

Tiny-LX

Ultra Low Power PCI/104 Computer



**Advanced Micro
Peripherals**

THE EMBEDDED VIDEO EXPERTS

The Tiny-LX is a highly integrated, low-power Pentium-class computer on a standard 3.6in x 3.8in PCI/104 footprint. The Tiny-LX series is 100% compatible with MSDOS, Windows-NT/2000/CE/XP-Embedded, Linux and a wide range of RTOS including VxWorks and QNX.



In addition to standard peripheral controllers for disks, keyboard, mouse, serial and USB ports, the Tiny-LX features a fast 10/100MBit Ethernet Controller for efficient LAN communications.

The integrated display controller supports a wide range of display resolutions and is capable of simultaneously driving both CRT and TTL Flat

Low power,

reliable

and

rugged

passively cooled

design

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Panels.

The Tiny-LX also features an integrated sound card offering stereo input and outputs.



Applications

Industrial Automation

Portable Test Equipment

Medical Instrumentation

Mobile Entertainment Systems

Point-of-sale and Kiosk applications

Security, Transportation, Telematics

Embedded Internet/Intranet Appliance

Windows, Linux, QNX, VxWorks Support

Rugged Harsh Environment Applications

High Resolution

VGA,

and

TTL Flat Panel

Display

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Features

AMD Geode LX800 Processor @ 500MHz

High Resolution CRT and TFT support

IDE and USB 2.0 ports

10/100Mbit Ethernet

100% PC-AT Compatible

512-1024 MBytes DDR SDRAM

Single +5V low power operation

Passive Cooling

Full PCI/104 Expansion

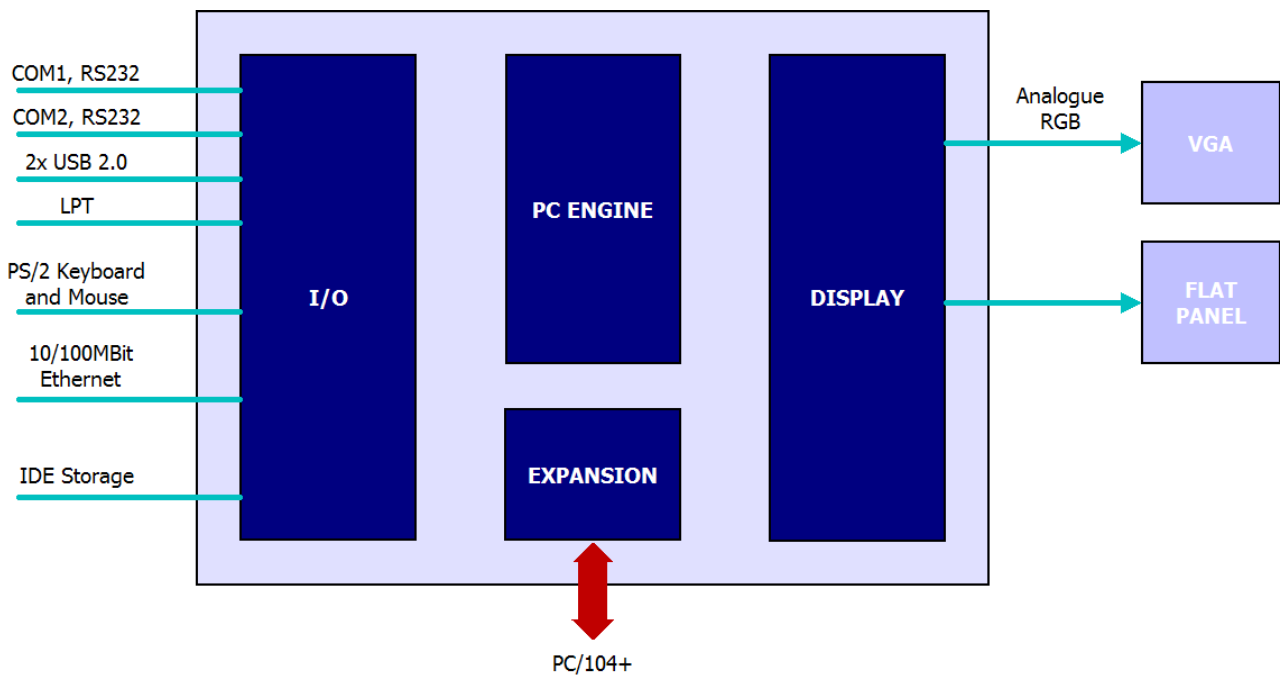
UK designed and manufactured

Extended
temperature
and
conformal coating
options
for tough
environments

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Tiny-LX Block Diagram



Processor

AMD Geode LX800 x86 CPU at 500Mhz
Host Bus at 133MHz
64KBytes L1 cache, 64KBytes L2 cache
X86 instruction set

Memory

512 or 1024MBytes DDR SDRAM
512KBytes FlashROM (for BIOS)

Peripherals

High performance Graphics Controller (CRT, TFT)
Up to 254Mbytes display buffer
CRT and Flat Panel resolution up to 1600 x 1200
TTL Flat Panel Interface
Double-headed Display capability
2 RS232 serial port with FIFO at 230.4Kbaud
Supports Ultra DMA Hard Disk and CDROM drive
Supports external CompactFlash (using T7Flash)
Supports PS/2 Keyboard and Mouse
Integrated sound card with stereo audio input and output.
10/100MBit PCI Ethernet Controller
2 on-board USB 2.0 ports
PCI bus-mastering USB Hub Controller
Fully compliant with OHCI/EHCI standard
Software programmable watchdog timer

Power Management

ACPI compliant

Expansion

Stackable embedded 32-bit PC/104-Plus PCI bus
3.3V/5V PCI signalling

Physical

3.6in x 3.8in PCI/104 format
Passive cooling
Temperature 0 to 60 °C
Extended Temperature (-40 °C to +80 °C)
Power consumption 7.5W (Max) 4.5W (Typical)
Rel. humidity 5% to 95% non-condensing (optional conformal coating)
Single +5V DC regulated power supply
MTBF Greater than 125,000 Hours MIL-HDBK-217 at 25°C



Related Products

Cable-TLX	Cable set for attaching peripherals to the Tiny-LX
T7Flash-xxx	Case-mounted CompactFlash solid-state disk adaptor
Bridge2000	PC/104-Plus bridge board
LANswitch	5-port Ethernet Switch for PC/104+

Ordering Information

Tiny-LX-(CPU Speed)/(DDR RAM size)-(Ext)	
CPU Speed	500 for 500MHz
SDRAM size	512 for 512MBytes, 1024 for 1GBytes
-Ext	Extended temperature option (-40°C to +80°C)

Example

Tiny-LX-500/512 selects 500MHz CPU, 512MBytes DDR RAM

** This bulletin contains preliminary product information and is subject to change*

