PCM-3115 PC/104-Plus 2 Slot PCMCIA Module

Startup Manual

Introduction

The PCM-3115 is a PCMCIA interface module that attaches to the PC/104-plus connector on your CPU card or PC/104-plus CPU module. The PCM-3115 provides 32-bit performance, PCI bus capability, and is fully compliant with PC Card 95/97/98, Card 32 (32 Bit) specifications and PCMCIA V2.1 / JEIDA 4.2 (16 Bit).

The module includes 2 PCMCIA slots. Two LEDs indicate the activity of the PCMCIA card in each slot. The PCM-3115, with its Ricoh Card Bus Controller chipset, brings the latest PCMCIA performance features to Advantech's PC/104 line. This includes low power consumption (hardware suspend) and Microsoft native driver support. The Ricoh chipset, with a substantial list of pretested supported devices, allows for greater all-around compatibility for your PCMCIA device support.

Packing List

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

- 1 PCM-3115 PC/104 PCMCIA module
- 1 Start-up manual

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

For more information on this and other Advantech products, please visit our website at:

http://www.advantech.com
http://www.advantech.com/epc

For technical support and service, please visit our support website at:

http://www.advantech.com/support

This manual is for the PCM-3115

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Features

PCM-3115 PC/104-Plus 2 Slot PCMIA Module

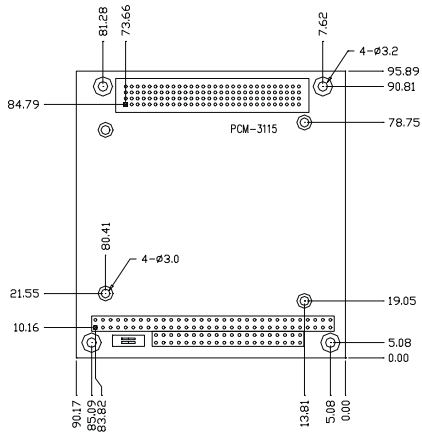
- High-performance (PC/104 **PLUS***)*
- Low Power consumption (Hardware Suspend)
- Complies with PC Card 95/97/98, Card 32 (32 Bit)
- PCMCIA V2.1 / JEIDA 4.2 (16 Bit)
- Accept Type I/II/III PCMCIA cards
- Supports 2 PCMCIA Slots (when Type III card used in Slot 2, Slot 1 will be occupied too)
- Support Plug & Play automatic detection & configuration
- Support Windows NT 4.0, Windows 95/98/2000

Specifications

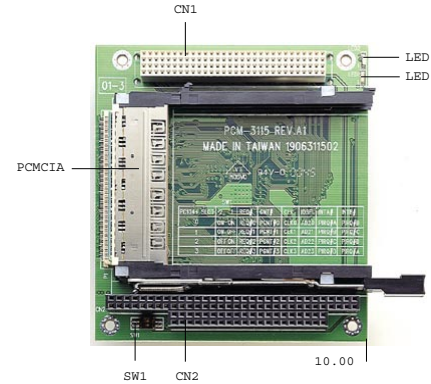
- System Chipset: Ricoh Card Bus Chipset
- Power management: Supports Advanced Configure Power Interface (ACPI)
- Data Bus: 32 Bit
- Bus Speed: Compliant with PCI 2.1 (33 Mhz)
- PCMCIA Slot: 2 Slots
- PCMCIA Card: Accept Type I/II/III PCMCIA Cards
- Plug & Play: Support Plug & Play automatic detection & configuration
- PC/104 expansion: 104-pin and 120-pin 16/32-bit PC104 /Plus module connector
- Operating Voltage: +5 V Only
- Power Consumption: +5 @ 70 mA (Typical)
- Size/Weight: 96 x 90 mm (3.8” x 3.5”). 90 g (0.198 lb)
- Environment: 0 ~ 60° C (operation), -40 ~ 85° (Storage)
- Humidity: 0 ~ 90 %

Mechanical Drawings

Board Dimensions

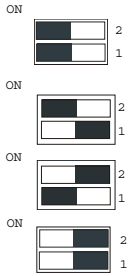


Locating Connectors and Jumpers



Jumper Settings

SW1: PC/104 Plus Module IRQ Setting



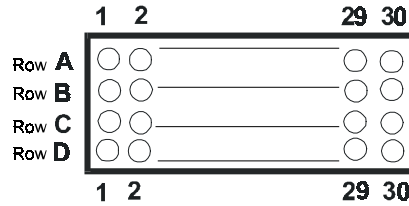
PC104 plus slot	REQ#	GNT#	CLK	ID Address	INT#0	INT#1	INT#2	INT#3
1	REQ#0	GNT#0	CLK0	AD 20	INT#A	INT#B	INT#C	INT#D
2	REQ#1	GNT#1	CLK1	AD 21	INT#B	INT#C	INT#D	INT#A
3	REQ#2	GNT#2	CLK2	AD22	INT#C	INT#D	INT#A	INT#B
4	REQ#2	GNT#2	CLK2	AD23	INT#D	INT#A	INT#B	INT#C

Connectors and Jumpers

CN1	PC104/Plus Connector (PCI)
CN 2	PC 104 plus connector (ISA)
P1	PCMC2A socket
SW1	PC104 plus slot select
LED1	PCMC2A socket 1 activity
LED2	PCMC2A socket 2 activity

PC/104+ Bus signal assignments (PCI)

Pin Number	Signal (CN1) RowA	RowB	Signal (CN1) RowC	RowD
1	GND/5V/KEY	RESERVED	+5	AD00
2	VI/O	AD02	AD01	+5V
3	AD05	GND	AD04	AD03
4	C/BE0*	AD07	GND	AD06
5	GND	AD09	AD08	GND
6	AD11	VI/O	AD10	M66EN
7	AD14	AD13	GND	AD12
8	+3.3V	C/BE1*	AD15	+3.3V
9	SERR*	GND	SB0*	PAR
10	GND	PERR*	+3.3V	SDONE
11	STOP*	+3.3V	LOCK*	GND
12	+3.3V	TRDY*	GND	DEVSEL*
13	FRAME*	GND	IRDY*	+3.3V
14	GND	AD16	+3.3V	C/BE2*
15	AD18	+3.3V	AD17	GND
16	AD21	AD20	GND	AD19
17	+3.3V	AD23	AD22	+3.3V
18	IDSELO	GND	IDSEL1	IDSEL2
19	AD24	C/BE3*	VI/O	IDSEL3
20	GND	AD26	AD25	GND
21	AD29	+5V	AD28	AD27
22	+5V	AD30	GND	AD31
23	REQ0*	GND	REQ1*	VI/O
24	GND	REQ2*	+5V	GNT0*
25	GNT1*	VI/O	GNT2*	GND
26	+5V	CLK0	GND	CLK1
27	CLK2	+5V	CLK3	GND
28	GND	INTD*	+5V	RST*
29	+12V	INTA*	INTB*	INTC*
30	-12V	Reserved	Reserved	GND/3.3V KEY
* low active				



: PC/104-Plus connector (PCI bus)

PC/104+ Bus signal assignments (ISA)

Pin Number	Signal (CN2) RowA	RowB	Signal (CN2) RowC	RowD
1	IOCHCHK*	GND	GND	GND
2	SD7	RESET	SBHE*	MEMCS16*
3	SD6	+5 V	LA23	IOCS16*
4	SD5	IRQ9	LA22	IRQ10
5	SD4	-5V	LA21	IRQ11
6	SD3	DRQ2	LA20	IRQ12
7	SD2	-12V	LA19	IRQ15
8	SD1	ENDXFR*	LA18	IRQ14
9	SD0	+12V	LA17	DACKO*
10	IOCHRDY	(KEY)	MEMR*	DRQ0
11	AEN	SMEMW*	MEMW*	DACK5*
12	SA19	SMEMR*	SD8	DRQ5
13	SA18	IOW*	SD9	DACK6*
14	SA17	IOR*	SD10	DRQ6
15	SA16	DACK3*	SD11	DACK7*
16	SA15	DRQ3	SD12	DRQ7
17	SA14	DACK1*	SD13	+5V
18	SA13	DRQ1	SD14	MASTER*
19	SA12	REFRESH*	SD15	0V
20	SA11	SYSCLK	(KEY)	0V
21	SA10	IRQ7	----	----
22	SA9	IRQ6	----	----
23	SA8	IRQ5	----	----
24	SA7	IRQ4	----	----
25	SA6	IRQ3	----	----
26	SA5	DACK2*	----	----
27	SA4	TC	----	----
28	SA3	BALE	----	----
29	SA2	+5V	----	----
30	SA1	OSC	----	----
31	SA0	0V	----	----
32	0V	0V	----	----
* low active