PCM-3665 PC/104-Plus Dual Giga Ethernet LAN Module Startup Manual

Introduction

The powerful, new PC/104-plus dual Giga Ethernet LAN module is designed to support the ever increasing number of network connected embedded products on the market. It can be applied to any size form factor CPU board by employing the PC/104-plus throughput connectors. The PCM-3665 can provide a single or dual ethernet configuration using combinations of Intel's 82541PI ethernet chipsets (see ordering information below). The PCM-3665 provides full 32-bit performance, PCI bus capability and is in full compliance with IEEE 802.3u 100Base-T specifications and IEEE 802.3x Full Duplex Flow Control.The PCM-3665 is your off-the-shelf solution that can immediately provide one or two ethernet ports to your embedded system.

The PCM-3665 module includes a built-in 10 pin box header and RJ-45 connectors. Two diagnostic LEDs indicate the operating status of the module and the network. You can define LEDs according to the application. The PCM-3665 comes with drivers for a wide variety of networks and operating systems.

Packing list

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

• 1 Startup Manual for PCM-3665

• 1 CD-ROM for PCM-3665 Driver/Utility

• 1 Giga LAN cable for PCM-3665-01A1E

• 2 Giga LAN cable for PCM-3665P-00A1E

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

Note 1: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: www.adobe.com/products/acrobat/readstep2.html(Acrobat is a trademark of Adobe.)

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This manual is for the PCM-3665 series Rev. A1.

Part No.2006366500   1st Edition
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Specifications

Standard Functions

• **Chipset:** Intel 82541PI

• **Single/Twin Ethernet Port:** PCM-3665-00A1E Dual Giga LAN with RJ45 con; PCM-3665P-00A1E Dual Giga LAN w/o RJ45 con; PCM-3665-01A1E Single Giga LAN w/o RJ45 con.

• **Network Port:** Provide a standare IEEE 802.3 Ethernet Interface for 1000Base-T, 100Base-TX, and 10Base-T applications (802.3, 802.3u, and 802.3ab)

• **Compatability:** PCI version 2.2, 33MHz PCI

• **Expansion Interface:** PC104+ (ISA bypass)

Mechanical and Environmental

• **Power Consumption:** Dual LAN: +5V @ 1.2A (typical); Single LAN: +5V @ 0.6A (typical)

• **Power Requirements:** +5V +/-5% tolerance on power supply

• **Dimensions (L x W):** 96 x 90 mm (3.8" x 3.5")

• **Weight:** 0.084kg (0.185 lb)

• **Operating Temperature:** 0 ~ 60°C(32~140°F)

• **Storage Temperature:** -40 ~ 85°C(-40~185°F)

• **Operating Humidity:** 0%~90% relative humity,non-condensing

Jumpers & Connectors

Connectors on the board link it to external devices, such as hard disk drives, a keyboard or expansion bus connectors. In addition, the board has a number of jumpers that allow you to configure your system to suit your application.

The table below lists the function of each of the jumpers and connectors.

Jumper

J1	PCI VIO Select
S1	PCI INT Select

Connectors

Label	Function
CN1	PC104- Connector
CN3	LAN1 RJ45 Connector
CN4	LAN1 Internal Connector
CN5	LAN1 LED Connector
CN6	LAN2 Internal Connector
CN7	LAN2 RJ45 Connector
CN8	LAN2 LED Connector
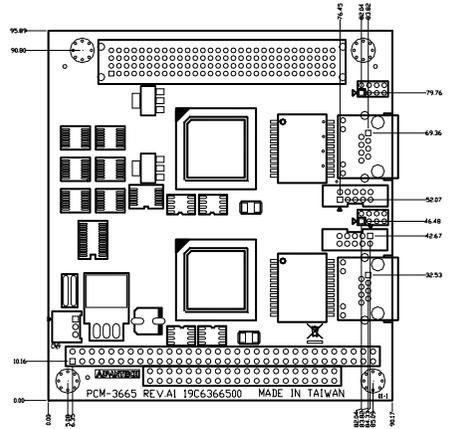
Mechanical Drawing (component side)

Board Layout

Locating connector (component side)
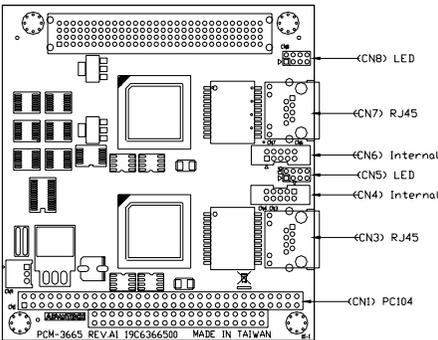
Mechanical Drawing (solder side)

Jumper Settings

Jumper setting

J1: PCI VIO Select

Pin	Function
1-2*	+5V
2-3	+3.3V

*: Default

S1: PCI INT Select

SW (2,1)	LAN1				
ON, ON	PCI_REQ#0	PCI_GNT#0	PCI_CLK#0	PCI_IDSEL#0	PCI_INTA#
ON, OFF	PCI_REQ#1	PCI_GNT#1	PCI_CLK#1	PCI_IDSEL#1	PCI_INTB#
OFF, ON	PCI_REQ#2	PCI_GNT#2	PCI_CLK#2	PCI_IDSEL#2	PCI_INTC#
OFF, OFF	PCI_REQ#3	PCI_GNT#3	PCI_CLK#3	PCI_IDSEL#3	PCI_INTD#

SW (4,3)	LAN2				
ON, ON	PCI_REQ#0	PCI_GNT#0	PCI_CLK#0	PCI_IDSEL#0	PCI_INTA#
ON, OFF	PCI_REQ#1	PCI_GNT#1	PCI_CLK#1	PCI_IDSEL#1	PCI_INTB#
OFF, ON	PCI_REQ#2	PCI_GNT#2	PCI_CLK#2	PCI_IDSEL#2	PCI_INTC#
OFF, OFF	PCI_REQ#3	PCI_GNT#3	PCI_CLK#3	PCI_IDSEL#3	PCI_INTD#

Caution!

Achtung!