## PCM-3794 & PCM-3594

PC/104+ Card Bus Module & 1394 Daughter Board

### 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

#### Warnina!



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 Notice

PCM-3794 features two PCMCIA slots. When integrating two FLASH CARD DEVICES, only one will be accessible.

Notice Notice

### A Message to the Customer

#### **AAEON Customer Services**

Each and every AAEON product is built to the most exacting specifications to ensure reliable performance in the harsh and demanding conditions typical of industrial environments. Whether your new AAEON equipment is destined for the laboratory or the factory floor, you can be assured that your product will provide the reliability and ease of operation for which the name AAEON has come to be known.

Your satisfaction is our primary concern. Here is a guide to AAEON's customer services. To ensure you receive the full benefit of our services, please follow the instructions below carefully.

#### **Technical Support**

We want you to attain the maximum performance from your products. So if you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in your product documentation. These answers are normally a lot more detailed than the ones we can give over the phone.

So please consult this manual first. If you still cannot find the answer, gather all the information or questions that apply to your problem, and with the product close at hand, call your dealer. Our dealers are well trained and ready to give you the support you need to get the most from your AAEON products. In fact, most problems reported are minor and are able to be easily solved over the phone.

In addition, free technical support is available from AAEON engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products.

#### **Product Warranty**

AAEON warrants to you, the original purchaser, that each of its products will be free from defects in materials and workmanship for two years from the date of shipment.

This warranty does not apply to any products which have been repaired or altered by persons other than repair personnel authorized by AAEON, or which have been subject to misuse, abuse, accident or improper installation. AAEON assumes no liability under the terms of this warranty as a consequence of such events.

Because of AAEON's high quality-control standards and rigorous testing, most of our customers never need to use our repair service. If an AAEON product is defective, it will be repaired or replaced at no charge during the warranty period. For out-of-warranty repairs, you will be billed according to the cost of replacement materials, service time, and freight. Please consult your dealer for more details.

If you think you have a defective product, follow these steps:

- Collect all the information about the problem encountered. (For example, CPU type and speed, AAEON products used, other hardware and software used, etc.) Note anything abnormal and list any on-screen messages you get when the problem occurs.
- 2. Call your dealer and describe the problem. Please have your manual, product, and any helpful information readily available.
- 3. If your product is diagnosed as defective, obtain an RMA (return material authorization) number from your dealer. This allows us to process your return more quickly.
- 4. Carefully pack the defective product, a fully-completed Repair and Replacement Order Card and a photocopy proof of purchase date (such as your sales receipt) in a shippable container. A product returned without proof of the purchase date is not eligible for warranty service.
- 5. Write the RMA number visibly on the outside of the package and ship it prepaid to your dealer.

### **Notice**

Dear Customer,

Thank you for purchasing the PCM-3794 board along with the PCM-3594 (1394 daughter board). This Quick Installation Guide is designed to help you to get the most out of the PCM-3794 and PCM-3594, please read it thoroughly before you install and use the board. The product that you have purchased comes with an two-year limited warranty, but AAEON will not be responsible for misuse of the product. Therefore, we strongly urge you to first read the quick installation guide before using the product.

To receive the latest version of the user manual, please visit our Web site at:

Http:\\WWW.AAEON.COM

### **Features**

### **PCM-3794**

#### **Features**

- PCMCIA socket support two type II cards or one type III card
- Support R2 and cardbus

### **PCM-3594**

#### **Features**

- Supports three IEEE-1394 ports (Via PCM-3794)
- Two power input connectors for user customization

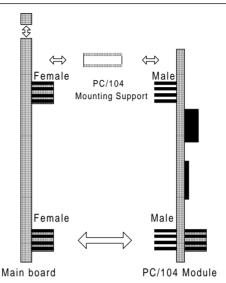
### **Installing PC/104+ Modules**

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.

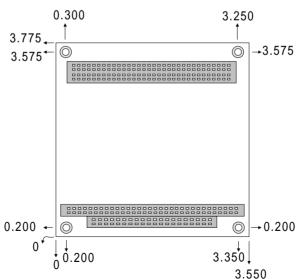
Installing these modules on the mainboard is quick and simple. The following steps show how to mount the PC/104 + modules:

- 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.

### **Installing PC 104 + Module**

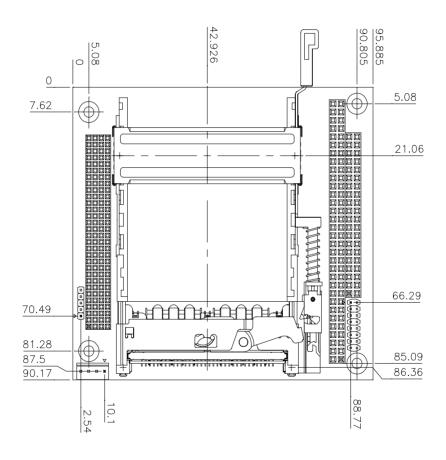


#### PC/104 & PC/104 Plus Module Mounting Diagram

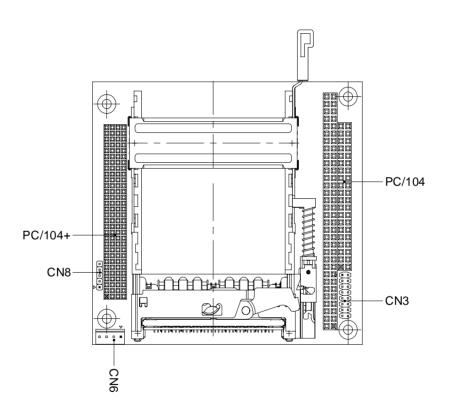


PC/104 & PC/104 Plus module dimenstions (inches ±5%)

### **PCM-3794 Dimensions**



### **PCM-3794 Connector Locations**



### Connectors for PCM-3794

Name	Function
CN3	IEEE_1394 Connector to PCM-3594
CN6	Power Connector to PCM-3594
CN8	PME Connector
S2	PC/104+CLK Select
S3	PC/104+IDSEL
S4	PC / 104 + REQ/GNT Select

### CN3 IEEE\_1394 Connector to PCM-3594

Pin	Signal	Pin	Signal
1	DATA1	2	DATA0
3	DATA3	4	DATA2
5	DATA5	6	DATA4
7	DATA7	8	DATA6
9	CTL1	10	CTL0
11	LINK_ON	12	REQ
13	CLK	14	LPS
15	RST	16	GND

## CN6 Power Connector to PCM-3594

Pin	Signal	
1	+12V	
2	GND	
3	GND	
4	VCC	

### S2: PC104+ CLK Select

Pin	Signal
1	PCICLK0(ON)
2	PCICLK1 (OFF)
3	PCICLK2 (OFF)
4	PCICLK3 (OFF)

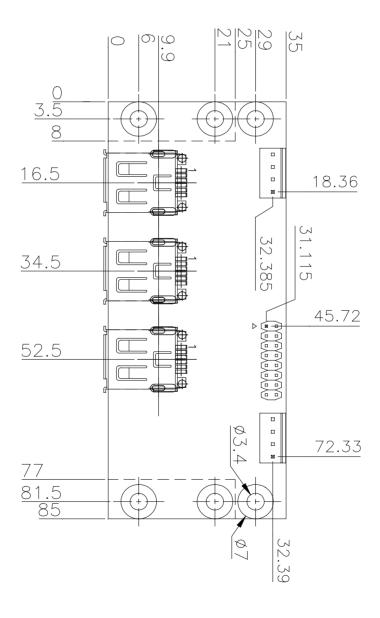
### **S3: PC 104+ IDSEL**

Signal
ID0 (ON)
ID1 (OFF)
ID2 (OFF)
ID3 (OFF)

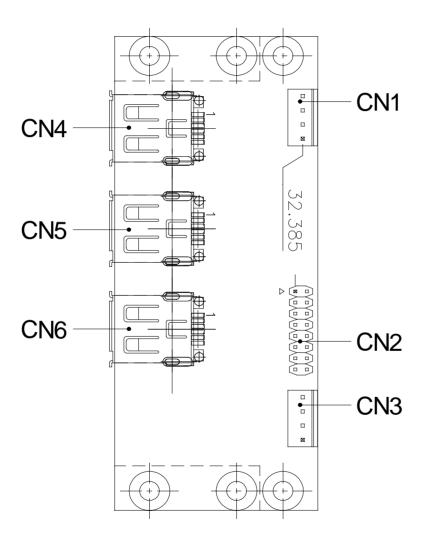
### S4: PC 104+ REQ/GNT Select

Pin	Signal	
1	GNT0(ON)	
2	GNT1 (OFF)	
3	GNT2 (OFF)	
4	REQ0(ON)	
5	REQ1 (OFF)	
6	REQ2 (OFF)	

### **PCM-3594 Dimensions**



### **PCM-3594 Connector Locations**



### **Connectors PCM-3594**

CN1	Power Connector to PCM-3794	
CN2	IEEE 1394 Connector (VIA PCM-3794)	
CN3	Power Connector to power cord (optional)	
CN4, CN5, CN6	1394 Cable Ports	

### CN1 & CN3 Power Connector

Pin	Signal
1	+12V
2	GND
3	GND
4	VCC

### **CN2 IEEE 1394 Connector**

Pin	Signal	Pin	Signal
1	DATA1	2	DATA0
3	DATA3	4	DATA2
5	DATA5	6	DATA4
7	DATA7	8	DATA6
9	CTL1	10	CTL0
11	LINK_ON	12	REQ
13	CLK	14	LPS
15	RST	16	GND

### CN4, CN5, CN6 1394 Cable Ports

Pin	Signal
1	BUS POWER
2	GND
3	TPB-
4	TPB+
5	TPA-
6	TPA+
7	CHASSIS GND
8	CHASSIS GND

