

## Notice

This guide is designed for experienced users to setup the system in the shortest time.

## Safety Precautions

### **Warning!**



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

### **Caution!**



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

OZONE SAFE



RECYCLABLE

## **A Message to the Customer**

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First of all, thank you for purchasing PFM-P01A PC/104 POE Module. This Quick Installation Guide will help you on the process of the installation. Please read it thoroughly before you start to install it. The product comes with a sheet of warranty for two years assurances except for improper use. Therefore, we strongly suggest you to read and refer to the Quick Installation Guide before any installation. You may visit AAEON website for the latest version of the instruction. Please refer to <http://www.aaeon.com>

## Product Warranty

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### AAEON Customer Services

All products in AAEON are designed as the strictest specifications to ensure that the products will own the reliable performance in the typical industrial environments. Whether your purchase from AAEON is made to the purpose of the laboratory or the factory facility, you can be assured that every purchase in AAEON will provide the reliability and stability of operation.

Your satisfaction is our primary concern. Here is a guide for AAEON's customer services. Ensure you get the full benefits of our services, please follow the instructions below step by step.

### Technical Support

We require you to get the maximum performance from your products.

If you run into technical difficulties, we'll be here always for you. For the most frequently asked questions, you can easily find solutions in your product documentation. The guide is detailed specification, so please refer to it first. Therefore, we suggest strongly that you can read it before asking for a customer service over the phone. If you still cannot find the answer, gather all questions you can think of and have the product at hand before giving a call to your dealer. All dealers of AAEON are well-trained and ready to provide you as many supports as we can. Based on the customer service we've

encountered until now, most of problems are minor and able to be easily solved over the phone. In addition, free-charged technical support is available from AAEON engineers in the office time. We are always pleased to give advice regarding to any installation and operation for AAEON products.

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## 1.1 Features

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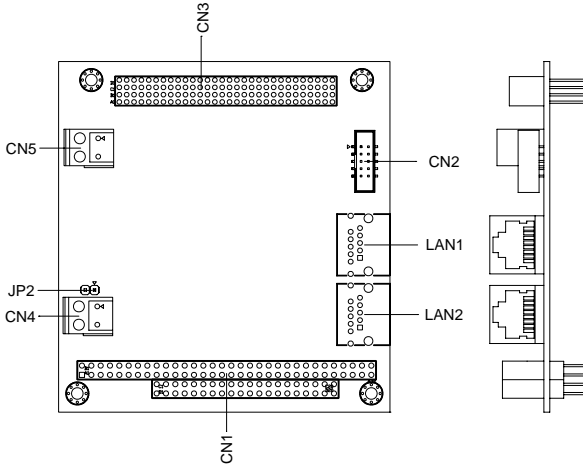
- Supports Power over Ethernet to provide +5V DC output

## 1.2 Specifications

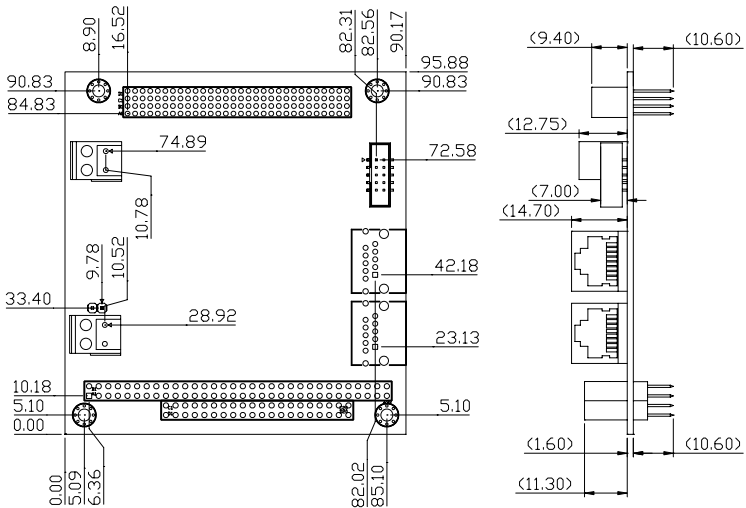
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- Form Factor                      3.55" x 3.775" (90mm x 96mm)
- PoE PD Chip                      TI TPS2375
- Power Output                      +5V DC / 10Watts

### 1.3 Location of Jumpers and Connectors



### 1.4 Mechanical Drawing



## 1.5 List of Jumpers

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

Label	Function
JP2	Enable/Disable POE function

## 1.6 List of Connectors

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

Label	Function
CN1	PC/104 Connector (Provides +5V DC Output)
CN2	Ethernet Port
CN3 (optional)	PCI-104 Connector (Provides +5V DC Output)
CN4	+16V to +48V DC Input Connector
CN5	+5V DC Output Connector
LAN1	Ethernet Port
LAN2	PoE Port

**Note:**

1. Use either CN2 or LAN 1 to connect Ethernet. CN2 and LAN1 cannot be used simultaneously.
2. CN4 is the backup power input of PoE. LAN2 and CN4 can be used simultaneously.

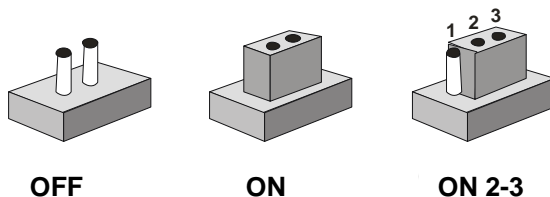


## 1.7 Setting Jumpers

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

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



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

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

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

## 1.8 Enable/ Disable PoE Function (JP2)

JP2	Function
1-2	Disable PoE
No short	Enable PoE

## 1.9 PC/104 Connector (CN1)

Pin	Signal	Pin	Signal
A1	NC	B1	GND
A2	NC	B2	NC
A3	NC	B3	+5V
A4	NC	B4	NC
A5	NC	B5	NC
A6	NC	B6	NC
A7	NC	B7	NC
A8	NC	B8	NC
A9	NC	B9	NC
A10	NC	B10	GND
A11	NC	B11	NC
A12	NC	B12	NC
A13	NC	B13	NC
A14	NC	B14	NC
A15	NC	B15	NC

A16	NC	B16	NC
A17	NC	B17	NC
A18	NC	B18	NC
A19	NC	B19	NC
A20	NC	B20	NC
A21	NC	B21	NC
A22	NC	B22	NC
A23	NC	B23	NC
A24	NC	B24	NC
A25	NC	B25	NC
A26	NC	B26	NC
A27	NC	B27	NC
A28	NC	B28	NC
A29	NC	B29	+5V
A30	NC	B30	NC
A31	NC	B31	GND
A32	GND	B32	GND
C1	GND	D1	GND
C2	NC	D2	NC
C3	NC	D3	NC
C4	NC	D4	NC
C5	NC	D5	NC
C6	NC	D6	NC

C7	NC	D7	NC
C8	NC	D8	NC
C9	NC	D9	NC
C10	NC	D10	NC
C11	NC	D11	NC
C12	NC	D12	NC
C13	NC	D13	NC
C14	NC	D14	NC
C15	NC	D15	NC
C16	NC	D16	NC
C17	NC	D17	+5V
C18	NC	D18	NC
C19	NC	D19	GND
C20	GND	D20	GND

### 1.10 PCI-104 Connector (CN3) (Optional)

Pin	Signal	Pin	Signal
A1	GND	B1	NC
A2	NC	B2	NC
A3	NC	B3	GND
A4	NC	B4	NC
A5	GND	B5	NC

A6	NC	B6	NC
A7	NC	B7	NC
A8	NC	B8	NC
A9	NC	B9	GND
A10	GND	B10	NC
A11	NC	B11	NC
A12	NC	B12	NC
A13	NC	B13	GND
A14	GND	B14	NC
A15	NC	B15	NC
A16	NC	B16	NC
A17	NC	B17	NC
A18	NC	B18	GND
A19	NC	B19	NC
A20	GND	B20	NC
A21	NC	B21	+5V
A22	+5V	B22	NC
A23	NC	B23	GND
A24	GND	B24	NC
A25	NC	B25	NC
A26	+5V	B26	NC
A27	NC	B27	+5V
A28	GND	B28	NC

A29	NC	B29	INC
A30	NC	B30	NC
C1	+5V	D1	NC
C2	NC	D2	+5V
C3	NC	D3	NC
C4	GND	D4	NC
C5	NC	D5	GND
C6	NC	D6	GND
C7	GND	D7	NC
C8	NC	D8	NC
C9	NC	D9	NC
C10	NC	D10	NC
C11	NC	D11	GND
C12	GND	D12	NC
C13	NC	D13	NC
C14	NC	D14	NC
C15	NC	D15	GND
C16	GND	D16	NC
C17	NC	D17	NC
C18	NC	D18	NC
C19	NC	D19	NC
C20	NC	D20	GND
C21	NC	D21	NC

C22	GND	D22	NC
C23	NC	D23	NC
C24	+5V	D24	NC
C25	NC	D25	GND
C26	GND	D26	NC
C27	NC	D27	GND
C28	+5V	D28	NC
C29	NC	D29	NC
C30	NC	D30	GND

### 1.11 LAN Connector (CN2)

Pin	Signal	Pin	Signal
1	RX-	2	RX+
3	NC	4	NC
5	GND	6	GND
7	NC	8	NC
9	TX+	10	TX-

### 1.12 DC Input (CN4) (+16V~+48V)

CN4	Function
1	+ (Anode)
2	- (Cathode)

### 1.13 DC Output (CN5) (+5V)

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<b>CN5</b>	<b>Function</b>
1	+ (Anode)
2	- (Cathode)



## Below Table for China RoHS Requirements

产品中有毒有害物质或元素名称及含量

## AAEON Main Board/ Daughter Board/ Backplane

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