

**Half-size PCISA Intel® Pentium® M or Celeron® M
processors with a 400MHz FSB and comes with LCD, CRT,
dual LAN,dual-display support, USB2.0 and audio**

PCISA-6770E2-RS

Quick Installation Guide

Version 3.0

Aug. 04, 2008

Package Contents

PCISA-6770E2-RS package includes the following items:

- 1 x PCISA-6770E2-RS single board computer
- 1 x ATA66/100 HDD cable
- 1 x KB/MS Y cable
- 1 x RS232/LPT cable
- 1 x RS232/422/485 cable
- 1 x USB cable
- 1 x Audio cable
- 1 x mini jumper pack
- 1 x Utility CD
- 1 x QIG (Quick Installation Guide)



©2006 Copyright by IEI Technology corp.
All rights reserved.

Specifications

- CPU: Intel® Pentium® M or Celeron® M processors with a 400MHz FSB
- System Chipset: Intel® 852GM+ICH4
- BIOS: AMI BIOS Label
- System memory: One 184-pin 1GB (max.) 200MHz or 266MHz DDR SDRAM DIMM supported
- Ethernet: Dual 10/100Mbps Intel® 82562ET/82551ER Ethernet chipset
- I/O

I/O Interface:

- 1 x RS-232
- 1 x RS-232/422/485
- 1 x LPT by pin-header
- 1 x IrDA by pin-header
- 5 x USB 2.0(1 on rear,4 by pin header)
- 1 x ATA-100
- 1 x ATA-33 IDE channel
- 1 x PS/2 keyboard/mouse
- 1 x 5-pin header for keyboard
- 1 x FDD

Super I/O: W83627HG

Digital I/O:8-bit digital I/O, 4-bit output / 4-bit input

- Display: CRT integrate in Intel® 852GM
18/24-bit dual-channel LVDS
- Audio: Realtek ALC655 AC'97 codec
- Power supply:5V/12V, AT/ATX power support
- Power Consumption:
5V@3.5A, 12V @1.9A running a 1.7GHz 2MB L2 cache Intel® Pentium® M processor with 266 MHz 512MB DDR DIMM
- Temperature: 0 ~ 60°C(32 ~ 140°F)
- Watchdog timer: Software programmable 1-255 sec. by super I/O

Ordering Information

PCISA-6770E2-RS-R30

PCISA Intel® Pentium® M/ Celeron® M CPU Card with VGA/LVDS, Dual LAN,USB2.0 and Audio

PCISA-6770E2-RS-600-R30

PCISA Intel® Celeron® M 600MHz 512K Cache CPU Card with VGA/LVDS ,Dual LAN,USB2.0 and Audio

PCISA-6770E2-RS-1GZ-R30

PCISA Intel® Celeron® M 1GHz Zero Cache CPU Card with VGA/LVDS ,Dual LAN,USB2.0 and Audio

32200-000058-RS: 2.0mm pitch FDD cable

32100-133600-RS: 2.0mm to 2.54mm pitch front panel cable

32100-126600-RS: 2.0mm to 2.54mm pitch USB cable

CF-518-RS: CPU cooler

CF-479B-RS: CPU cooler

Jumpers setting and Connectors

Table of Jumpers and Connectors	
LABEL	FUNCTION
J_CMOS1	CMOS state setting
JP1	COM2 Port Mode setting
JCF1	Configure CF Card type
J_VLVDS1	LVDS Voltage Selection
JP2	LVDS Panel Resolution Selection
KB_MS1	PS/2 Mouse & Keyboard Connector
KB1	5-pin Header Keyboard Connector
LAN1/LAN2	RJ45 LAN Connector
VGA1	VGA 15-pin Female Connector
CPU_FAN1	CPU Fan Connectors
ATXCTL1	Backplane to Main Board ATX Power Control Connector
F_PANEL1	PWR & RST Buttons and Indicators
USB_C4	USB Port Connectors
IDE1	IDE Connector 1
IDE2	IDE Connector 2
FDD1	FDD Connector
LPT1	Parallel Port Connector
COM1	Internal Serial Port 10-pin Connector
COM2	Internal Serial Port 14-pin Connector
DIO1	Digital I/O Connector
INVERTER1	Panel Backlight +12V Power Source
LVDS1	Dual Link LVDS
USB01 USB23	Internal 4 Port USB Connector
J_AUDIO1	AC'97 Connector
CD_IN1	CD-IN Input Connector
PWR1	Power Source Connector
IR1	IrDA Infrared Interface Connector
DVI1(optional)	Digital Visual Interface Connector

J_CMOS1 : Clear CMOS Setup	
J_CMOS1	DESCRIPTION
Short 1-2	Keep CMOS Setup (Default)
Short 2-3	Clear CMOS Setup

JCF1: configure CF Card type	
JCF1	DESCRIPTION
Open	Slave (Default)
Short 1-2	Master

J_VLVDS1:LVDS Voltage election	
J_VLVDS1	DESCRIPTION
1-2	+3.3V LVDS (Default)
2-3	+5V LVDS

JP1:Configure COM2 Mode	
JP1	DESCRIPTION
1-2	RS-232 (Default)
3-4	RS-422
5-6	RS-485

ATXCTL1 : Backplane to Mainboard Connector	
PIN	DESCRIPTION
1	GND
2	PS_ON#
3	5VSB

CPU_FAN1:CPU Fan Connector	
PIN	DESCRIPTION
1	SYSFANIN
2	+12V
3	GND

CD_IN1: Audio CD-IN Connector	
PIN	DESCRIPTION
1	CD-IN L
2	GND_AUDIO
3	GND_AUDIO
4	CD-IN R

IR1: IrDA connector	
PIN	DESCRIPTION
1	VCC
2	NC
3	IR-RX
4	GND
5	IR-TX
6	CIRRX

JP2 : LVDS Panel Resolution Selection	
JP2	DESCRIPTION
OFF	640 X 480 (18bit) (Default)
1-2	800 X 600 (18bit)
3-4	1024 X 768 (24bit)
1-2 & 3-4	1280 X 1024 (36bit)
5-6	1400 X 1050 (36bit)
1-2 & 5-6	1024 X 768 (18bit)
3-4 & 5-6	1600 X 1200 (48bit)
1-2 & 3-4 & 5-6	1280 X 1024 (48bit)
7-8	800 X 600 (24bit)
1-2 & 7-8	1366 X 768 (24bit)
3-4 & 7-8	1024 X 768 (36bit)
1-2 & 3-4 & 7-8	1400 X 1050 (48bit)
5-6 & 7-8	1600 X 1200 (36bit)
1-2 & 5-6 & 7-8	800 X 480 (18bit)
3-4 & 5-6 & 7-8	800 X 480 (24bit)
1-2 & 3-4 & 5-6 & 7-8	1366 X 768 (48bit)

F_PANEL1:Front Panel Jumper					
	PIN	DESCRIPTION	PIN	DESCRIPTION	
PWRBTN	1	PWR_BTN+	2	PWR_LED+	PWRLED
	3	PWR_BTN-	4	PWR_LED-	
HDDLED	5	HD_LED+	6	RESET+	RESET
	7	HD_LED-	8	RESET-	

KB1:5-pin Header Keyboard Connector	
Pin	DESCRIPTION
1	KEYBOARD CLOCK
2	KEYBOARD DATA
3	N/C
4	GND
5	VCC

USB01 & USB23 : Internal USB Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	VCC	2	GND
3	DATA-	4	DATA+
5	DATA+	6	DATA-
7	GND	8	VCC

COM1 : 10PIN Serial Port Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	DCD#	2	DSR#
3	RXD	4	RTS#
5	TXD	6	CTS#
7	DTR#	8	RI#
9	GND	10	NC

COM2 : 14-Pin Serial Port Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	DCD#	2	DSR#
3	RXD	4	RTS#
5	TXD	6	CTS#
7	DTR#	8	RI#
9	GND	10	NC
11	TX+	12	TX-
13	RX+	14	RX-

PWR1 : ATX POWER IN	
PIN NO.	DESCRIPTION
1	VCC
2	GND
3	GND
4	+12V

INVERTER1 : 5-pin Header Inverter Connector	
PIN	DESCRIPTION
1	LCD_BKLTCTL
2	GROUND
3	+12V
4	GROUND
5	BACKLIGHT ENABLE

LVDS1 : LVDS LCD Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	GND
3	LVDSA_Y0+	4	LVDSA_Y0-
5	LVDSA_Y1+	6	LVDSA_Y1-
7	LVDSA_Y2+	8	LVDSA_Y2-
9	LVDSA_CLK+	10	LVDSA_CLK-
11	LVDSA_Y3+	12	LVDSA_Y3-
13	GND	14	GND
15	LVDSB_Y0+	16	LVDSB_Y0-
17	LVDSB_Y1+	18	LVDSB_Y1-
19	LVDSB_Y2+	20	LVDSB_Y2-
21	LVDSB_CLK+	22	LVDSB_CLK-
23	LVDSB_Y3+	24	LVDSB_Y3-
25	GND	26	GND
27	LVDS_VCC	28	LVDS_VCC
29	LVDS_VCC	30	LVDS_VCC

J_AUDIO1: AC'97 Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	SPK L	2	SPK R
3	GND_AUDIO	4	GND_AUDIO
5	LINE_OUTL	6	LINE_OUTR
7	LINEIN L	8	LINEIN R
9	GND_AUDIO	10	GND_AUDIO
11	MICIN	12	GND_AUDIO

DIO1 : Digital Input / Output Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	Ground	2	VCC
3	Output 3	4	Output 2
5	Output 1	6	Output 0
7	Input 3	8	Input 2
9	Input 1	10	Input 0

DVI1 : DVI Connector (Optional)			
DVI Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	Data 2-	14	+5V Power
2	Data 2+	15	GND
3	GND	16	Hot Plug Detect.
4	N/C	17	Data 0-
5	N/C	18	Data 0+
6	DDC Clock	19	GND
7	DDC Data	20	N/C
8	N/C	21	N/C
9	Data 1-	22	GND
10	Data 1+	23	Clock +
11	GND	24	Clock -
12	N/C	25	GND

LPT1 : Parallel Port Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	STROBE#	14	AUTO FORM FEED #
2	DATA0	15	ERROR#
3	DATA1	16	INITIALIZE#
4	DATA2	17	PRINTER SELECT LN#
5	DATA3	18	GND
6	DATA4	19	GND
7	DATA5	20	GND
8	DATA6	21	GND
9	DATA7	22	GND
10	ACKNOWLEDGE#	23	GND
11	BUSY	24	GND
12	PAPER EMPTY	25	GND
13	PRINTER SELECT		

The technical drawing illustrates the PCISA-6770 Rev.3.0, a compact industrial PC. The top view shows a rectangular board with a central processor area, surrounded by various components and connectors. The side view shows the board's profile, highlighting its slim design and the location of the front panel connectors.

Top View Dimensions (mm):

- Overall Width: 184.99
- Overall Height: 163.70
- Processor Area Width: 122.38
- Processor Area Height: 119.13
- Left Margin: 11.81
- Right Margin: 103.53
- Top Margin: 161.34
- Bottom Margin: 157.45
- Front Panel Width: 79.84
- Front Panel Height: 24.60
- Front Panel Margin: 16.65
- Front Panel Height: 17.52
- Front Panel Margin: 23.69
- Front Panel Height: 42.05
- Front Panel Margin: 14.40
- Front Panel Height: 08.21
- Front Panel Height: 57.21
- Front Panel Height: 08.21

Side View Dimensions (mm):

- Overall Height: 38.7

Components and Connectors:

- PCISA-6770 Rev.3.0**: Main processor unit.
- ATXCTL1**: ATX control connector.
- CPU_FAN1**: CPU cooling fan.
- PWR1**: Power input connector.
- INVERTER1**: Inverter component.
- J_VDPS1**: Video display port connector.
- DVI1**: DVI video output connector.
- USB01** and **USB23**: USB ports.
- BAT**: Battery connector.
- COM1** and **COM2**: Serial communication ports.
- J_AUDIO1**: Audio connector.
- CD IN1**: CD-ROM drive connector.
- LAN1** and **LAN2**: Ethernet network ports.
- USB_C4**: USB connector.
- VGA1**: VGA video output connector.
- KB1**: Keyboard connector.
- KB_MS1**: Mouse connector.

