FORMOSA
INDUSTRIAL COMPUTING

LMB-680BX

**PCI/ISA-bus
Pentium II SBC
with AGP , Ethernet ,
SCSI on-board**

Features

♦ Full-size Pentium II SBC, PCI/ISA-bus with PICMG 2.0 standard
♦ Solt-1 socket on the reverse side
♦ Supports on-board VGA/ Ethernet / SCSI optional functions
♦ Software Programmable Watchdog Timer

Specifications

System Chipset
♦ Intel 440BX AGP set

Processor
♦ Intel Pentium II CPU up to 450 MHz

Clock Generator
♦ IC WORKS, clock generator & clock buffer
♦ Processor bus supports Pentium II processor at 66 / 100 MHz

Main Memory
♦ Support 66 / 100 MHz memory bus
♦ Two 25-degree ,168-pin DIMM and enhanced fixed Sockets
♦ Support Up to 256 MB EDO RAM or SDRAM, in future supports 512MB
♦ 64-bit data interface with 8-bit ECC functionality

2nd Level Cache
♦ Provided by Pentium II

AGP
♦ Chips:Cirrus Logic CL-GD5465 High-Performance 3D AGP Graphics Accelerator (AGP1.0)
♦ 66MHz AGP interface
♦ Display Memory: 4MB RDRAM on-board
♦ Resolution up to 1600*1200 at 85Hz
♦ True color operation up to 1024* 768
♦ VGA Connector: 15-pin D-type connector

LAN
♦ Chips: Realtek 8139 A
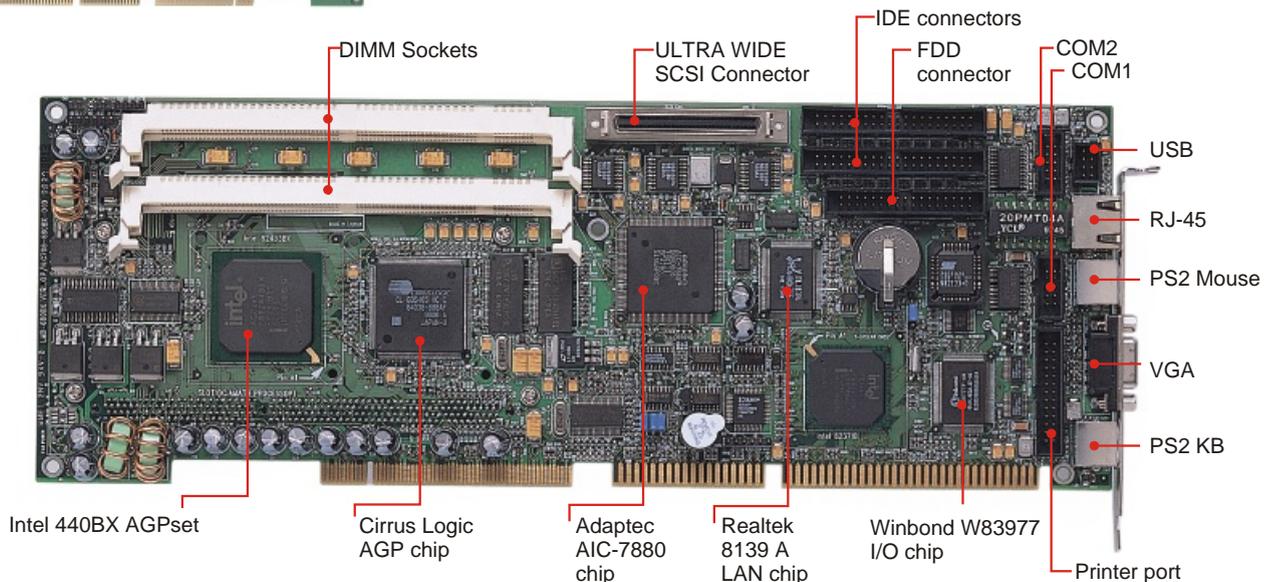♦ 10/100 Mbps Ethernet, RJ45 Connector with TX, LINK LED indicators

SCSI
♦ Chips: Adaptec 7880
♦ 68-pin Connector, Wide SCSI

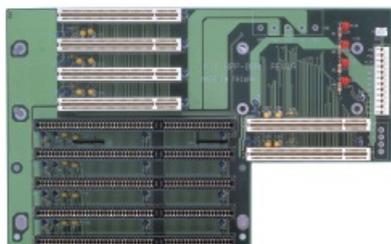Pentium II on the rear side:
A more stable design

Slot 1 connector

DIMM Sockets

ULTRA WIDE
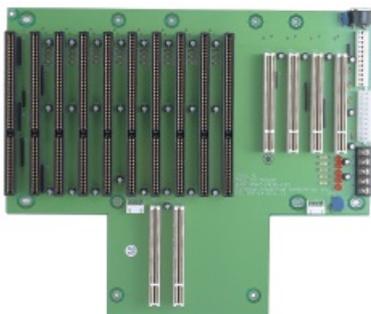SCSI Connector

IDE connectors

FDD
connector

COM2
COM1

USB

RJ-45

PS2 Mouse

VGA

PS2 KB

Intel 440BX AGPset

Cirrus Logic
AGP chip

Adaptec
AIC-7880
chip

Realtek
8139 A
LAN chip

Winbond W83977
I/O chip

Printer port

CE   PICMG   AGP

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PICMG 2.0 Standard

BPP-06
♦ 255mm x 134mm (10"x5.3")

BPP-08B
♦ 270mm x 169mm (10.6"x6.7")

BPP-14
♦ 311mm x 264mm (12.2"x10.4")

BIOS
♦ Y2000 compliant
♦ 256KB AWARD Flash ROM BIOS, PnP (Plug & Play)

Integrated IDE controller
♦ Ultra DMA/33, supports two PCI-bus master IDE channels
♦ Supports up to 4 devices

Enhanced DMA controller
♦ Two 82C37 DMA Controller
♦ Supports PCI DMA with 3 PC/PCI Channels and Distributed DMA Protocals

Interrupt Controller
♦ Two 82C59, supports 15 levels interrupt

USB Interface
♦ Two USB 1.0 Ports, 8-pin connector

RTC (Real Time Clock)
♦ Built-in Chip 256-bytes Battery-Backup CMOS SRAM
♦ Powered by non-rechargeable lithium battery

Timer
♦ Based on 82C54

I/O
♦ Chipsets: Winbond W83977TF
♦ Serial Port: Two 10-pin internal RS-232 connectors (COM1 and COM2);
  High-speed 16550 compatible UARTs with 16-byte send/receive FIFOs
♦ IR Interface: 6-pin header
♦ Floppy Disk Interface: One 34-pin FDD Connector supports up to two floppy drives
♦ Parallel Port: One Bi-directional Parallel Port supports EPP and ECP mode
♦ Keyboard Connector: PS/2 type
♦ Mouse Connector: PS/2 type

Watchdog Timer
♦ 0 ~ 63 seconds software programmable

Others
♦ Reset: 2-pin header
♦ HD-LED: 2 pin header
♦ Speaker: 4-pin header
♦ Fan Power: 3-pin header +12V

Board Type
♦ 6-layer PCB, single-side SMT design

Power Regulator
♦ On-board Switching Voltage Regulator (Harris HIP6019)

Software Compatible
♦ DOS 6.22, Windows 95, Windows 98, Win NT 3.51, Win NT 4.0, OS2

Enviroment
♦ Power requirement: 29W (PentiumII 350)
♦ Operating Temperature: 0-60℃ (32-140℉)
♦ Storage Temperature: -20-80℃ (-4-176℉)
♦ Power Supply Voltage: +5VDC (±0.25V), ±12VDC (±0.6V)
♦ Relative Humidity: 5%-95% (Non-condensing)

Required Certification
♦ CE Mark

Dimension
♦ L * W : 340 x 122 (mm)

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  to change without further notice.
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Order Information
♦ LMB-680BX-00: Pentium II Full-size CPU Card with VGA, LAN, SCSI on board
♦ LMB-680BX-01: Pentium II Full-size CPU Card with VGA, LAN on board
♦ LMB-680BX-02: Pentium II Full-size CPU Card with VGA on board
♦ LMB-680BX-03: Pentium II Full-size CPU Card (without VGA, LAN, SCSI)
♦ Passive Backplane: BPP-06, BPP-08B, BPP-11, BPP-14

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