PCE-7210 Dual Socket 604 Intel® Xeon® / LV Xeon® Processor Card with PCI Express / IPMI / VGA / Dual Gigabit LAN (FSB 800MHz)

Packing List

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

- 1 PCE-7210 Dual Intel® Xeon® / LV Xeon® processor-based single board computer

- 1 PCE-7210 Startup Manual

- 1 CD with driver utility and manual (in PDF format)

• 1 FDD cable	p/n: 1700340640
• 2 Ultra ATA 66/100 HDD cables	p/n: 1701400452
• 2 Serial ATA HDD data cable	p/n: 1700071000
• 2 Serial ATA HDD power cable	p/n: 1703150102
• 1 Printer (parallel) port & COM port cable kit	p/n: 1701260305
• 1 Dual COM port cable kit	p/n: 1701092300
• 1 Y cable for PS/2 keyboard and PS/2 mouse	p/n: 1700060202
• 2 CPU cooler	p/n: 1750000282
• 1 VGA cable	p/n: 1700000259
• 1 Video Cable(S / Composite terminal)	p/n: 1700000784

- Warranty card

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

Note 1: For detailed contents of the PCE-7210, please refer to the enclosed CD-ROM (in PDF format).
Note 2: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: www.adobe.com/Prodindex/acrobat/readstep.html (Acrobat is a trademark of Adobe.)

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

http://www.advantech.com

http://www.advantech.com/eplatform

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

http://www.advantech.com/support

This manual is for the PCE-7210 series Rev. A1.

Specifications

Standard SBC Functions

- **CPU:** Support Single/Dual socket 604 Intel® XeonTM / LV Xeon® FSB 800Mhz processors
- **BIOS:** Award® 4 Mb Flash memory BIOS
- **Chipset:** Intel® E7520 with 6300ESB
- **System Memory:** Dual Channel; Four 240-pin DIMM sockets accepts up to 8 GB DDR2 400 ECC registered SDRAM
- **SATA/IDE interface:** Supports up to two independent Serial ATA hard drives (up to 150MB/s) with software RAID 0 or 1 functions; supports up to two IDE hard disk drives, or four enhanced IDE devices.
- **FDD interface:** Supports up to two FDDs
- **Serial ports**: Three serial RS-232 ports
- **Parallel port:** One parallel port, supports SPP/EPP/ECP mode
- **Keyboard/mouse connector:** Supports one standard PS/2 keyboard and mouse
- **Watchdog timer:** 255 level timer intervals
- **USB (2.0):** Four Universal Serial Bus ports to Backplane

VGA Interface

- **Chipset:** ATi Radeon® 7000M
- **Interface:** PCI
- **Display memory:** 64MB DDR SDRAM integrated
- **Video Output :**
VGA 1: 2048x1536 at 60Hz; 15 pin CRT connector x1;
VGA 2: 2048x1536 at 60Hz; Alternative with TV-out, S-video signal by pin header;
DVI connector: 1600 x 1200 at 60Hz

Ethernet Interface

- **Chipset:**
- Dual 10/100/1000Base-T: Broadcom® BCM5715C
- **Connection**: On-board RJ-45 connector x 2

Mechanical and Environmental

- **Dimensions (L x W):** 338 x 122 mm
- **Power supply voltage:** +5 V ± 12 V
- **Power requirements:**
CPU   Intel® Xeon® 3.2GHz/2M/800/110W *2
MEMORY   DDRII 2GB *4
Test program,Intel Max power 100% + BurnIn test 4.0

+12V	20.5 A
+5V	3.28 A
+3.3V	11.51 A
+5VSB	0.42 A
-12V	0.01 A
-5V	0.01 A

- **Operating temperature:** 0 ~ 60 °C (depending on CPU)
- **Weight:** 0.5 kg (weight of board)

Connectors and Jumpers

The board has a number of connectors and jumpers that allow you to configure your system to suit your application.

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

Connectors

Label	Function
IDE1	Primary IDE connector
IDE2	Secondary IDE connector
FDD1	Floppy drive connector
LPT1	Parallel port
VGA1	VGA connector
VGA2	VGA-2 connector
DVI1	DVI connector
COM1	Serial port:COM1 (9-pin connector)
COM3	Serial port:COM3 (9-pin connector)
COM4	Serial port:COM4 (9-pin connector)
KBMS1	PS/2 keyboard and mouse connector
KBMS2	External keyboard/mouse connector
JIR1	Reserved
CPUFAN1	CPU1 FAN connector
CPUFAN2	CPU2 FAN connector
JFP1	Power and Reset Button connector
JFP2	HDD LED/SNMP SMbus/Speaker connector
JFP3	Power LED and keyboard lock connector
JOBS1	HW Monitor Alarm Close: Enable OBS Alarm Open: Disable OBS Alarm
LAN12	Dual Giga LAN RJ45 connector with Transformer
AC97	AC97 Link connector
SATA1	Serial ATA1
SATA2	Serial ATA2
LANLED1	LAN1 and LAN2 LED connector
BMC1	BMC connector
GPIO1	GPIO header
EXPCI1	HIROSA Extended PCI connector (Optional)

Jumpers

Label	Function
CMOS1	CMOS clear
JWDT1	Watchdog timer output selection

CMOS1: CMOS clear function	
Closed Pins	**Result**
1-2	Keep CMOS data*
2-3	Clear CMOS
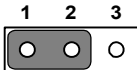
* default setting

JWDT1: Watchdog timer output option	
Closed Pins	**Result**
1-2	Reserved
2-3	System reset *
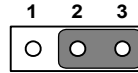
* default setting

Software Installation

• The CD disc contains a driver installer program that will lead you through the installation of various device drivers needed to take full advantage of your CPU card.

Caution

The computer is provided with a battery-powered Real-time Clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions

Safety Information

This device complies with the requirements in Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.
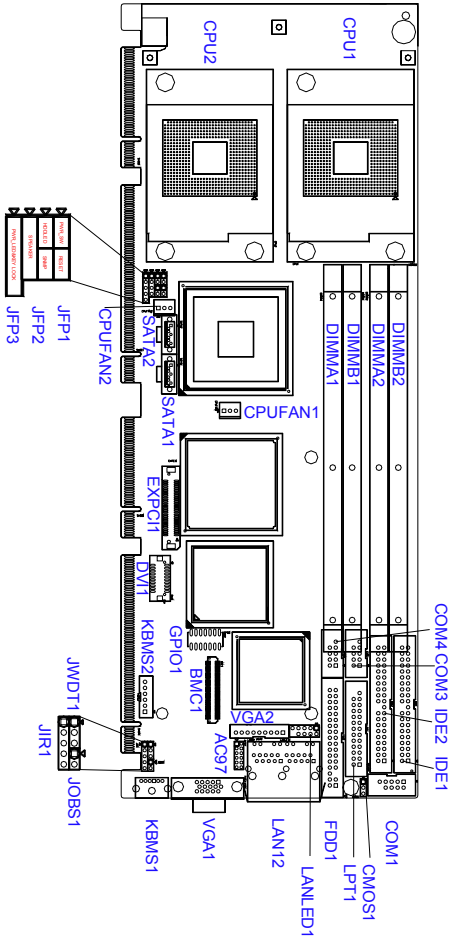
Board Layout: Jumper and Connector Locations