover



Step 3: Unscrew the storage tray



Step 4: Remove the storage tray



Step 5: The function switch setting shows up



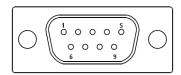
10. S_422:

(Switch), COM1 setting, it provides selectable RS232 or RS422 or RS485 serial signal output.

Function	S_422 Pin#	
RS232	OFF:	
(Default)	Pin1, Pin2, Pin3, Pin4	
RS422	ON:	
(option)	Pin1, Pin2, Pin3, Pin4	
RS485	ON:	
(option)	Pin1, Pin2, Pin3, Pin4	

11. COM1:

(Type DB9), Rear serial port, standard DB9 Male serial port is provided to make a direct connection to serial devices. COM1 port is controlled by pins No.1~6 of JP1, select output Signal RI or 5V or 12V, For details, please refer to description of JP1 and S_232 and S_422 setting.



RS232 (Default):		
Pin#	Signal Name	
1	DCD# (Data Carrier Detect)	
2	RXD (Received Data)	
3	TXD (Transmit Data)	
4	DTR (Data Terminal Ready)	
5	Ground	
6	DSR (Data Set Ready)	
7	RTS (Request To Send)	
8	CTS (Clear To Send)	
9	JP1 select Setting (RI/5V/12V)	

BIOS Setup:

Advanced/W83627UHG Super IO Configuration/Serial Port 1 Configuration 【RS-232】

RS422 (option):		
Pin#	Signal Name	
1	422_RX+	
2	422_RX-	
3	422_TX-	
4	422_TX+	
5	Ground	
6	NC	
7	NC	
8	NC	
9	NC	

BIOS Setup:

Advanced/W83627UHG Super IO Configuration/Serial Port 1 Configuration 【RS-422】

RS485 (option):		
Pin#	Signal Name	
1	NC	
2	NC	
3	485-	
4	485+	
5	Ground	
6	NC	
7	NC	
8	NC	
9	NC	
DIOC Catara		

BIOS Setup:

Advanced/W83627UHG Super IO Configuration/Serial Port 1 Configuration 【RS-485】

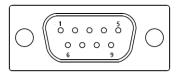
12. JP2:

(2.0mm Pitch 2x3 Pin Header), COM2 jumper setting, pin 1~6 are used to select signal out of pin 9 of COM2 port.

JP2 Pin#	Function	
Close 1-2	COM2 RI (Ring Indicator) (default)	
Close 3-4	COM2 Pin9=+5V	(option)
Close 5-6	COM2 Pin9=+12V	(option)

13. COM2:

(Type DB9),Rear serial port, standard DB9 Male serial port is provided to make a direct connection to serial devices.



Pin#	Signal Name						
1	DCD# (Data Carrier Detect)						
2	RXD (Received Data)						
3	TXD (Transmit Data)						
4	DTR (Data Terminal Ready)						
5	Ground						
6	DSR (Data Set Ready)						
7	RTS (Request To Send)						
8	CTS (Clear To Send)						
9	RI (Ring Indicator)						

14. TCH1:

(2.0mm Pitch 1x6 box Pin Header), internal Touch controller connector.

Pin#	Signal Name
1	SENSE
2	X+
3	X-
4	Y+
5	Y-
6	GND_EARCH

15. JTAG1(option):

(2.0mm Pitch 2x2 Pin Header), Touch eeprom program to write interface

Signal Name	Pin#		Signal Name
3.3V	1 2		C2D_BR
YC2CK_RST	3	4	Ground

16. LED3:

LED STATUS. Green LED for Touch Power status.

17. SATA P:

(2.5mm Pitch 1x2 box Pin Header), Two onboard 5V output connectors are reserved to provide power for SATA devices.

Pin#	Signal Name
1	+DC5V
2	Ground



Note:

Output current of the connector must not be above 1A.

18. SATA2:

(SATA 7Pin), SATA Connectors, one SATA connectors are provided, with transfer speed up to 3.0Gb/s.

19. SATA1:

(SATA 7Pin+15Pin), SATA Connectors, one SATA connectors are provided, with transfer speed up to 3.0Gb/s.

20. SD1:

(SD card socket), Secure Digital Memory Card socket.

21. MPCIE1:

(Socket 52Pin),mini PCle socket, it is located at the top, it supports mini PCle devices with USB2.0 and LPC and SMBUS and PCle signal. MPCle card size is 30x30mm.

22. AUDIO:

(2.0mm Pitch 2X6 Pin Header), Front Audio, An onboard Realtek ALC662 codec is used to provide high-quality audio I/O ports. Line Out can be connected to a headphone or amplifier. Line In is used for the connection of external audio source via a Line in cable. MIC is the port for microphone input audio.

Signal Name	Pin#	Pin#	Signal Name
5V	1	2	GND_AUD
LINE-OUT-L	3	4	LINE-OUT-R
FRONT_JD	5	6	LINE1_JD
LINE-IN-L	7	8	LINE-IN-R
MIC-IN-L	9	10	MIC-IN-R
GND_AUD	11	12	MIC1_JD

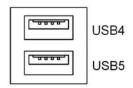
23. LINE OUT:

(Diameter 3.5mm Jack), HD Audio port, An onboard Realtek ALC662 codec is used to provide high quality audio I/O ports. Line Out can be connected to a headphone or amplifier.



24. USB45:

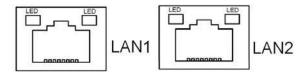
USB4/USB5: (Double stack USB type A), Rear USB connector, it provides up to 4 USB2.0 ports, High-speed USB 2.0 allows data transfers up to 480 Mb/s , support USB full-speed and low-speed signaling.



Each USB Type A Receptacle (2 Ports) Current limited value is 1.5A. If the external USB device current exceeds 1.5A, please separate connectors into different Receptacle.

25. LAN1/LAN2:

LAN1/LAN2: (RJ45 Connector), Rear LAN port, Two standard 10/100/1000M RJ-45 Ethernet ports are provided. Used Realtek RTL8111E chipset, LINK LED (green) and ACTIVE LED (yellow) respectively located at the left-hand and right-hand side of the Ethernet port indicate the activity and transmission state of LAN.



26. BUZ1:

Onboard buzzer.

27. LED1:

LED STATUS. Green LED for Motherboard Power status.

28. LED2:

LED STATUS. Green LED for Motherboard Standby Power Good status.

29. CN1:

(DF13-40P Connector),For expand output connector, It provides one 18/24bit single channel LVDS,one Backlight control, two USB ports, one power led, one HDD LED,one power on/off button, one RESET.

Function	Signal Name	Pin#		Signal Name	Function
	12V_S0	2	1	12V_S0	
	BKLT_EN_OUT	4	3	BKLT_CTRL	
	Ground	6	5	Ground	
	LVDS_VDD5	8	7	LVDS_VDD5	
	LVDS_VDD3	10	9	LVDS_VDD3	
LVDS	Ground	12	11	Ground	LVDS
	LA_DATAP0	14	13	LA_DATAN0	

	LA_DATAP1	16	15	LA_DATAN1	
	LA_DATAP2	18	17	LA_DATAN2	
	LA_DATAP3	20	19	LA_DATAN3	
	LA_CLKP	22	21	LA_CLKN	
	Ground	24	23	Ground	
	Ground	26	25	Ground	
USB1	USB1_P	28	27	USB1_N	USB1
USB0	USB0_P	30	29	USB0_N	USB0
	5V_USB01	32	31	5V_USB01	USB1
	5V_USB01	34	33	5V_USB01	
PWR LED	PWR_LED+	36	35	HDD_LED+	HDD LED
	Ground	38	37	Ground	
PWR ON/OFF	PWRBTN_ON-	40	39	FP_RST-	RESET

INVT1:

(2.0mm Pitch 1x6 Pin wafer connector), Backlight control connector for LVDS.



Pin#	Signal Name					
1	+DC12V					
2	+DC12V					
3	Ground					
4	Ground					
5	BKLT_EN_OUT					
6	BKLT_CTRL					



Note:

Pin6 is backlight control signal, support DC or PWM mode, mode select at BIOS CMOS menu.

30. CN2:

(DF13-20P Connector), for expand output connector, it provides eight GPIO, one RS422 or RS485.

Function	Signal Name	Pin#		Signal Name	Function
5V	5V_S5	2	1	5V_S5	5V
SIO_GPIO61	GPIO_IN2	4	3	GPIO_IN1	SIO_GPIO60
SIO_GPIO63	GPIO_IN4	6	5	GPIO_IN3	SIO_GPIO62
	Ground	8	7	Ground	
SIO_GPIO21	GPIO_OUT2	10	9	GPIO_OUT1	SIO_GPIO20
SIO_GPIO23	GPIO_OUT4	12	11	GPIO_OUT3	SIO_GPIO22
	Ground	14	13	Ground	
485 or 422	485+_422TX+	16	15	485422TX-	485 or 422
RS422	422_RX+	18	17	422_RX-	RS422
5V	5V_S0	20	19	5V_S0	5V

COM3 BIOS Setup:

Advanced/W83627UHG Super IO Configuration/Serial Port 3 Configuration [RS-422]

Advanced/W83627UHG Super IO Configuration/Serial Port 3 Configuration [RS-485]

31. CN3:

(1.27mm Pitch 2X30 Pin Header), For expand output connector, It provides four GPIO, Two USB 2.0,one PS/2 mouse, one PS/2 keyboard,two uart,one PCIe x1,one SMbus. connected to the TB-528 riser Card.

Function	Signal Name	Pin#		Signal Name	Function
	5V_S5_USB	1 2		5V_S5_USB	
	5V_S5_USB	3	4	5V_S5_USB	
	USB23_OC	5	6	CLKREQPSON_ATX-	
USB2	USB2_N	7	8	USB2_P	USB2
USB3	USB3_N	9	10	USB3_P	USB3
	Ground	11	12	Ground	
PS/2 MS	PS2_MSCLK	13	14	PS2_MSDATA	PS/2 MS
PS/2 KB	PS2_KBCLK	15	16	PS2_KBDATA	PS/2 KB
	COM6_RI	17	18	COM6_DCD-	
COM6	COM6_TXD	19	20	COM6_RXD	COM6
(UART)	COM6_DTR	21	22	RICOM6_RTS-	(UART)
	COM6_DSR	23	24	COM6_CTS-	
	Ground	25	26	Ground	
	COM5_RI	27	28	COM5_DCD-	
COM5	COM5_TXD	29	30	COM5_RXD	COM5
(UART)	COM5_DTR	31	32	DSRCOM5_RTS-	(UART)
	COM5_DSR	33	34	DTRCOM5_CTS-	
GPIO24	ICH_GPIO24	35	36	ICH_GPIO13	GPIO13
GPIO26	ICH_GPIO26	37	38	ICH_GPIO27	GPIO27
	Ground	39	40	Ground	
	PE1_TX_N0	41	42	PE1_TX_P0	
	PE1_RX_N0	43	44	PE1_RX_P0	
PCIE	Ground	45	46	Ground	PCIE
	CLK_100M_PE1_N	47	48	CLK_100M_PE1_P	
	PM_PCIE_WAKE	49	50	PLTRST_BUF-	
SMBUS	SMB_CLK_S5	51	52	SMB_DATA_S5	SMBUS
PCIE	PE1_CLKREQ	53	54	Ground	
	3P3V_S5	55	56	PWRBTN_ON-	
	3P3V_S5	57	58	3P3V_S5	
12V	12V_S0	59	60	12V_S0	12V

32. H3/H4/H5/H6:

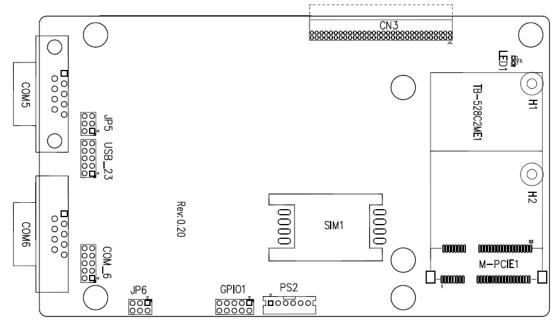
CPU1 and U53 Heat Sink SCREW HOLES, Four screw holes for intel N2600 and NM10 Heat Sink assemble.

33. H1/H2:

MPCIE1 SCREW HOLES, H1and H2 for mini PCIE card (30mmx30mm) assemble.

34. TB-528C2ME1 (option):

SBC-7106 Riser Card, TB-528C2ME1 CN3 connect to SBC-7106 CN3 pin Header. TB-528C2ME1 Top:



CN3:

(1.27mm Pitch 2X30 Pin Header), connect to SBC-7106 CN3 pin Header.

M-PCIE1:

(Socket 52Pin),mini PCle socket, it is located at the top, it supports mini PCle devices with **USB2.0(USB2)**,Smbus,SIM and PCle signal. MPCle card size is 30x30mm or 30x50.95mm.

Signal Name	Function support
PCIe 1X	Yes
USB2.0 (USB2)	Yes
SMBus	Yes
SIM	Yes

H1/H2:

MPCIE1 SCREW HOLES, H2 for mini PCIE card (30mmx30mm) assemble. H1 for mini PCIE card (30mmx50.95mm) assemble.

LED1:

Mini PCIe devices LED Status.

SIM1:

(SIM Socket 6 Pin), Support SIM Card devices.

PS2:

(2.0mm Pitch 1X6 Pin Wafer), PS/2 keyboard and mouse port, the port can be connected to PS/2 keyboard or mouse via a dedicated cable for direct used.

Pin#	Signal Name
1	KBDATA
2	MSDATA
3	Ground
4	+5V
5	KBCLK
6	MSCLK

GPIO1:

(2.0mm Pitch 2x5 Pin Header), General-purpose input/output port, it provides a group of self-programming interfaces to customers for flexible use.

Signal Name	Pin#	Pin#	Signal Name
Ground	1	2	NC
NC	3	4	SMB_DATA_R
SMB_CLK_R	5	6	ICH_GPIO13_IN1
ICH_GPIO24_IN2	7	8	ICH_GPIO26_IN3
ICH_GPIO27_IN4	9	10	+5V

USB 23:

(2.0mm Pitch 2x5 Pin Header) ,Front USB connector, it provides one USB port via a dedicated USB cable, speed up to 480Mb/s.

Signal Name	Pin#	Pin#	Signal Name
5V_USB23	1	2	5V_USB23
USB3_N	3	4	USB2_N (option, NC)
USB3_P	5	6	USB2_P (option, NC)
Ground	7	8	Ground
NC	9	10	Ground



Note:

Before connection, make sure that pinout of the USB Cable is in accordance with that of the said tables. Any inconformity may cause system down and even hardware damages.

JP5:

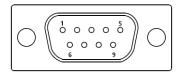
(2.0mm Pitch 2x3 Pin Header), COM5 setting jumper, pin 1~6 are used to select signal out of pin 9 of COM5 port.

JP5 Pin#	Function	
Close 1-2	RI (Ring Indicator)	(default)
Close 3-4	COM5 Pin9=+5V	(option)
Close 5-6	COM5 Pin9=+12V	(option)

COM5:

(Type DB9), serial port, standard DB9 serial port is provided to make a direct connection to serial devices. COM5 port is controlled by pins No.1~6 of **JP5**, select output Signal RI

or 5V or 12v, For details, please refer to description of JP3.



Pin#	Signal Name	
1	DCD# (Data Carrier Detect)	
2	RXD (Received Data)	
3	TXD (Transmit Data)	
4	DTR (Data Terminal Ready)	
5	Ground	
6	DSR (Data Set Ready)	
7	RTS (Request To Send)	
8	CTS (Clear To Send)	
9	JP5 Setting:	
	Pin1-2: RI (Ring Indicator) (default)	
	Pin3-4 : 5V Standby power (option)	
	Pin5-6:12V Standby power (option)	

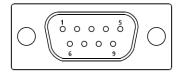
JP6:

(2.0mm Pitch 2x3 Pin Header), COM6 setting jumper, pin 1~6 are used to select signal out of pin 9 of COM6 port.

JP6 Pin#	Function	
Close 1-2	RI (Ring Indicator)	(default)
Close 3-4	COM6 Pin9=+5V	(option)
Close 5-6	COM6 Pin9=+12V	(option)

COM6:

(Type DB9), serial port, standard DB9 serial port is provided to make a direct connection to serial devices. COM6 port is controlled by pins No.1~6 of **JP6**, select output Signal RI or 5V or 12v, For details, please refer to description of JP6.



Pin#	Signal Name
1	DCD# (Data Carrier Detect)
2	RXD (Received Data)
3	TXD (Transmit Data)
4	DTR (Data Terminal Ready)
5	Ground
6	DSR (Data Set Ready)
7	RTS (Request To Send)

8	CTS (Clear To Send)	
9	JP6 Setting:	
	Pin1-2: RI (Ring Indicator)	(default)
	Pin3-4 : 5V Standby power	(option)
	Pin5-6:12V Standby power	(option)

COM_6 (option):

(2.0mm Pitch 2X5 Pin Header), COM6 Port, up to one standard RS232 port are provided. They can be used directly via COM cable connection.

Signal Name	Pin#	Pin#	Signal Name
DCD	1	2	RXD
TXD	3	4	DTR
Ground	5	6	DSR
RTS	7	8	CTS
JP6 Setting:	9	10	NC
RI/5V/12V			

35. TB-528C2 (option):

SBC-7106 Riser Card, TB-528C2ME1 CN3 connect to SBC-7106 CN3 pin Header. TB-528C2ME1 Top:



CN3:

(1.27mm Pitch 2X30 Pin Header), connect to SBC-7106 CN3 pin Header.

LED1:

Mini PCIe devices LED Status.

PS2:

(2.0mm Pitch 1X6 Pin Wafer), PS/2 keyboard and mouse port, the port can be connected to PS/2 keyboard or mouse via a dedicated cable for direct used.

Pin#	Signal Name
1	KBDATA
2	MSDATA
3	Ground
4	+5V
5	KBCLK
6	MSCLK

GPI01:

(2.0mm Pitch 2x5 Pin Header), General-purpose input/output port, it provides a group of self-programming interfaces to customers for flexible use.

Signal Name	Pin#	Pin#	Signal Name
Ground	1	2	NC
NC	3	4	SMB_DATA_R
SMB_CLK_R	5	6	ICH_GPIO13_IN1
ICH_GPIO24_IN2	7	8	ICH_GPIO26_IN3
ICH_GPIO27_IN4	9	10	+5V

USB 23:

(2.0mm Pitch 2x5 Pin Header) ,Front USB connector, it provides one USB port via a dedicated USB cable, speed up to 480Mb/s.

Signal Name	Pin#	Pin#	Signal Name
5V_USB23	1	2	5V_USB23
USB3_N	3	4	USB2_N
USB3_P	5	6	USB2_P
Ground	7	8	Ground
NC	9	10	Ground



Note:

Before connection, make sure that pinout of the USB Cable is in accordance with that of the said tables. Any inconformity may cause system down and even hardware damages.

JP5:

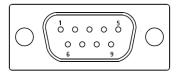
(2.0mm Pitch 2x3 Pin Header), COM5 setting jumper, pin 1~6 are used to select signal out of pin 9 of COM5 port.

JP5 Pin#	Function	
Close 1-2	RI (Ring Indicator)	(default)
Close 3-4	COM5 Pin9=+5V	(option)
Close 5-6	COM5 Pin9=+12V	(option)

COM5:

(Type DB9), serial port, standard DB9 serial port is provided to make a direct connection to

serial devices. COM5 port is controlled by pins No.1~6 of **JP5**,select output Signal RI or 5V or 12v, For details, please refer to description of JP3.



Pin#	Signal Name	
1	DCD# (Data Carrier Detect)	
2	RXD (Received Data)	
3	TXD (Transmit Data)	
4	DTR (Data Terminal Ready)	
5	Ground	
6	DSR (Data Set Ready)	
7	RTS (Request To Send)	
8	CTS (Clear To Send)	
9	JP5 Setting:	
	Pin1-2: RI (Ring Indicator) (default)	
	Pin3-4 : 5V Standby power (option)	
	Pin5-6:12V Standby power (option)	

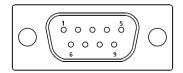
JP6:

(2.0mm Pitch 2x3 Pin Header), COM6 setting jumper, pin 1~6 are used to select signal out of pin 9 of COM6 port.

JP6 Pin#	Function	
Close 1-2	RI (Ring Indicator)	(default)
Close 3-4	COM6 Pin9=+5V	(option)
Close 5-6	COM6 Pin9=+12V	(option)

COM6:

(Type DB9), serial port, standard DB9 serial port is provided to make a direct connection to serial devices. COM6 port is controlled by pins No.1~6 of **JP6**, select output Signal RI or 5V or 12v, For details, please refer to description of JP6.



Pin#	Signal Name
1	DCD# (Data Carrier Detect)
2	RXD (Received Data)
3	TXD (Transmit Data)
4	DTR (Data Terminal Ready)
5	Ground
6	DSR (Data Set Ready)
7	RTS (Request To Send)

8	CTS (Clear To Send)	
9	JP6 Setting:	
	Pin1-2: RI (Ring Indicator)	(default)
	Pin3-4 : 5V Standby power	(option)
	Pin5-6:12V Standby power	(option)

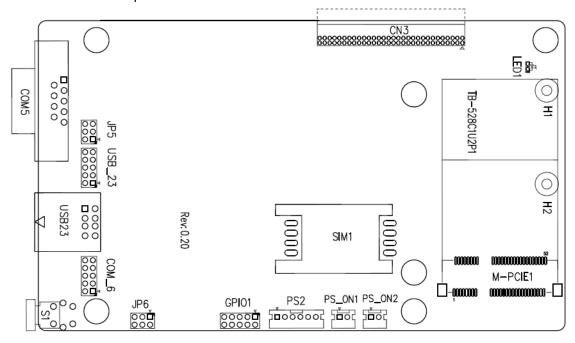
COM_6 (option):

(2.0mm Pitch 2X5 Pin Header), COM6 Port, up to one standard RS232 port are provided. hey can be used directly via COM cable connection.

Signal Name	Pin#	Pin#	Signal Name
DCD	1	2	RXD
TXD	3	4	DTR
Ground	5	6	DSR
RTS	7	8	CTS
JP6 Setting:	9	10	NC
RI/5V/12V			

36. TB-528C1U2P1 (option):

SBC-7106 Riser Card, TB-528C1U2P1 CN3 connect to SBC-7106 CN3 pin Header. TB-528C1U2P1 Top:



CN3:

(1.27mm Pitch 2X30 Pin Header), connect to SBC-7106 CN3 pin Header.

M-PCIE1:

(Socket 52Pin),mini PCle socket, it is located at the top, it supports mini PCle devices with Smbus,SIM and PCle signal. MPCle card size is 30x30mm or 30x50.95mm.

Signal Name	Function support
PCIe 1X	Yes

USB2.0 (USB2)	NC (option)
SMBus	Yes
SIM	Yes

H1/H2:

MPCIE1 SCREW HOLES, H2 for mini PCIE card (30mmx30mm) assemble. H1 for mini PCIE card (30mmx50.95mm) assemble.

LED1:

Mini PCIe devices LED Status.

SIM1 (option):

(SIM Socket 6 Pin), Support SIM Card devices.

PS ON1:

(2.0mm Pitch 1X2 Pin Wafer), ATX Power and Auto Power on jumper setting.

PS_ON	Mode
Close 1-2	Auto Power on (Default)
Open 1-2	ATX Power

PS_ON2 (option):

(2.0mm Pitch 1X2 Pin Wafer), They can be used directly via cable connection to SBC-7106 JP5.

PS_ON2	SBC-7106 R1.10 /JP5
Pin1	Pin1
Pin2	Pin2

PS2:

(2.0mm Pitch 1X6 Pin Wafer), PS/2 keyboard and mouse port, the port can be connected to PS/2 keyboard or mouse via a dedicated cable for direct used.

Pin#	Signal Name
1	KBDATA
2	MSDATA
3	Ground
4	+5V
5	KBCLK
6	MSCLK

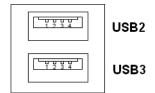
GPI01:

(2.0mm Pitch 2x5 Pin Header), General-purpose input/output port, it provides a group of self-programming interfaces to customers for flexible use.

Signal Name	Pin#	Pin#	Signal Name
Ground	1	2	NC
NC	3	4	SMB_DATA_R
SMB_CLK_R	5	6	ICH_GPIO13_IN1
ICH_GPIO24_IN2	7	8	ICH_GPIO26_IN3
ICH_GPIO27_IN4	9	10	+5V

USB23:

(Double stack USB type A), Rear USB connector, it provides up to 2 USB2.0 ports, speed up to 480Mb/s.



USB_23 (option):

(2.0mm Pitch 2x5 Pin Header) ,Front USB connector, it provides one USB port via a dedicated USB cable, speed up to 480Mb/s.

Signal Name	Pin#	Pin#	Signal Name
5V_USB23	1	2	5V_USB23
USB3_N	3	4	USB2_N
USB3_P	5	6	USB2_P
Ground	7	8	Ground
NC	9	10	Ground



Note.

Before connection, make sure that pinout of the USB Cable is in accordance with that of the said tables. Any inconformity may cause system down and even hardware damages.

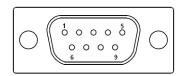
JP5:

(2.0mm Pitch 2x3 Pin Header), COM5 setting jumper, pin 1~6 are used to select signal out of pin 9 of COM5 port.

JP3 Pin#	Function	
Close 1-2	RI (Ring Indicator)	(default)
Close 3-4	COM5 Pin9=+5V	(option)
Close 5-6	COM5 Pin9=+12V	(option)

COM5:

(Type DB9), serial port, standard DB9 serial port is provided to make a direct connection to serial devices. COM5 port is controlled by pins No.1~6 of **JP5**, select output Signal RI or 5V or 12v, For details, please refer to description of JP3.



Pin#	Signal Name		
1	DCD# (Data Carrier Detect)		
2	RXD (Received Data)		
3	TXD (Transmit Data)		
4	DTR (Data Terminal Ready)		
5	Ground		
6	DSR (Data Set Ready)		
7	RTS (Request To Send)		
8	CTS (Clear To Send)		
9	JP5 Setting:		
	Pin1-2: RI (Ring Indicator) (default)		
	Pin3-4 : 5V Standby power (option)		
	Pin5-6:12V Standby power (option)		

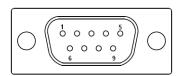
JP6:

(2.0mm Pitch 2x3 Pin Header), COM6 setting jumper, pin 1~6 are used to select signal out of pin 9 of COM6 port.

JP3 Pin#	Function	
Close 1-2	RI (Ring Indicator)	(default)
Close 3-4	COM6 Pin9=+5V	(option)
Close 5-6	COM6 Pin9=+12V	(option)

COM6:

(Type DB9), serial port, standard DB9 serial port is provided to make a direct connection to serial devices. COM6 port is controlled by pins No.1~6 of **JP6**, select output Signal RI or 5V or 12v, For details, please refer to description of JP6.



Pin#	Signal Name	
1	DCD# (Data Carrier Detect)	
2	RXD (Received Data)	
3	TXD (Transmit Data)	
4	DTR (Data Terminal Ready)	
5	Ground	
6	DSR (Data Set Ready)	
7	RTS (Request To Send)	
8	CTS (Clear To Send)	

9	JP6 Setting:	
	Pin1-2: RI (Ring Indicator)	(default)
	Pin3-4 : 5V Standby power	(option)
	Pin5-6:12V Standby power	(option)

S1:

PWR BT: POWER on/off Button, They are used to connect power switch button. The two pins are disconnected under normal condition. You may short them temporarily to realize system startup & shutdown or awaken the system from sleep state.

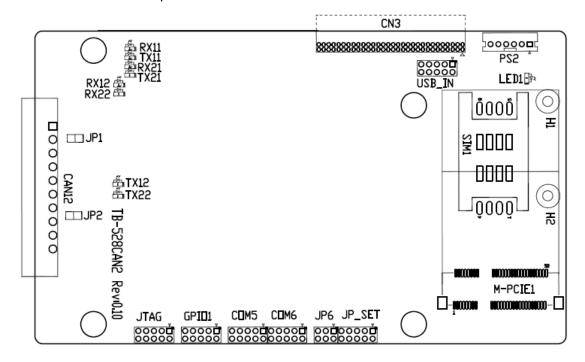
PWR LED: POWER LED status.

S1	Model	TB-528C1U2P1	PS_ON2
Yes	SBC-7106 R110	R12/ NC	Cable
Yes	SBC-7106 R120	R12/ 0ohm	NC

37. TB-528CAN2 R0.10 (option):

SBC-7106 Riser Card, TB-528CAN2 CN3 connect to SBC-7106 CN3 pin Header. It provides two CAN-bus Interface.

TB-528CAN2 Top:



CN3:

(1.27mm Pitch 2X30 Pin Header), connect to SBC-7106 CN3 pin Header.

M-PCIE1:

(Socket 52Pin),mini PCle socket, it is located at the top, it supports mini PCle devices with Smbus,USB2.0,SIM and PCle signal. MPCle card size is 30x30mm or 30x50.95mm.

Signal Name	Function support
PCIe 1X	Yes
USB2.0 (USB2)	Yes

SMBus	Yes
SIM	Yes

H1/H2:

MPCIE1 SCREW HOLES, H2 for mini PCIE card (30mmx30mm) assemble. H1 for mini PCIE card (30mmx50.95mm) assemble.

LED1:

Mini PCIe devices LED Status.

SIM1 (option):

(SIM Socket 6 Pin), Support SIM Card devices.

PS2:

(2.0mm Pitch 1X6 Pin Wafer), PS/2 keyboard and mouse port, the port can be connected to PS/2 keyboard or mouse via a dedicated cable for direct used.

Pin#	Signal Name		
1	KBDATA		
2	MSDATA		
3	Ground		
4	+5V		
5	KBCLK		
6	MSCLK		

USB_IN (option):

(2.0mm Pitch 2x5 Pin Header) ,Front USB connector, it provides two USB port via a dedicated USB cable, speed up to 480Mb/s.

Signal Name	Pin#	Pin#	Signal Name
5V_USB23	1	2	5V_USB23
NC (USB3_N)	3	4	NC (USB2_N)
NC (USB3_P)	5	6	NC (USB2_P)
Ground	7	8	Ground
NC	9	10	Ground



Before connection, make sure that pinout of the USB Cable is in accordance with that of the said tables. Any inconformity may cause system down and even hardware damages.

JP_SET (option) :

(2.0mm Pitch 2x5 Pin Header).

Signal Name	Pin#	Pin#	Signal Name
3P3V_S5_USB	1	2	3P3V_S5
3P3V_S5_USB	3	4	3P3V_S5
3P3V_S5_USB	5	6	3P3V_S5

PSON_ATX	7	8	Ground
PSON_ATX	9	10	Ground

JP6:

(2.0mm Pitch 2x3 Pin Header), COM6 setting jumper, pin 1~6 are used to select signal out of pin 9 of COM6 port.

JP3 Pin#	Function		
Close 1-2	RI (Ring Indicator)	(default)	
Close 3-4	COM6 Pin9=+5V	(option)	
Close 5-6	COM6 Pin9=+12V	(option)	

COM6:

(2.0mm Pitch 2X5 Pin Header), COM6 Port, up to one standard RS232 port are provided. They can be used directly via COM cable connection.

Signal Name	Pin#	Pin#	Signal Name
DCD	1	2	RXD
TXD	3	4	DTR
Ground	5	6	DSR
RTS	7	8	CTS
JP6 Setting: RI/5V/12V	9	10	NC

COM5:

(2.0mm Pitch 2X5 Pin Header), COM5 Port, up to one standard RS232 port are provided. They can be used directly via COM cable connection.

Signal Name	Pin#	Pin#	Signal Name
DCD	1	2	RXD
TXD	3	4	DTR
Ground	5	6	DSR
RTS	7	8	CTS
RI	9	10	NC

GPI01:

(2.0mm Pitch 2x5 Pin Header), General-purpose input/output port, it provides a group of self-programming interfaces to customers for flexible use.

Signal Name	Pin#	Pin#	Signal Name
Ground	1	2	NC
NC	3	4	SMB_DATA_R
SMB_CLK_R	5	6	ICH_GPIO13_IN1
ICH_GPIO24_IN2	7	8	ICH_GPIO26_IN3
ICH_GPIO27_IN4	9	10	+5V

JTAG:

(2.0mm Pitch 2x5 Pin Header), Reserve.

JP1:

(2.0mm Pitch 1x2 Pin Header), Reserve.

JP2:

(2.0mm Pitch 1x2 Pin Header), Reserve.

CAN12:

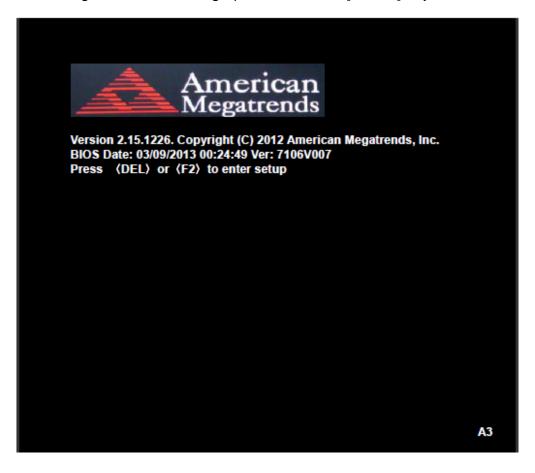
(3.5mm Pitch 1x10 Pin connector), it provides two CAN-bus Interface.

Pin#	Channel	Signal Name	Function
1		CANL2	CAN bus Signal L
2		R2-	Terminal resistor R-(internally connected to CANL2)
3		FG	Shield cable (FG)
4	CAN2	R2+	Terminal resistor R+(internally connected to CANH2)
5		CANH2	CAN bus Signal H
6		CANL1	CAN bus Signal L
7		R1-	Terminal resistor R-(internally connected to CANL1)
8		FG	Shield cable (FG)
9	CAN1	R1+	Terminal resistor R+(internally connected to CANH1)
10		CANH1	CAN bus Signal H

【See TB-528AN2 Manual】

3.1 Operations after POST Screen

After CMOS discharge or BIOS flashing operation,. Press [Delete] key to enter CMOS Setup.



After optimizing and exiting CMOS Setup, the POST screen displayed for the first time is as follows and includes basic information on BIOS, CPU, memory, and storage devices.

3.2 BIOS Setup Utility

Press [Delete] key to enter BIOS Setup utility during POST, and then a main menu containing system summary information will appear.

Main	Advanced	Chipset	Boot	Security	Save & Exit
BIOS	Information				Intel Reference Code
BIOS	Vendor	Amer	ican Mega	trends	Version
Core \	/ersion	4.6.5.	3		
Compl	liancy	UEFI	2.3; PI 1.2		
Projec	t Version	7106\	/007		
Build [Date and Time	03/09/	2013 00:24	1:49	
► Intel R	C Version				
					→←: Select Screen
Syster	m Language	[Englis	sh]		↑↓ : Select Item
					Enter: Select
Syster	m Date	[Sun (01/01/2012	1	+/- : Charge Opt.
Syster	m Time	[00:00	0:08]		F1 : General Help
					F2: Previous Values
Acces	s Level	Admi	nistrator		F3:Optimized Defaults
					F4:Save and Exit
					ESC Exit

3.3 Main Settings

BIOS Information		Intel Reference Code
BIOS Vendor	American Megatrends	Version
Core Version	4.6.5.3	
Compliancy	UEFI 2.3; PI 1.2	
Project Version	7106\007	
Build Date and Time	03/09/2013 00:24:49	
► Intel RC Version		
		→←: Select Screen
System Language	[English]	↑↓ : Select Item
		Enter: Select
System Date	[Sun 01/01/2012]	+/-: Charge Opt.
System Time	[00:00:08]	F1 : General Help
		F2: Previous Values
Access Level	Administrator	F3:Optimized Defaults
		F4:Save and Exit
		ESC Exit
Version 2.15.12	26. Copyright (C) 2012 America	an Megatrends , Inc.

System Time:

Set the system time, the time format is:

Hour: 0 to 23

Minute: 0 to 59 Second: 0 to 59

System Date:

Set the system date, the date format is:

Day: Note that the 'Day' automatically changes when you set the date.

Month: 01 to 12

Date: 01 to 31

Year: 1998 to 2099

3.4 Advanced Settings

_	Aptio Setup	Utility – Copy	yright (C)	2012 America	n Megatrends, Inc.
Main	Advanced	Chipset	Boot	Security	Save & Exit
					PCI,PCI-X and PCI
▶PCI S	ubsystem Sett	ings			Express Settings
► ACPI	Settings				
► CPU C	Configuration				
►Therm	al Configuration	on			
►IDE C	onfiguration				
►USB C	Configuration				
►W836	27UHG Super	IO Configura	tion		
►W836	27UHG HW M	onitor			→←: Select Screen
► Serial	Port Console	Redirection			↑↓ : Select Item
►PPM 0	Configuration				Enter: Select
					+/- : Charge Opt.
					F1 : General Help
					F2: Previous Values
					F3:Optimized Defaults
					F4:Save and Exit
					ESC Exit
	Version 2.15	.1226. Copyı	right (C) 2	012 American	Megatrends , Inc.

3.4.1 PCI Subsystem Settings

PCI Bus Driver Versio V2.05.02

PCI Common Settings:

PCI Latency Timer:

[32 PCI Bus Clocks]
[64 PCI Bus Clocks]
[96 PCI Bus Clocks]
[128 PCI Bus Clocks]
[160 PCI Bus Clocks]
[192 PCI Bus Clocks]
[224 PCI Bus Clocks]

VCA Palatta Channe	[248 PCI Bus Clocks]
VGA Palette Snoop:	[Disabled] [Enabled]
PERR# Generation:	
	[Disabled] [Enabled]
SERR# Generation:	[Disabled] [Enabled]
I Settings Enable ACPI Auto Conf:	
	[Disabled]
	[Enabled]
Enable Hibernation:	
	[Enabled] [Disabled]
ACPI Sleep State:	
[Susper [S1 only	and S3 available for OS to choose from] and Disabled] a(CPU Stop Clock)] a(Suspend to RAM)]
Lock Legacy Resources:	

[Disabled] [Enabled]

[Disabled] [Enabled]

ACPI Settings

S3 Video Repost:

3.4.2

3.4.3 CPU Configuration

Processor Type Intel(R) Atom(TM) CPU N2600

EMT64 Not Supported

Processor Speed 1600MHz System Bus Speed 400MHz

Ratio Status 16 Actual Ratio 16

System Bus Speed 400MHz
Processor Stepping 30661
Microcode Revision 269
L1 Cache RAM 2x56 k
L2 Cache RAM 2x512 k

Hyper-Threading Supported

Hyper-Threading:

Processor Core

[Enabled] [Disabled]

Dual

Execute Disable Bit:

[Enabled]
[Disabled]

Limit CPUID Maximum:

[Disabled] [Enabled]

3.4.4 Thermal Configuration

CPU Thermal Configuration DTS SMM

[Disabled] [Enabled]

Platform Thermal Configuration

Critical Trip Point [POR]
Active Trip Point Lo [55 C]
Active Trip Point Hi [71C]
Passive Trip Point [95]
Passive TC1 Value 1
Passive TC2 Value 5
Passive TSP Value 10

3.4.5 IDE Configuration

SATA Port0 Not Present

SATA Port1 Not Present

SATA Controller(S):

[Enabled]

[Disabled]

Configure SATA as:

[IDE]

[AHCI]

Misc Configuration for hard disk

3.4.6 USB Configuration

USB Configuration

USB Devices:

1 Drive , 1 keyboard

Legacy USB Support:

[Enabled]

[Disabled]

EHCI Hand-off:

[Disabled]

[Enabled]

USB hardware delays a USB transfer time-out:

[20 sec]

[10 sec]

[5 sec]

[1 sec]

Device reset time-out:

[20 sec]

[10 sec]

[30 sec]

[40 sec]

Device power-up delay

[Auto]

[Manual]

3.4.7 W83627UHG Super IO Configuration

W83627UHG Super IO ch W83627UHG Serial Port 1 Configuration UART Mode Selection:

> [RS-485] [RS-422]

Serial Port 2 Configuration
Serial Port 3 Configuration
UART Mode Selection:

[RS-485] [RS-422]

Serial Port 4 Configuration Serial Port 5 Configuration Serial Port 6 Configuration

3.4.8 W83627UHG HW Monitor

PC Health Status

System Temperature1 : +38
System Speed : N/A

VCORE : +0.968V +12V : +12.302V +3.3V : +3.320V +1.5V : +1.528V **AVCC** : +5.203V VCC5V : +5.216V : +5.203V VSB5 **VBAT** : +3.334V

3.4.9 Serial Port Console Redirection

COM₀

Console Redirection

[Enabled] [Disabled]

Console Redirection Settings

Serial Port for Out-of-Band Management/

Windows Emergency Management Services (EMS)

Console Redirection

[Disabled]

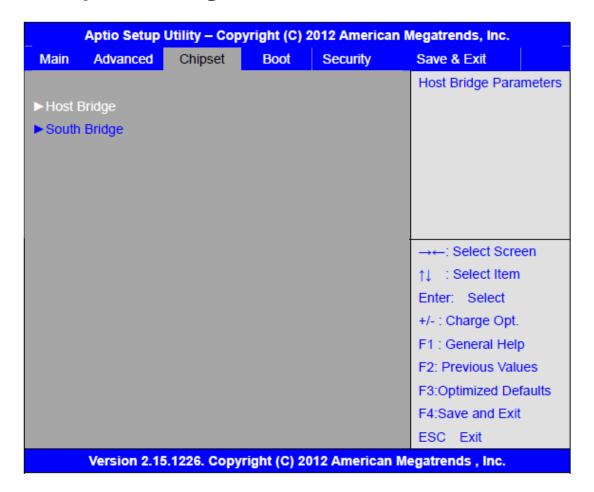
[Enabled]

Console Redirection Settings

3.4.10 PPM Configuration

PPM Configuration EIST: [Enabled] [Disabled] CPU C State Report [Enabled] [Disabled] Enhanced C State [Enabled] [Disabled] CPU Hard C4E [Enabled] [Disabled] CPU C6 State [Enabled] [Disabled] C4 Exit Timing [Fast] [Default] [Slow] C-state POPDOWN [Enabled] [Disabled] C-state POPUP [Enabled] [Disabled]

3.5 Chipset Settings



3.5.1 Host Bridge

- ► Memory Frequency and Timing
- ► Intel IGD Configuration

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

Memory Frequency 800 MHz(DDR3)

Total Memory 2048 MB
DIMM#0 Not Present
DIMM#1 2048 MB

Memory Frequency and Timing

MRC Fast Boot

[Enabled]

[Disabled]

Max TOLUD

[Dynamic]

[1GB]

[1.25GB]

[1.5GB]

[1.75GB]

[2GB]

[2.25GB]

[2.5GB]

[2.75GB]

[3GB]

[3.25GB]

Intel IGD Configuration

IGFX - Boot Type

[VBIOS Default]

[VGA]

[LVDS]

[HDMI]

[VGA + LVDS]

[VGA + HDMI]

[LVDS + HDMI]

LCD Panel Type

[VBIOS Default]

[640x480, 18bit]

[800x480, 18bit]

[800x600, 18bit]

[1024x600, 18bit]

[1024x768, 18bit]

[1280x768, 18bit]

[1280x800, 18bit]

[1280x1024, 18bit]

[1366x768, 18bit]

[1024x768, 24bit]

[1280x768, 24bit]

[1280x800, 24bit]

[1280x1024, 24bit]

[1366x768, 24bit]

Panel Scaling

[Auto]

[Force Scaling]

[off]

[Maintain Aspect Ratio]

Active LFP

[LVDS]

[No LVDS]

[EDP]

IGD Clock Source

[External Clock]

[Internal Clock]

Fixed Graphics Memory

[128MB]

[256MB]

ALS Support

[Disabled]

[Enabled]

Back light Control

[DC]

[PWM]

Back light Logic

[Positive]

[Negative]

Back light Control Lev

[Auto]

[Disabled]

[Level 8]

[Level 1]

[Level 2]

[Level 3]

[Level 4]

[Level 5]

[Level 6]

[Level 7]

[Level 8]

[_0.0.0]

[Level 9]

[Level 10]

[Level 11]

[Level 12]

[Level 13]

[Level 14]

[Level 15]

3.5.2 South Bridge

TPT Devices

PCI Express Root Port 0

PCI Express Root Port 1

PCI Express Root Port 2

PCI Express Root Port 3

DMI Link ASPM Control

[Enabled]
[Disabled]
PCI-Exp. High Priorit

[Disabled]
[Enabled]
High Precision Event Timer Configuration
High Precision Timer

[Enabled]
[Disabled]

SLP_S4 Assertion Widt

[1-2 Seconds]
[2-3 Seconds]
[3-4 Seconds]

3.6 Boot Settings

Main	Advanced	Chipset	Boot	Security	Save & Exit	
Boot	Configuration				Number of seco	onds to
Setu	p Prompt Time	eout			Wait for setup	
Boot	up Numlock S	tate	[On]		Activation key.	
					65535(0xFFFF))means
Quie	t Boot		[Disabled]		Indef inite waiting	ng.
Fast	Boot		[Enabled]			
Skip	USB		[Disabled]			
Skip	PS2		[Disabled]			
CSM	116 Module Ve	rsion	07.69			
Gate	a20 Active		[Upon Requ	est]		
Optio	on ROM Mess	ages	[Force BIOS]		
Inter	rupt 19 Captui	re	[Immediate]		_	
					→←: Select Sc	
Drive	er Option Prior	ities			↑↓ : Select Ite	m
Boot	Option Priorit	ies			Enter: Select	
					+/- : Charge Op	ot.
Boot	Option Priorit	ies			F1 : General He	elp
Boot	Option #1		[SATA PM: H	Hitachi]	F2: Previous Va	alues
Boot	Option #2		[]		F3:Optimized D	efaults
Hard	Drive BBS Pr	riorities			F4:Save and Ex	xit
CSM I	Parameters				ESC Exit	

Setup Prompt Timeout [1] **Bootup Numlock State** [On] [off] **Quiet Boot** [Disabled] [Enabled] Fast Boot [Enabled] [Disabled] Skip VGA [Enabled] [Disabled] Skip USB [Disabled] [Enabled] Skip PS2 [Disabled] [Enabled] CSM16 Module Version 07.69 Gatea20 Active [Upon Request] [Always] Option ROM Messages [Force BIOS] [Keep Current] Interrupt 19 Capture [Immediate] [Postponed] Boot Option #1 Boot Option #2 Sets the system boot order [SATA PM:*** ...] Hard Drive BBS Priorities Boot Option #1 SATA PM:***... ***** Disabled **CSM Parameters** Launch CSM [Always] [Never] Boot option filter [UEFI and Legacy]

[Legacy only]

[UEFI only] Launch PXE OpROM poli [Do not Launch] [UEFI only] [Legacy only] Launch Storage OpROM [Legacy only] [Do not Launch] [UEFI only] Launch Video OpROM po [Do not Launch] [UEFI only] [Legacy only] Other PCI device ROM [UEFI OpROM] [Legacy OpROM]

3.7 Security Settings



3.7.1 Administrator Password

3.7.2 User Password



Type the password with up to 20 characters and then press <Enter> key. This will clear all previously typed CMOS passwords. You will be requested to confirm the password. Type the password again and press <Enter> key. You may press <Esc> key to abandon password entry operation.

To clear the password, just press <Enter> key when password input window pops up. A confirmation message will be shown on the screen as to whether the password will be disabled. You will have direct access to BIOS setup without typing any password after system reboot once the password is disabled.

Once the password feature is used, you will be requested to type the password each time you enter BIOS setup. This will prevent unauthorized persons from changing your system configurations.

Also, the feature is capable of requesting users to enter the password prior to system boot to control unauthorized access to your computer. Users may enable the feature in Security Option of Advanced BIOS Features. If Security Option is set to System, you will be requested to enter the password before system boot and when entering BIOS setup; if Security Option is set to Setup, you will be requested for password for entering BIOS setup.

3.8 Save & Exit Settings



Save Changes and Exit Save & Exit Setup save Configuration and exit? [Yes] [No] Discard Changes and Ext Exit Without Saving Quit without saving? [Yes] [No] Save Changes and Reset Save & reset Save Configuration and reset? [Yes] [No] Discard Changes and Reset Reset Without Saving Reset without saving? [Yes] [No] Save Changes Save Setup Values Save configuration? [Yes] [No] **Discard Changes** Load Previous Values Load Previous Values? [Yes] [No] **Restore Defaults** Load Optimized Defaults Load optimized Defaults? [Yes] [No] Save user Defaults Save Values as User Defaults Save configuration? [Yes] [No] Restore user Defaults Restore User Defaults Restore User Defaults? [Yes] [No] Launch EFI Shell from filesystem device WARNING Not Found

[ok]

This chapter describes the installation procedures for software and drivers under the windows 7. The software and drivers are included with the motherboard. The contents include **Intel chipset driver**, **VGA driver**, **LAN drivers**, **Audio driver Installation instructions are given below**.

Important Note:

After installing your Windows operating system, you must install first the Intel Chipset Software Installation Utility before proceeding with the installation of drivers.



4.1 Intel Chipset Driver

To install the Intel chipset driver, please follow the steps below.

Step 1. Select Intel (R) Chipset NM10 Express from the list



Step 2. Click **Next** to setup program.



Step 3. Read the license agreement. Click **Yes** to accept all of the terms of the license agreement.



Step 4. Click Next to continue.



Step 5. Click Next.



Step 6. Select **Yes, I want to restart this computer now**. Click **Finish**, then remove any installation media from the drives.



4.2 Intel Graphics Media Accelerator Driver

To install the VGA drivers, follow the steps below to proceed with the installation.

Step 1. Select Intel(R) VGA Chipset Driver.



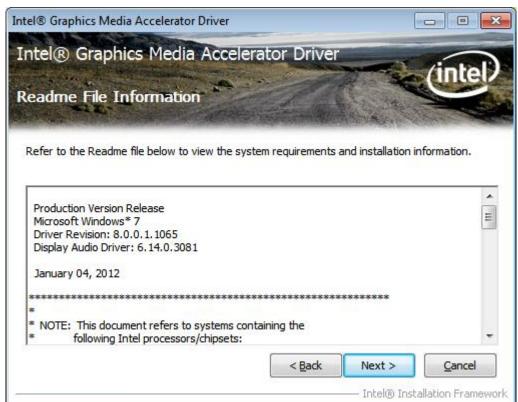
Step 2. Tick Automatically run WinSAT and enable the Windows Aero desktop theme(if supported). Click Next.



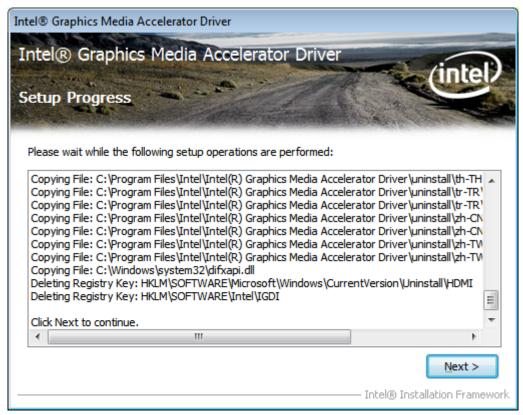
Step 3. Read license agreement. Click Yes.



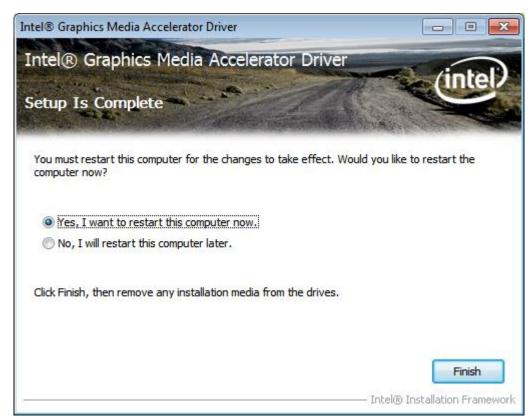
Step 4. Click Next.



Step 5. Click Next.



Step 6. To restart the computer, select **Yes, I want to restart this computer now**. Then click **Finish**.



4.3 Intel (R) Network Adapter

To install the Intel (R) Network Adapter device driver, please follow the steps below.

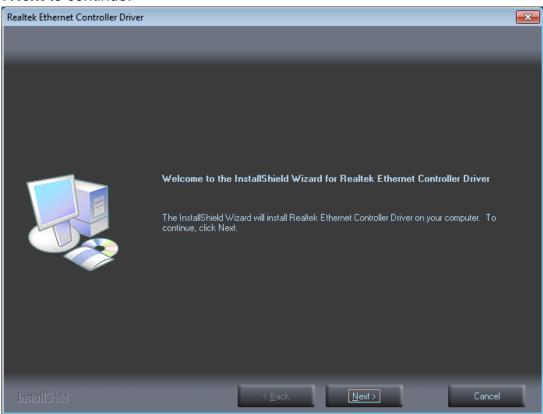
Step 1. Select LAN Driver.



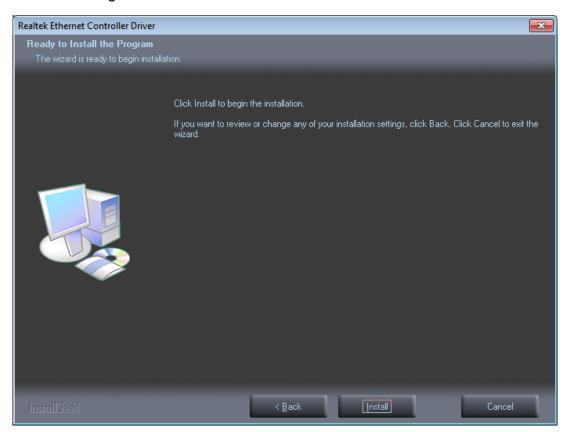
Step 2. Select ARCHMI-7"~15".



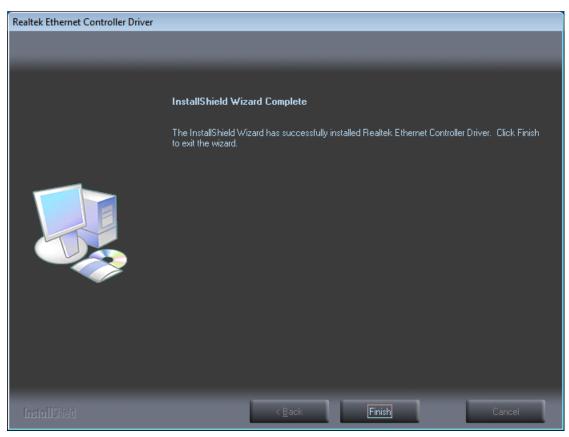
Step 3. Click Next to continue.



Step 4. Click **Install** to begin the installation.



Step 5. Click Finish to exist the wizard.



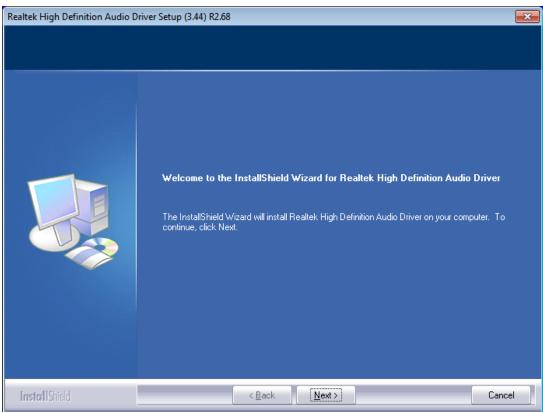
4.4 Realtek ALC662 HD Audio Codec Driver Installation

To install the Realtek ALC662 HD Audio Codec Driver, please follow the steps below.

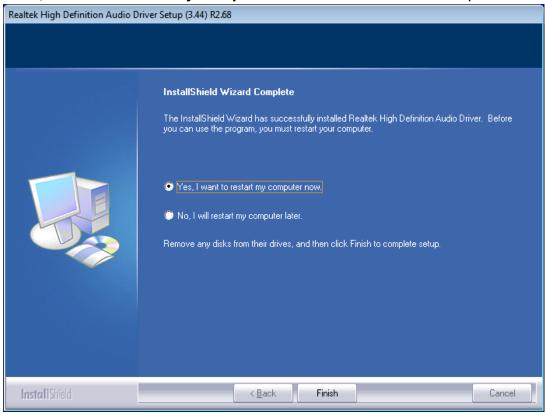
Step 1. Select Realtek AL662 Audio Codec Driver from the list



Step 2. Click Next to continue.



Step 3. Click Yes, I want to restart my computer now. Click Finish to complete the installation.



Chapter 5 Touch Screen Installation

This chapter describes how to install drivers and other software that will allow your touch screen work with different operating systems.

5.1 Windows 2000/2003/Vista/WIN7 Universal Driver

Installation for PenMount 6000 Series

Before installing the Windows 2000/WIN7 driver software, you must have the Windows 2000/WIN 7 system installed and running on your computer. You must also have one of the following PenMount 6000 series controller or control boards installed: PM6500, PM6300.

5.1.1 Installing Software(Resistive Touch)

If you have an older version of the PenMount Windows 2000/WIN7 driver installed in your system, please remove it first. Follow the steps below to install the PenMount DMC6000 Windows 2000/WIN7 driver.

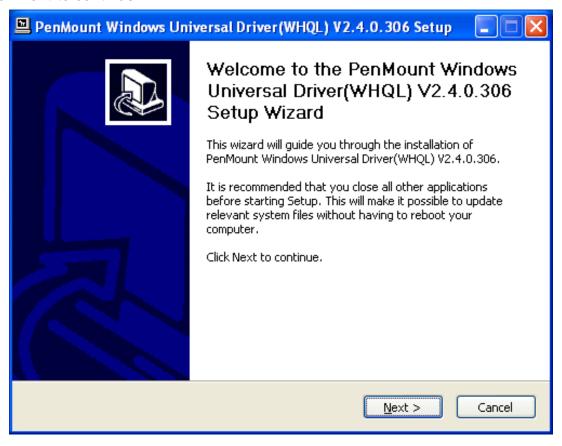
Step 1. Insert the product CD, the screen below would appear. Click touch panel driver.



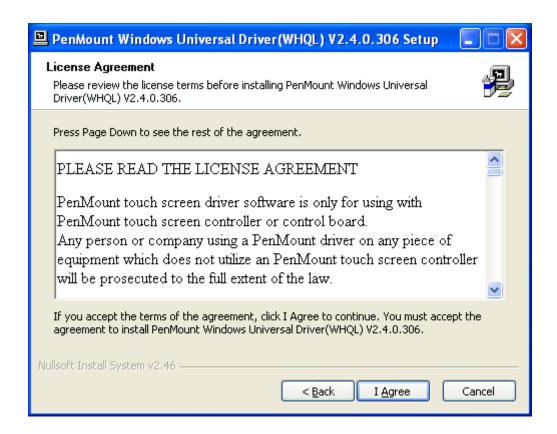
Step 2. Select Resistive Touch.



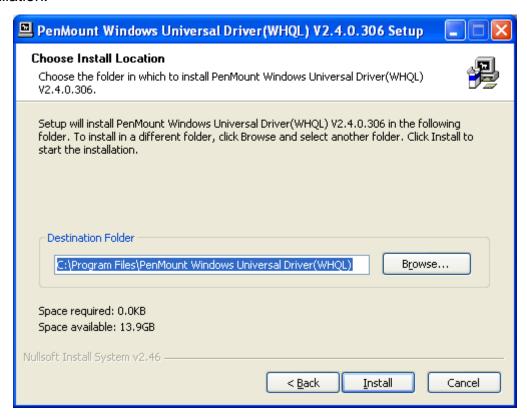
Step 3. Click Next to continue.



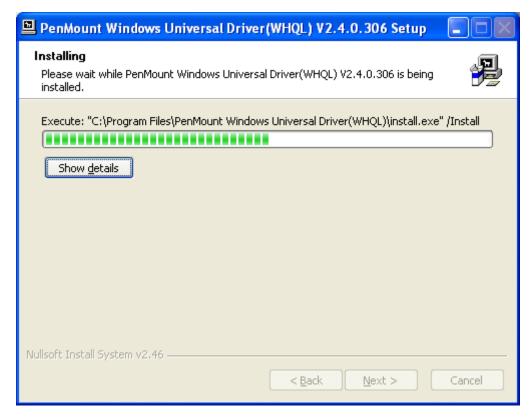
Step 4. Read the license agreement. Click **I Agree** to agree the license agreement.



Step 5. Choose the folder in which to install PenMount Windows Universal Driver. Click **Install** to start the installation.



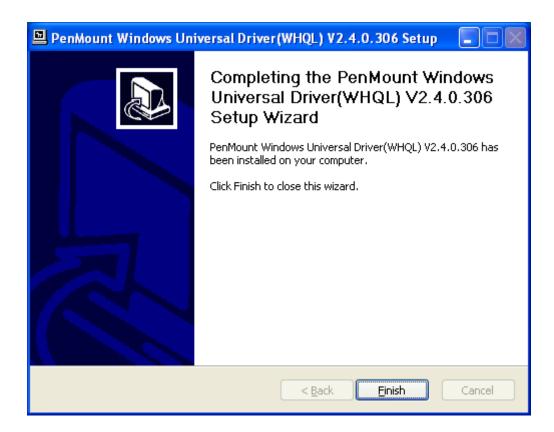
Step 6. Wait for installation. Then click **Next** to continue.



Step 7. Click Continue Anyway.



Step 8. Click **Finish** to complete installation.



5.1.2 Installing Software (Projected Capacitive)

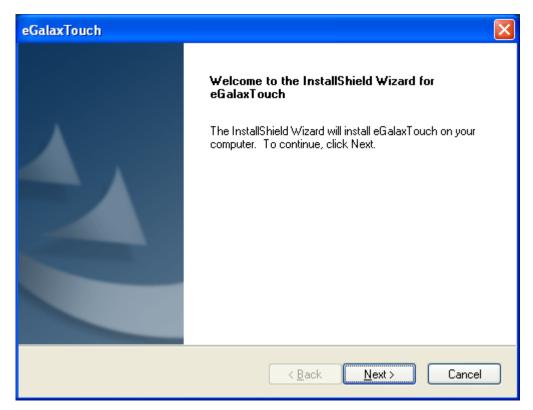
Step 1. Insert the product CD, the screen below would appear. Click Touch Panel Driver.



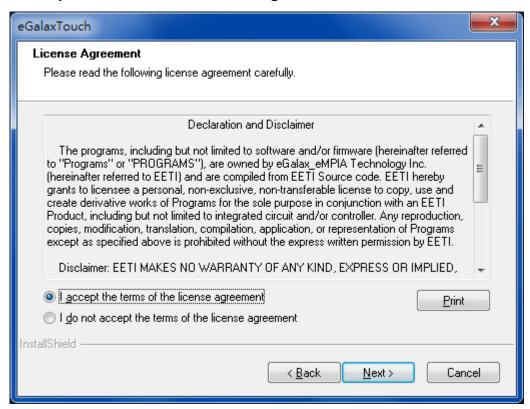
Step 2. Select Projected Capacitive.



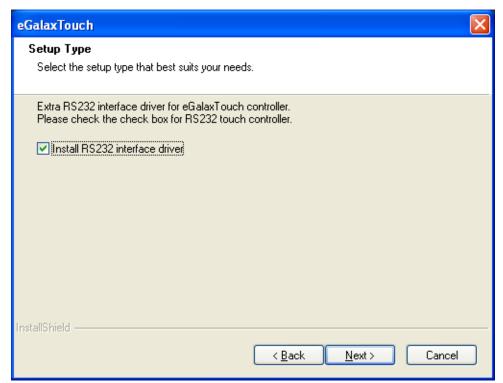
Step 3. Click Next to continue.



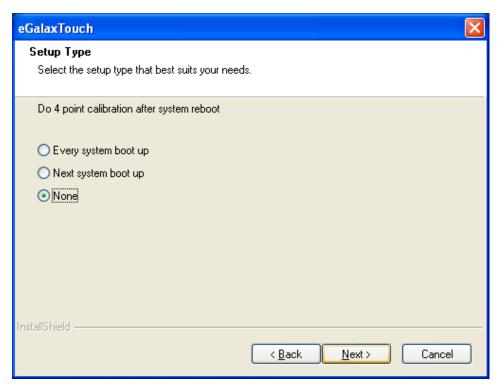
Step 4. Select I accept the terms of the license agreement. Click Next.



Step 5. Tick Install RS232 interface driver. Click Next.



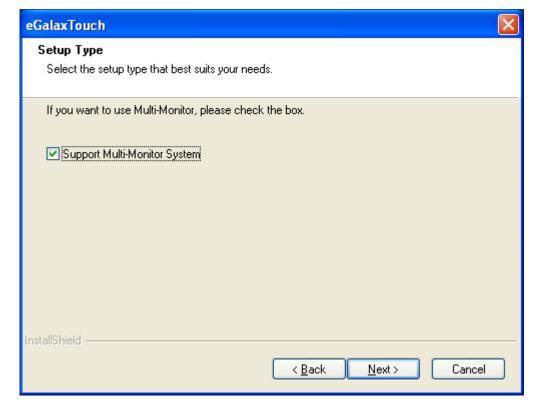
Step 6. Select None. Click Next.



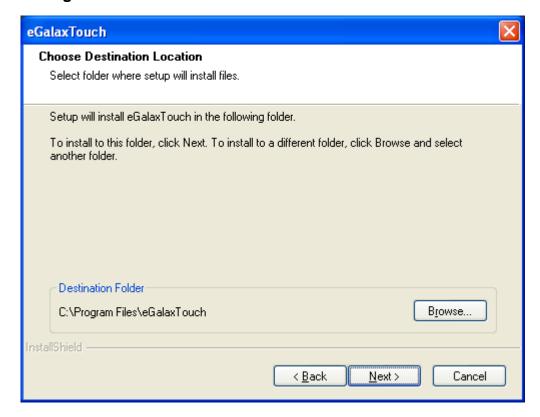
Step 7. Click OK.



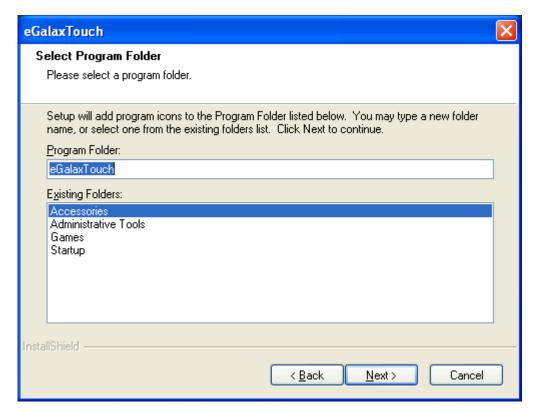
Step 8. Tick Support Muti-Monitor System. Click Next.



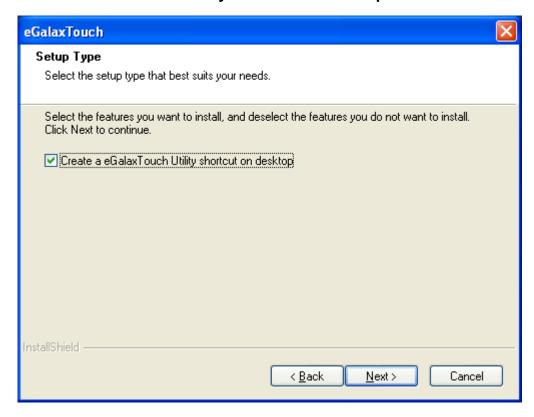
Step 9. Go to C:\Program Files\eGalaxTouch. Click Next.



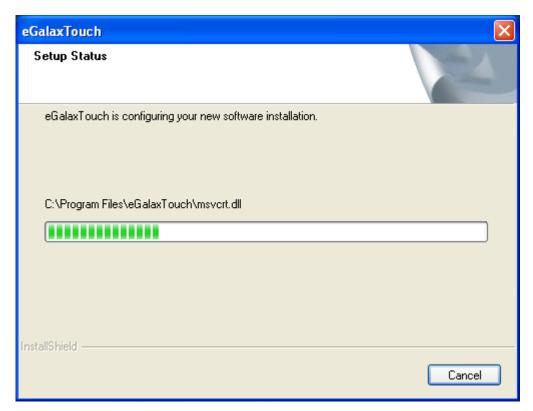
Step 10. Click Next.



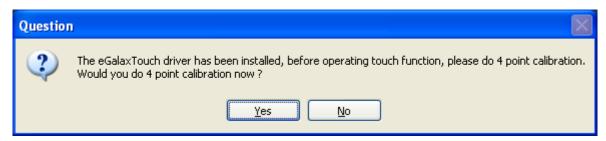
Step 11. Tick Create a eGalaxTouch Utility shortcut on desktop. Click Next.



Step 12. Wait for installation.



Step 13. Click Yes to do 4 point calibration.



5.2 Software Functions

5.2.1 Software Functions(Resistive Touch)

Upon rebooting, the computer automatically finds the new 6000 controller board. The touch screen is connected but not calibrated. Follow the procedures below to carry out calibration.

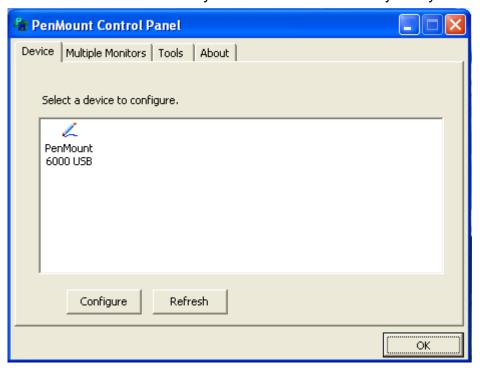
- 1. After installation, click the PenMount Monitor icon "PM" in the menu bar.
- 2. When the PenMount Control Panel appears, select a device to "Calibrate."

PenMount Control Panel(Resistive Touch)

The functions of the PenMount Control Panel are **Device, Multiple Monitors**, **Tools** and **About**, which are explained in the following sections.

Device

In this window, you can find out that how many devices be detected on your system.

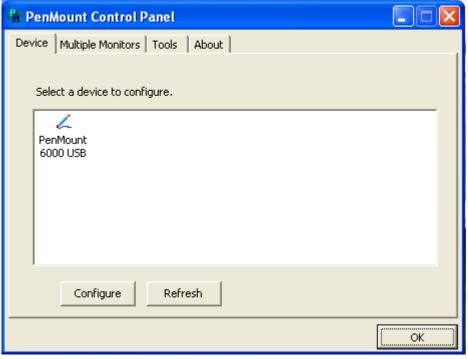


Calibrate

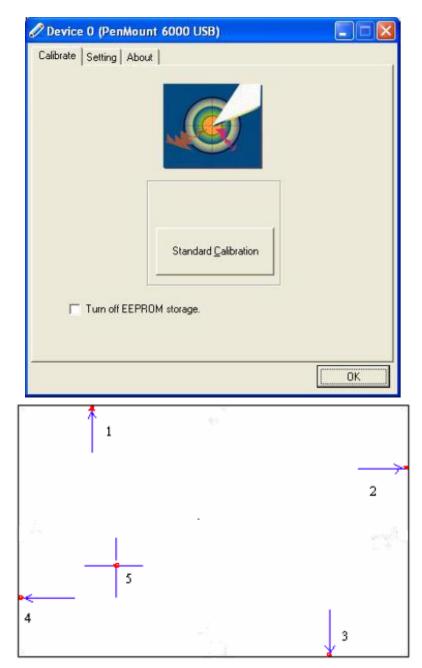
This function offers two ways to calibrate your touch screen. 'Standard Calibration' adjusts most touch screens. 'Advanced Calibration' adjusts aging touch screens.

Standard Calibration	Click this button and arrows appear
Standard Calibration	
	pointing to red squares. Use your finger or
	stylus to touch the red squares in
	sequence. After the fifth red point
	calibration is complete. To skip, press
	'ESC'.
Advanced Calibration	Advanced Calibration uses 4, 9, 16 or 25
	points to effectively calibrate touch panel
	linearity of aged touch screens. Click this
	button and touch the red squares in
	sequence with a stylus. To skip, press
	ESC'.
Command Calibration	Command call calibration function. Use
	command mode call calibration function,
	this can uses Standard, 4, 9, 16 or 25
	points to calibrate E.g. Please run ms-dos
	prompt or command prompt c:\Program
	Files\PenMount Universa Driver\Dmcctrl.exe
	-calibration 0 (Standard Calibration)
	Dmcctrl.exe - calibration (\$) 0= Standard
	Calibration 4=Advanced Calibration 4
	9=Advanced Calibration 9 16=Advanced
	Calibration 16 25=Advanced Calibration 25

Step 1. Please select a device then click "Configure". You can also double click the device too.

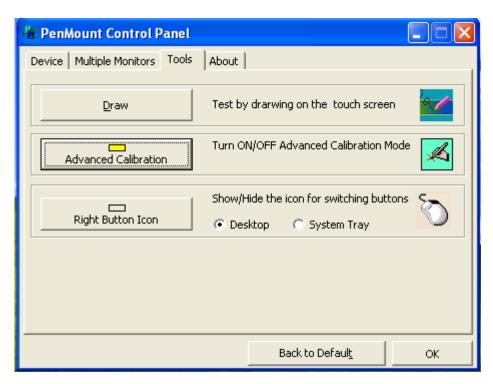


Step 2.Click "Standard Calibration" to start calibration procedure



NOTE: The older the touch screen, the more Advanced Mode calibration points you need for an accurate calibration. Use a stylus during Advanced Calibration for greater accuracy. Please follow the step as below:

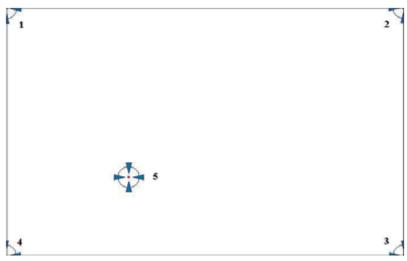
Step 3.Come back to "PenMount Control Panel" and select **Tools** then click **Advanced Calibration**.



Step 4. Select Device to calibrate, then you can start to do Advanced Calibration.



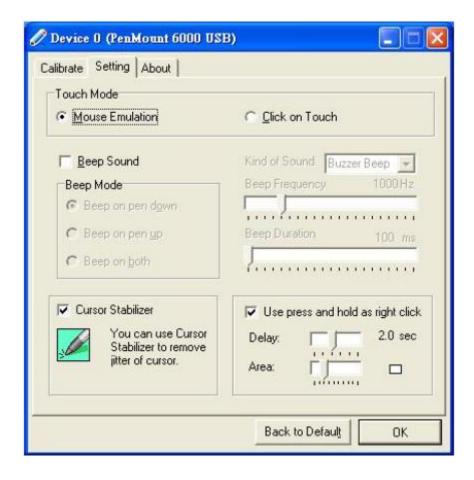
NOTE: Recommend to use a stylus during Advanced Calibration for greater accuracy.



Plot Calibration Data	Check this function and a touch panel linearity comparison graph appears when you have finished Advanced Calibration. The blue lines show linearity before calibration and black lines show linearity after calibration.
Turn off EEPROM storage	The function disable for calibration data to write in
	Controller. The default setting is Enable.

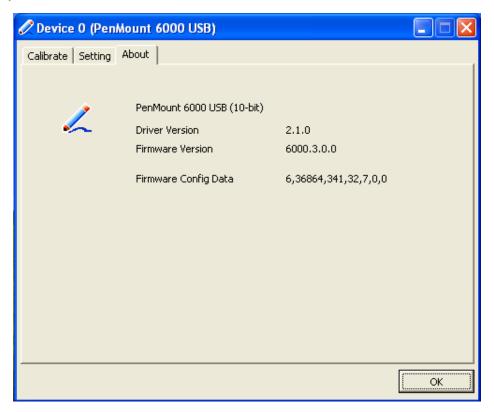
Setting

Touch Mode	This mode enables and disables the mouse's ability to drag on-screen icons – useful for configuring POS terminals.
	on-screen icons – userui for configuring FOS terminais.
	Mouse Emulation – Select this mode and the mouse
	functions as normal and allows dragging of icons.
	Click on Touch – Select this mode and the mouse only
	provides a click function, and dragging is disabled.
Beep Sound	Enable Beep Sound – turns beep function on and off
	Beep on Pen Down – beep occurs when pen comes down
	Beep on Pen Up – beep occurs when pen is lifted up
	Beep on both – beep occurs when comes down and lifted up
	Beep Frequency – modifies sound frequency
	Beep Duration – modifies sound duration
Cursor Stabilizer	Enable the function support to prevent cursor shake
Use press and hold	You can set the time out and area for you need.
as right click	



About

This panel displays information about the PenMount controller and driver version.



Multiple Monitors

Multiple Monitors support from two to six touch screen displays for one system.

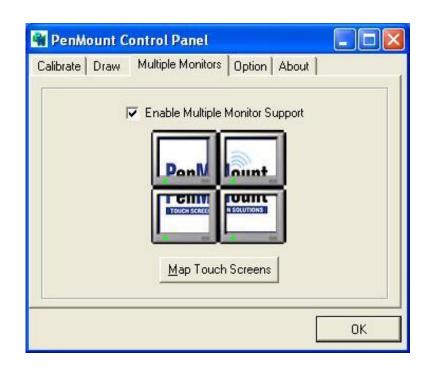
The PenMount drivers for Windows 2000/WIN 7 support Multiple Monitors. This function supports from two to six touch screen displays for one system. Each monitor requires its own PenMount touch screen control board, either installed inside the display or in a central unit. The PenMount control boards must be connected to the computer COM ports via the RS-232 interface. Driver installation procedures are the same as for a single monitor. Multiple Monitors support the following modes:

Windows Extends Monitor Function Matrox DualHead Multi-Screen Function nVidia nView Function

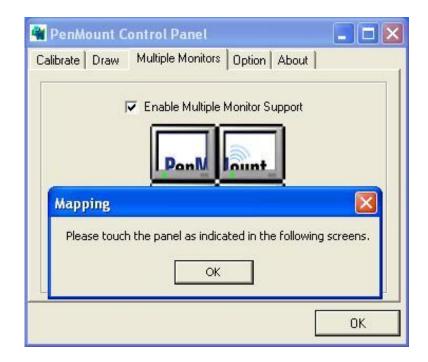
NOTE: The Multiple Monitor function is for use with multiple displays only. Do not use this function if you have only one touch screen display. Please note once you turn on this function the rotating function is disabled.

Enable the multiple display function as follows:

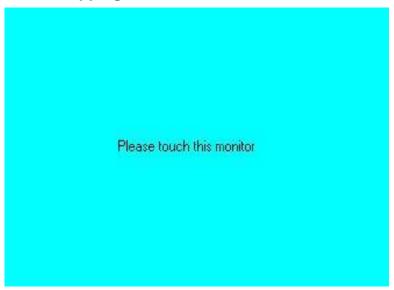
 Check the Enable Multiple Monitor Support box; then click Map Touch Screens to assign touch controllers to displays.



2. When the mapping screen message appears, click **OK.**



3. Touch each screen as it displays "Please touch this monitor". Following this sequence and touching each screen is called **mapping the touch screens.**



- 4. Touching all screens completes the mapping and the desktop reappears on the monitors.
- 5. Select a display and execute the "Calibration" function. A message to start calibration appears. Click **OK**.

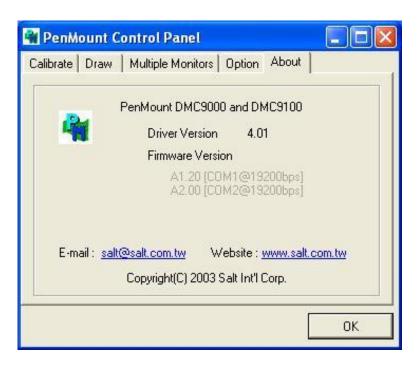


- 6. "Touch this screen to start its calibration" appears on one of the screens. Touch the screen.
- 7. "Touch the red square" messages appear. Touch the red squares in sequence.
- 8. Continue calibration for each monitor by clicking **Standard Calibration** and touching the red squares

- **NOTES:** 1. If you use a single VGA output for multiple monitors, please do not use the **Multiple Monitor** function. Just follow the regular procedure for calibration on each of your desktop monitors.
 - 2. The Rotating function is disabled if you use the Multiple Monitor function.
 - 3. If you change the resolution of display or screen address, you have to redo **Map Touch Screens**, so the system understands where the displays are.

About

This panel displays information about the PenMount controller and this driver version.

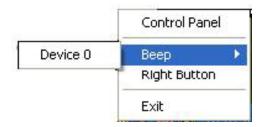


PenMount Monitor Menu Icon

The PenMount monitor icon (PM) appears in the menu bar of Windows 2000/WIN7 system when you turn on PenMount Monitor in PenMount Utilities.



PenMount Monitor has the following function



Control Panel	Open Control Panel Windows
Веер	Setting Beep function for each device
Right Button	When you select this function, a mouse icon appears in the right-bottom of the screen. Click this icon to switch between Right and Left Button functions.
Exit	Exits the PenMount Monitor function.

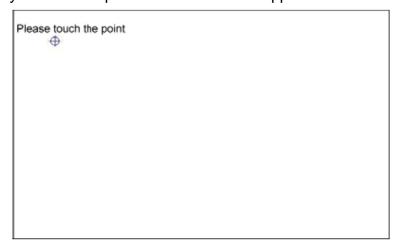
PenMount Rotating Functions

The PenMount driver for Windows 2000/WIN7 supports several display rotating software packages. Windows Me/2000/WIN7 support display rotating software packages such as:

- Portrait's Pivot Screen Rotation Software
- ATI Display Driver Rotate Function
- nVidia Display Driver Rotate Function
- SMI Display Driver Rotate Function
- Intel 845G/GE Display Driver Rotate Function

Configuring the Rotate Function

- 1. Install the rotation software package.
- 2. Choose the rotate function (0°, 90°, 180°, 270°) in the 3rd party software. The calibration screen appears automatically. Touch this point and rotation is mapped.

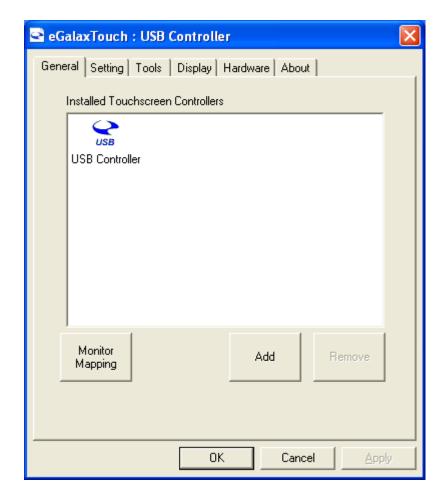


NOTE: The Rotate function is disabled if you use Monitor Mapping

5.2.2 Software Functions(Projected Capacitive)

General

In this window, you can see there is USB Controller. Click **OK** to continue.



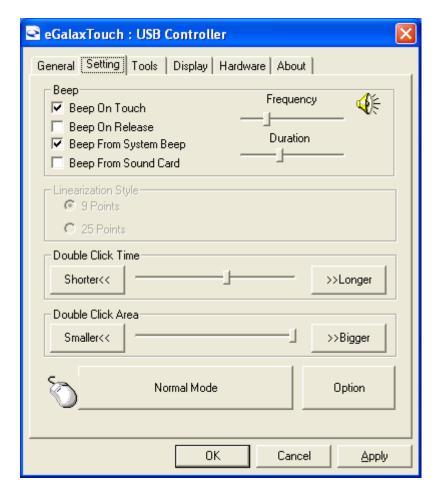
Monitor Mapping

To adjust touch panel

Add

To search for device

Setting



Beep

Beep On Touch

Beep On Release

Beep From System Beep

Beep From Sound Card

Linearization Style

9 points

25 points

Double Click Time

Shorter

Longer

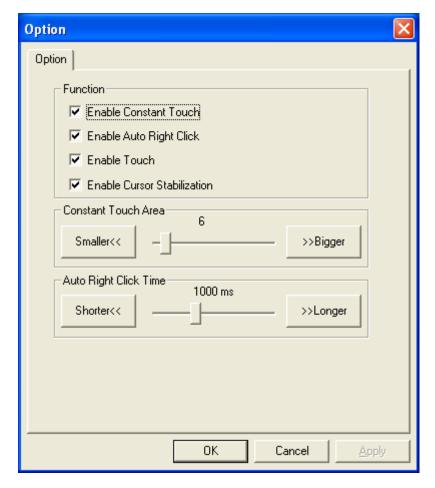
Double Click Area

Smaller

Bigger

Normal mode

Simulate the mouse mode



Option

Function

Enable Constant Touch

Enable Auto Right Click

Enable Touch

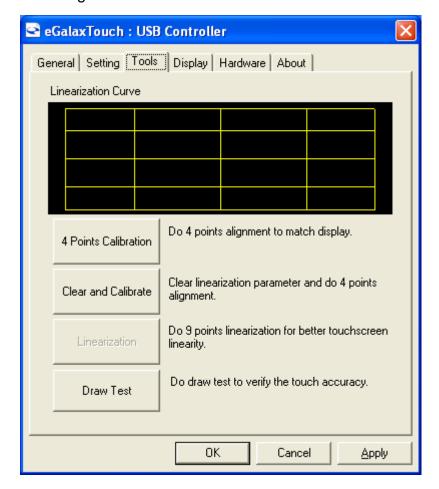
Enable Cursor Stabilization

Constant Touch Area

Auto Right Click Time

Tools

Click **OK** to continue the settings.



4 Points Calibration

Do 4 points alignment to match display.

Clear and Calibrate

Clear linearization parameter and do 4 points alignment.

Linearization

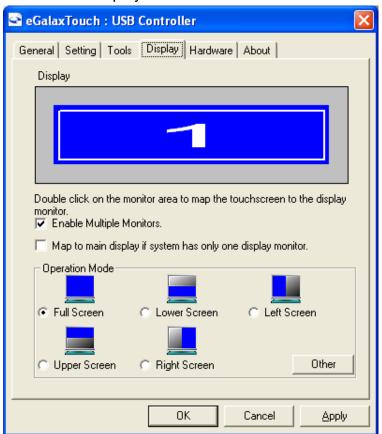
Do 9 points linearization for better touchscreen linearity.

Draw Test

Do draw test to verify the touch accuracy.

Display

In this window, it shows the mode of display.



Enable Multiple Monitors.

Map to main display if system has only one display monitor

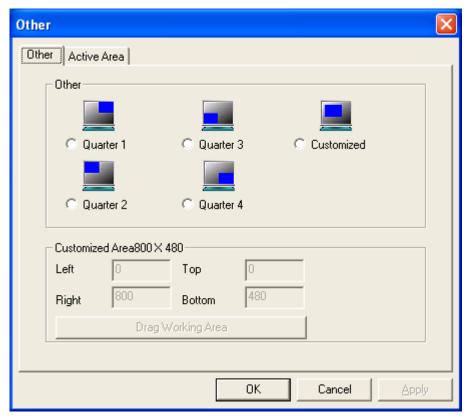
Full Screen

Lower Screen

Left Screen

Upper Screen

Right Screen



Other

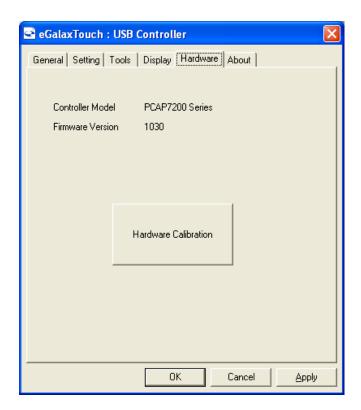
Other mode of display. Quarter1~4 and Customized area.



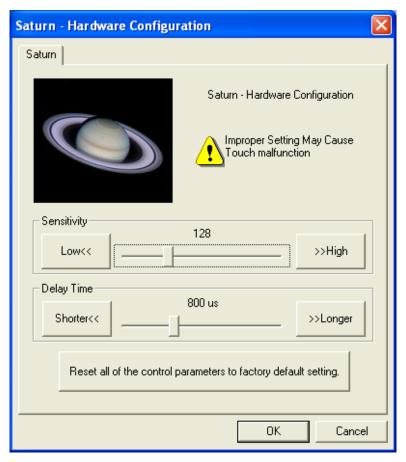
Active Area

Drag active area to enable Active Area Function.

Hardware



Saturn Hardware Configuration



About

To display information about eGalaxTouch and its version.

