

PC-3708

PC/104 Plus ATI Mobility VGA Card

Notice:

This guide is designed for experienced users to setup the system within the shortest time. For detailed information, please always refer to the electronic user's manual.

Safety Precautions

Warning!



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!



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

Notice

Product Insight

PCM-3708 can provide both Dual view and Simulscan (dual display) capabilities.

PCM-3708 Simulscan peripheral setting

1. CRT & Panel
2. CRT & TV

•When utilizing the Dual View feature on PCM-3708, the system allows you to select a master and slave monitor for each VGA peripheral. However when using the simulscan feature there is no need to set VGA monitors as a Master or Slave. **DO NOT SET YOUR VGA MONITORS AS MASTER OR SLAVE SETTING DURING SIMULSCAN OPERATION OR PROBLEMS WILL OCCURE.**

•When installing PCM-3708 onto another SBC (SBC-659, SBC-558, PCM-6896, PCM-6898) remember to install the PCM-3708 ATI VGA Driver and remove the existing VGA driver on SBC-659, SBC-558, PCM-6896, PCM-6898. **Triple View is not supported.**

•ATI M1 VGA chipset offers 8M of video ram, which is sufficient during single view operation. However during dual view operations the video ram has to be shared, so during Dual View operation resolution fields on your VGA monitors must be adjusted. Follow the corresponding resolution field table below to insure proper working order.

Notice

Product Insight

Quick Installation Guide

Features

PCM-3708

Features

- 8 M Video RAM
- Chipset: ATI Mobility M/M1
- Support 48 bit TTL Panel
- TV-Output
- ZV Port
- 2 Channel LVDS
- 128K Bios
- One PC/104+ connector for expansion and PC/104

Installing PC/104+ Modules

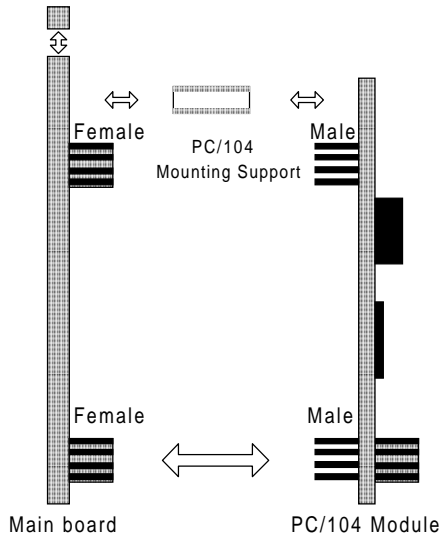
The mainboard's PC/104 + connectors give you the flexibility to attach PC/104 + expansion modules. These modules perform the functions of traditional plug-in expansion cards, but save space and valuable slots.

Installing these modules on the mainboard is quick and simple. The following steps show how to mount the PC/104 + modules:

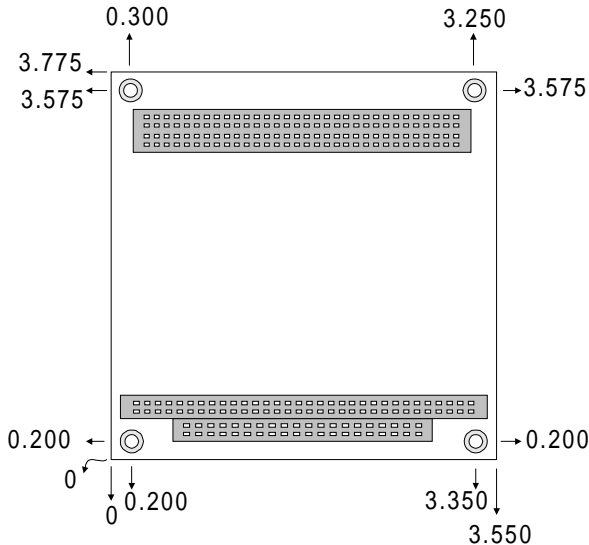
1. Remove the mainboard from your system paying particular attention to the safety instructions already mentioned.
2. Make any jumper or link changes required to the mainboard now. Once the PC/104 + module is mounted you may have difficulty in accessing these.
3. Normal PC/104 + modules have male connectors and mount directly onto the main card. However, to ensure better bus matching, the connectors on the mainboard and the PC/104+ module are both female. For this reason, you may need to use the "male-male" adapter included with the mainboard in order to properly connect your PC/104 + module. (Refer to the diagram on the following page.)
4. Mount the PC/104 + module onto the mainboard by pressing the module firmly but carefully onto the mounting connectors.
5. Secure the PC/104 + module onto the mainboard using the four mounting spacers and screws.

Quick Installation Guide

Installing PC 104 + Module



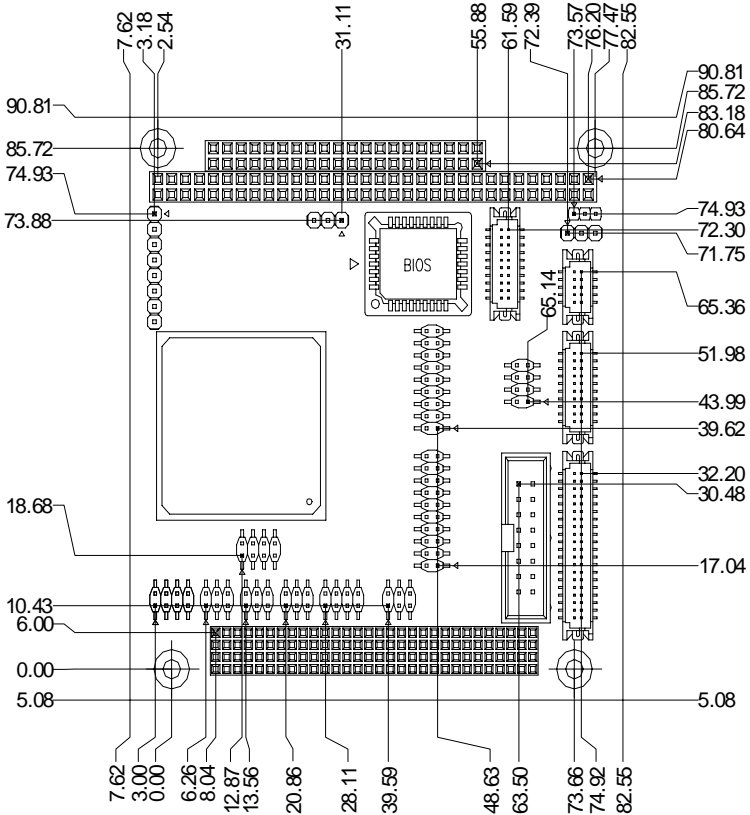
PC/104 & PC/104 Plus Module Mounting Diagram



PC/104 & PC/104 Plus module dimensions
(inches $\pm 5\%$)

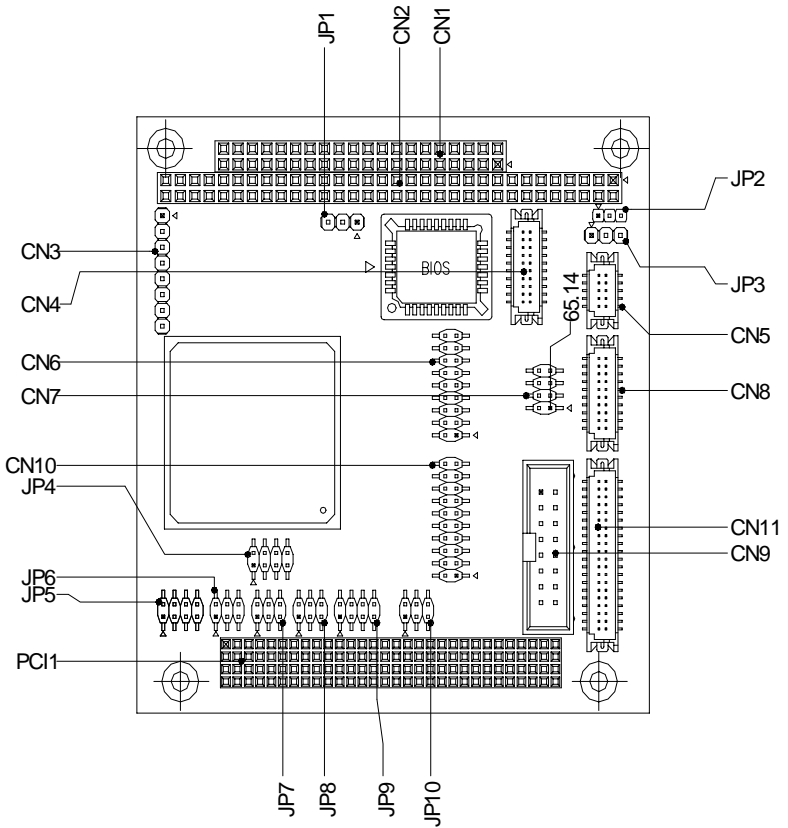
PCM-3708

PCM-3708 Dimensions



Quick Installation Guide

PCM-3708 Connector Locations



Jumpers & Connectors for PCM-3708

Name	Function
JP1	Voltage Setting
JP2	Shift Clock Setting
JP3	Panel Voltage Setting
JP5	Interrupt Setting
JP7	Prerequisite Setting
JP8	PGNT Setting
JP10	LCD Panel Type Setting
<hr/>	
CN5	TTL LCD Connector
CN6	Channel 2 LVDS
CN7	TV Out
CN8	TTL LCD Connector
CN9	CRT Connector
CN10	Channel 1 LVDS
CN11	TTL LCD Connector

Quick Installation Guide

JP1 Voltage Setting

(JP1)

CPU Board 3.3V

Regulator 3.3V

JP1



JP2 Shift Clock Setting

(JP2)

+Shift Clock

-Shift Clock

JP2



JP3 Panel Voltage Setting

(JP3)

5V

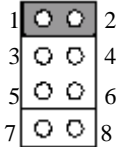
3.3V

JP3

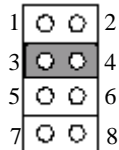


JP5 INT Setting

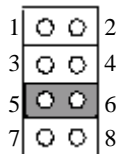
INT # A



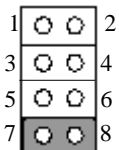
INT # B



INT # C



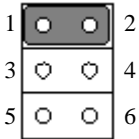
INT # D



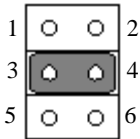
Quick Installation Guide

JP7 PREQ Setting

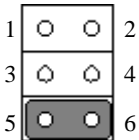
PREQ # 0



PREQ # 1

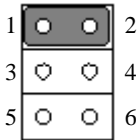


PREQ # 2

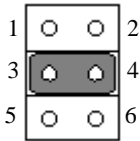


JP8 PGNT Setting

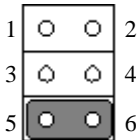
PGNT # 0



PGNT # 1



PGNT # 2

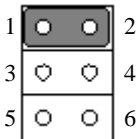


Quick Installation Guide

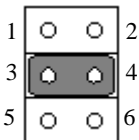
JP10 LCD Panel Type Setting

By placing jumper caps on JP10 you may incorporate the LCD panel of your choice.

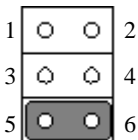
Toshiba (800 x 600) One Channel LVDS 6-6-6



Toshiba (800 x 600) One Channel LVDS 8-8-8 & 16/24 Bit TTL LCD

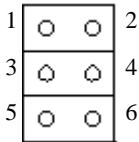


Hyundai (1024 x 768) One Channel LVDS 8-8-8 & 16/24 Bit TTL LCD

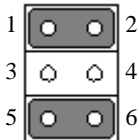


JP10 LCD Panel Type Setting

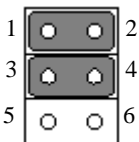
Panel Disabled



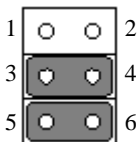
Hyundai (1024 x 768) Two Channel LVDS 6-6-6



Hyundai (1024 x 768) One Channel LVDS 6-6-6



Hyundai (1024 x 768) Two Channel LVDS 8-8-8 & 36/48Bit TTL LCD



Quick Installation Guide

CN5 TTL LCD Connector

PIN	SIGNAL	PIN	SIGNAL
1	GND	2	GND
3	ODD BLUE0	4	ODD BLUE1
5	ODD GREEN0	6	ODD GREEN1
7	ODD RED0	8	ODD RED1
9	GND	10	GND

CN6 Channel 2 LVDS

PIN	SIGNAL	PIN	SIGNAL
1	TXOUT1+	2	TXOUT1-
3	GND	4	GND
5	TXCLK+	6	TXCLK-
7	GND	8	VCC
9	VCC	10	VCC
11	TXOUT2+	12	TXOUT2-
13	GND	14	GND
15	TXOUT0+	16	TXOUT0-
17	TXOUT3+	18	TXOUT3-

CN7 TV-out

PIN	SIGNAL	PIN	SIGNAL
1	Y/R	2	COMP/B
3	GND	4	GND
5	C/G	6	SYNC
7	GND	8	NC

CN8 TTL LCD Connector

PIN	SIGNAL	PIN	SIGNAL
1	GND	2	GND
3	ODD BLUE2	4	ODD BLUE3
5	ODD BLUE4	6	ODD BLUE5
7	ODD BLUE6	8	ODD BLUE7
9	ODD GREEN2	10	ODD GREEN3
11	ODD GREEN4	12	ODD GREEN5
13	ODD GREEN6	14	ODD GREEN7
15	ODD RED2	16	ODD RED2
17	ODD RED4	18	ODD RED4
19	ODD RED6	20	ODD RED7

Quick Installation Guide

CN9 CRT Connector

PIN	SIGNAL	PIN	SIGNAL
1	RED	9	+5V
2	GREEN	10	GND
3	BLUE	11	NC
4	NC	12	SDA
5	GND	13	HSY
6	GND	14	VSX
7	GND	15	SCL
8	GND	16	CHASSIS GND

CN10 Channel 1 LVDS

PIN	SIGNAL	PIN	SIGNAL
1	TXOUT1+	2	TXOUT1-
3	GND	4	GND
5	TXCLK+	6	TXCLK-
7	GND	8	VCC
9	VCC	10	VCC
11	TXOUT2+	12	TXOUT2-
13	GND	14	GND
15	TXOUT0+	16	TXOUT0-
17	TXOUT3+	18	TXOUT3-
19	ENABKL	20	NC

Quick Installation Guide

CN11 TTL LCD Connector

PIN	SIGNAL	PIN	SIGNAL
1	+5V	2	+5V
3	GND	4	GND
5	+3.3V	6	+3.3V
7	ENABKL	8	GND
9	EVEN BLUE0	10	EVEN BLUE1
11	EVEN BLUE2	12	EVEN BLUE3
13	EVEN BLUE4	14	EVEN BLUE5
15	EVEN BLUE6	16	EVEN BLUE7
17	EVEN GREEN0	18	EVEN GREEN1
19	EVEN GREEN2	20	EVEN GREEN3
21	EVEN GREEN4	22	EVEN GREEN5
23	EVEN GREEN6	24	EVEN GREEN7
25	EVEN RED0	26	EVEN RED1
27	EVEN RED2	28	EVEN RED3
29	EVEN RED4	30	EVEN RED5
31	EVEN RED6	32	EVEN RED7
33	GND	34	GND
35	SHCLK	36	FLM
37	M	38	LP
39	NC	40	ENAVEE