



## APPLICATIONS

This PC/104 Plus form factor features stacking connectors for both ISA and PCI expansion bus protocols. Military and rugged industrial applications make use of both the PCI and ISA busses and ADL Embedded Solutions continues to support these applications using both PCI and ISA busses.

## FEATURES

- AMD Geode™ LX800
- 500MHz
- Power Management (ACPI 2.0 & APM 1.2)
- SoDIMM200 up to 1GB DDR-400
- Optional On-Board SSD Flash Up To 8GB
- Built In Geode LX800 @ 0.9W
- CRT/LCD On-Board
- 10/100 Base-T LAN-Ethernet
- 4x USB V2.0 Ports
- EIDE Hard Disk Interface
- COM1, COM2, LPT1
- RTC and Watchdog Timer
- Windows 7, Windows 8, Linux Compatible
- AC97 Sound Interface (in & out)
- Single 5VDC Power Supply
- PC/104-Plus BUS Connector

## DESCRIPTION

The ADLL8XPC is based on the AMD Geode™ LX800 embedded processor, with clock speed of 500MHz. It incorporates the full functionality of much larger boards into the compact and expandable form factor of PC/104-Plus. At just 96mm x 90mm in size with a processor power load as little as 0.9W, the ADLL8XPC is ideal for space con-strained rugged, mobile and remote applications.

The graphics controller is integrated into the AMD Geode™ chipset and can drive either a CRT though the VGA port or LCD by way of an 18-bit LVDS interface. Up to 1GB of DDR-400 SDRAM can be installed into the SoDIMM200 socket. The ADLL8XPC power management incorporates ACPI/APM functions. The standard ADLL8XPC also incorporates PCI 2.2 Bus, EIDE, 4xUSB 2.0, 2xRS232 COM ports, PS/2 Keyboard

and Mouse, parallel Printer, AC97 compatible sound with SPDif In/Out, 10/100MBit LAN and more. Optionally, the ADLL8XPC may be equipped with built-in SSD flash. This option will dramatically reduce the overall system footprint by providing a means of full system operation without the need for any type of external media connection. The ADLL8XPC meets all PC/104-Plus electrical specifications, so it can be “dropped-in” to any compliant system without changes. With its fast processor and its low power consumption, the ADLL8XPC is ideal for embedded semi-custom solutions.

Contact [sales](#) for more information about this product or other products in ADL's line of [embedded SBCs](#).

\*Data subject to change without notice.



## TECHNICAL SPECIFICATIONS - ADLL8XPC

FEATURE	FUNCTION	REMARKS	OPTIONS
Processor/CPU	Geode LX800		
L2-Cache	128KB		
Performance (MHz)	500MHz		
BIOS	Phoenix Award 6.1		
Power Management	ACPI 2.0 / APM 1.2	ACPI 2.0 / APM 1.2	
DRAM Min-Max (MB)	SoDIMM200 512MB-1GB DDR400		
Mouse, Keyboard	PS/2, USB		
Floppy Interface	Shared interface with LPT		
IDE Interface*	PATA (EIDE)	PIO 0/1/2/3/4 - DMA33/66/100, Primary Only	
COM1	RS232	RS422/485 optional	
COM2	RS232	RS422/485 optional	
COM3 / COM4	--		
LPT1	Shared interface with FDC	Uni/ECP/EPP/FDC	
USB	4x USB 1.1 / 2.0	USB 1-3 cfg HOST, USB 4 cfg DEVICE	
LAN	Intel® 82551ER	10/100 Base-T	
Audio	AC97:AMD CS5536 / Realtek ALC655	Anlg In: Lin/Mic/PC Beep, Anlg Out:Lin, SPDif In/out	
Video Controller	Geode LX800		
Video Memory	254MB		
CRT Video	1920 x 1440 max resolution		
LCD Interface	18-Bit LVDS		
LCD Resolution	1600 x 1200 max		
Video Input	7.5		
EEPROM Support	yes		
Watchdog	yes		
other	TPM Interface		
Power Consumption	1.48A - 1.50@ +5VDC (Typical)**	**Typical value applies to all models using 256MB - 1GB RAM with passive/ active cooling solutions	
Cooling Type	Passive		
Operating Temperature	-20°C to +70°C		
Extended Temperature	Optional -40°C to +85°C		
Dimensions	3.6" x 3.8" (90mm x 96mm)		

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## ORDERING INFORMATION

ITEM CODE	PART #	DESCRIPTION
<b>PCI/104-Plus Board</b>		
ADLLX8PC-F0	292035	LX800 16-Bit ISA PC/104-Plus No Flash
ADLLX8PC-F2	292033	LX800 16-Bit ISA PC/104-Plus w/2GB Flash
ADLLX8PC-F4	292036	LX800 16-Bit ISA PC/104-Plus w/4GB Flash
ADLLX8PC-F8	292037	LX800 16-Bit ISA PC/104-Plus w/8GB Flash
<b>Cooling Options</b>		
ADLTS1LX	292055	Heat Sink, passive
ADLTS2LX	292056	Heat Spreader, .6"
ADLTS3LX	292057	Heat Spreader, 1"
ADLTS4LX-HS	292059	Passive Heat Sink, .6"
ADLTS4LX-FS	292060	Active Heat Sink, .6"
<b>Standard Memory Options</b>		
DDR-DRAM128-3	994715	DDR-333MHz 128MB Standard Temperature
DDR-DRAM256-3LX	994826	DDR-333MHz 256MB Standard Temperature
DDR2-DDR-DRAM512-3LX	994926	DDR-333MHz 512MB Standard Temperature
DDR-DRAM1024-3LX	994024	DDR-333MHz 1GB Standard Temperature
<b>Extended Temp. Memory Options</b>		
DDR-DRAM256-3-EX	994829	DDR-333MHz 256MB Extended Temperature
DDR-DRAM512-3-EX	994929	DDR-333MHz 512MB Extended Temperature
DDR-DRAM1024-3-EX	994029	DDR-333MHz 1GB Extended Temperature
<b>Accessories and Options</b>		
ADL855PC-CK	293045	Dev. Cable Kit, or ADL855/LX8PC
ADLCF-II-S	989010	Compact Flash to IDE Type II Single
ADLCF-II-D	989020	Compact Flash to IDE Type II Dual
ADLPS104CF	293017	PC/104+ Pwr Supply, +7-28VDC IN, 5VDC OUT
<b>Other options may be available</b>		

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