Embedded Single Board Computers

PCM-9375 A3

AMD Geode™ LX800 3.5" SBC

Features
- AMD Geode™ low-power LX800 500 MHz processor
- DDR 333 MHz up to 1GB
- 24 bit TFT LCD/ LVDS LCD Display
- Dual 10/100 Mbps Fast Ethernet, 4COM ports, 4 USB ports
- Expansion: PC/104
- Supports SUSIAccess and Embedded Software APIs

Software APIs:
- GPIO
- H/W Monitor
- Watchdog
- Brightness
- SMBus
- Backlight On/Off

Utilities:
- BIOS flash
- Monitoring

Specifications

Processor System
- CPU: AMD Geode™ LX800 processor, up to 500 MHz
- Frequency: 500 MHz
- L2 Cache: 128 KB
- System Chipset: AMD Geode CS5536
- BIOS: Award 8 Mb Flash ROM BIOS

Memory
- Technology: DDR 333 MHz
- Max. Capacity: 1 GB
- Socket: 1 x 200-pin SODIMM

Display
- Chipset: AMD Geode LX800
- VRAM: Optimized shared memory architecture up to 64 MB system memory
- Graphics Engine: AMD Geode LX800 2D engine
- LVDS: 1 x Single channel 24-bit LVDS (JEIDA format), up to 1600 x 1200 x 32 bpp at 60 Hz
- VGA: VGA up to 1920 x 1440 @ 85 Hz
- TTL LCD: 1 x 24-bit TTL, up to 1600 x 1200 x 32 bpp at 60 Hz
- Dual Display: VGA+TTL, VGA+LVDS

Ethernet
- Speed: 10/100 Mbps (Supports Wake on LAN)
- Controller: Ethernet1 Realtek RTL8139 10/100 Mbps, Ethernet2 Realtek RTL8139 10/100 Mbps
- Connector: RJ-45 on Ethernet1, box header on Ethernet2

Audio
- Chipset: Realtek ALC655, Line-in, Line-out, Mic-in
- Watchdog Timer: Output System reset, Programmable counter from 1 ~ 255 minutes/ seconds

Storage
- CompactFlash: CompactFlash type I/II (Primary Master IDE Channel)
- IDE: 1
- Floppy: 1 (Shared with LPT)

Rear I/O
- Serial: 1 (COM1 supports RS-232) (ESD protection for RS-232: Air gap ±15kV, Contact ±8kV), 1 (10/100 Mbps)
- PS/2 KB/Mouse: 1
- VGA: 1
- PWRAHDD LED: 1
- Reset Button: 1

Internal I/O
- USB: 4 x USB 2.0
- Serial: 3 x COM (ESD protection for RS-232: Air gap ±15kV, Contact ±8kV), COM1 supports RS-232, COM2 supports RS-232/G2/485
- Ethernet: 1 (10/100 Mbps)
- IDE: 1 (UDMA 33/66)
- Parallel (LPT): 1 (Shared with FDD)
- FDD: 1 (Shared with LPT)
- GPIO: 8-pin GPIO
- PC: optional

Expansion
- PC/104 Slot: PC/104 Expansion 6/16-Bit ISA

Power
- Power Type: AT/ATX
- Power Supply Voltage: 5V ± 5% (+12V option for LCD, PC/104)
- Power Consumption (Typical): 0.8 A @ 5 V, 0.03 A @ 12 V (3.86 W)
- Power Consumption (Max, test in HCT): 1.2 A @ 5 V, 0.23 A @ 12 V (8.76 W)
- Power Management: ACPI 1.2, ACPI
- Battery: Lithium 3 V196 mAH

Environment
- Operational: Operating: Standard: 0 ~ 60°C (-32 ~ 140°F), Extend: -40 ~ 85°C (-40 ~ 185°F)
- Storage: -40 ~ 85°C (-40 ~ 185°F)

Physical Characteristics
- Dimensions (L x W): 166 x 162 mm (6.5" x 6.4")
- Weight: 0.64 kg (1.41 lb), weight of total package
- Total Height: 25.2mm

All product specifications are subject to change without notice. Last updated: 12-Jun-2019
### Ordering Information

<table>
<thead>
<tr>
<th>Part No.</th>
<th>CPU</th>
<th>Memory</th>
<th>VGA</th>
<th>LVDS</th>
<th>10/100 Ethernet</th>
<th>Audio</th>
<th>IDE</th>
<th>USB2.0</th>
<th>RS-232</th>
<th>RS-232/422/485</th>
<th>CF</th>
<th>Expansion</th>
<th>Thermal Solution</th>
<th>Operating Temp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCM-9375F-J0A3</td>
<td>AMD LX800</td>
<td>SODIMM</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>Yes</td>
<td>1 IDE</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>PC/104</td>
<td>Passive</td>
<td>0 ~ 60° C</td>
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<tr>
<td>PCM-9375E-J0A3</td>
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<td>1</td>
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<td>Yes</td>
<td>1 IDE</td>
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<td>3</td>
<td>1</td>
<td>PC/104</td>
<td>Passive</td>
<td>0 ~ 60° C</td>
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<td>SODIMM</td>
<td>1</td>
<td>-</td>
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<td>2</td>
<td>Yes</td>
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<td>1</td>
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<td>Passive</td>
<td>0 ~ 60° C</td>
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</table>

Note: Passive = fanless; Active = with fan

### Packing List

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>PCM-9375 SBC</td>
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<tr>
<td>1701440351</td>
<td>IDE cable (44p/44p) 53cm</td>
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<tr>
<td>1700002020</td>
<td>KR/MS cable 20cm</td>
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<tr>
<td>1701100202</td>
<td>LAN cable 20cm</td>
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<td>1700001971</td>
<td>COM 2/3/4 RS-232 cable 21 cm</td>
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<td>1700001977</td>
<td>Parallel Port cable 25cm</td>
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<td>1700160160</td>
<td>Audio cable 18 cm</td>
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<tr>
<td>1703100001</td>
<td>USB cable (2 ports) w/ bracket 12cm</td>
<td>1</td>
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<tr>
<td>1960000688</td>
<td>LX800 heatsink for PCM-9375 39.5 x 39.6 x 9.8 mm</td>
<td>1</td>
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<tr>
<td>1960000689</td>
<td>CSS536 heatsink for PCM-9375 22.6 x 22.6 x 14.5 mm</td>
<td>1</td>
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### Optional Accessories

<table>
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<tr>
<th>Part No.</th>
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<tbody>
<tr>
<td>1703040157</td>
<td>COM2 cable for RS-422/485</td>
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<tr>
<td>1703200021</td>
<td>ATX power control cable</td>
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<tr>
<td>9696937580E</td>
<td>PCM-9375-FDD module (must connected 1701340700 and 1700002212)</td>
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<tr>
<td>1701340700</td>
<td>Flat cable 34-pin for 9696937580E, 70cm (cable from 9696937580E's FDD port to FDD device)</td>
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<tr>
<td>1700000212</td>
<td>LPT Cable for 9696937580E, 1.27mm pitch, 10cm (cable from PCM-9375's LPT to 9696937580E's LPT)</td>
</tr>
</tbody>
</table>

### Rear I/O View

![Rear I/O View](image)

### Embedded OS/API

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>WinCE</td>
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<td>Image PCM-9375 CE 5.0 Pro Plus Eng</td>
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<td>TBD</td>
<td>CE 6.0 Pro GX3 4COM V1.2 ENG</td>
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<td>Win XPE</td>
<td>20706ME09S0001</td>
<td>WES2009 ENG V4.0</td>
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<td>TBD</td>
<td>WES2009 24MUI V4.0</td>
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