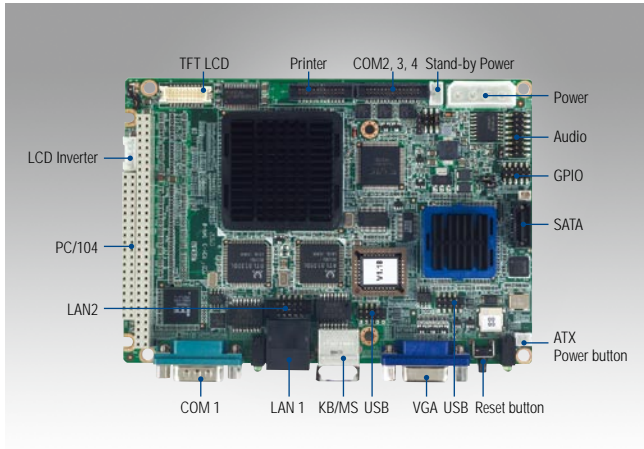


# PCM-9375

AMD Geode™ LX800 3.5" SBC, CRT, LVDS, LCD, 2 LAN, IDE, SATA, PC/104



## Features

- AMD Geode™ low power LX800 500 MHz processor
- 24-bit TFT LCD interface, 18-bit LVDS LCD display
- Dual 10/100 Mbps Fast Ethernet
- Supports up to 4 COM ports, 4 USB ports, PC/104 expansion
- Supports embedded software APIs and utilities

**Software APIs:**

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

**Utilities:**

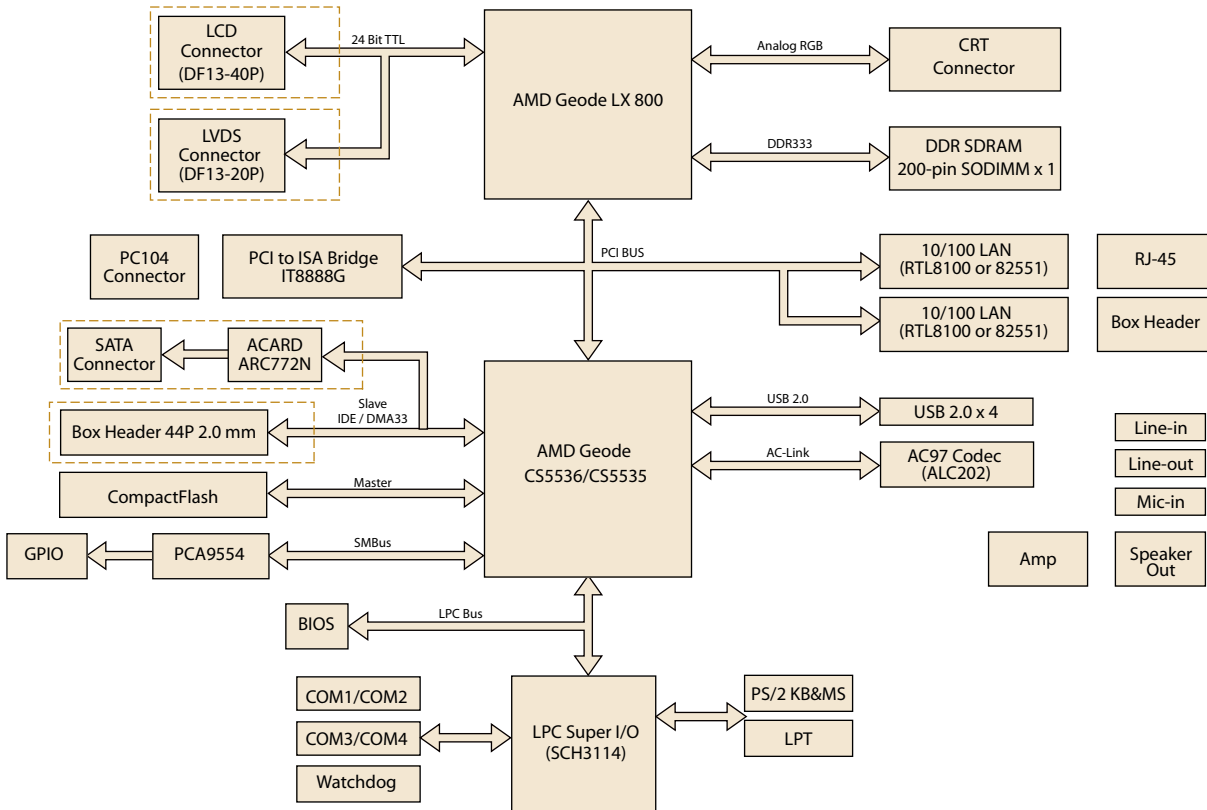
- BIOS flash
- Monitoring



## Specifications

|                          |                                      |   |
|--------------------------|--------------------------------------|---|
| Processor System         | CPU                                  | AMD Geode™ LX800 processor, up to 500 MHz   |
|                          | Frequency                            | 500 MHz   |
|                          | L2 Cache                             | 128 KB  |
|                          | System Chipset                       | AMD Geode LX800   |
|                          | BIOS                                 | Award 4 Mb Flash ROM BIOS   |
| Memory                   | Technology                           | DDR 333/400 MHz   |
|                          | Max. Capacity                        | 512 MB (1 GB optional)  |
| Display                  | Socket                               | 1 x 200-pin SODIMM  |
|                          | Chipset                              | AMD Geode LX800   |
|                          | VRAM                                 | Optimized shared memory architecture up to 64 MB system memory  |
|                          | Graphics Engine                      | AMD CS5536 2D engine  |
|                          | LVDS                                 | 1 x 18-bit LVDS (PCM-9375E), up to 1600 x 1200 x 32 bpp at 60 Hz  |
|                          | VGA                                  | CRT: up to 1920 x 1440 @ 32 bpp (85 Hz)<br>TTL LCD: up to 1600 x 1200 x 32 bpp at 60 Hz   |
|                          | Dual Display                         | CRT+TTL, CRT+LVDS   |
| Ethernet                 | Speed                                | 10/100 Mbps   |
|                          | Controller                           | LAN1 Realtek RTL8100 10/100 Mbps LAN<br>LAN2 Realtek RTL8100 10/100 Mbps LAN  |
|                          | Connector                            | RJ-45 on LAN1, box header on LAN2   |
| Audio                    | Chipset                              | Realtek ALC203 AC97, Line-in, Line-out, Mic-in  |
| WatchDog Timer           |                                      | Output system reset<br>Programmable 1 - 255 sec   |
| Storage                  | CompactFlash                         | 1   |
|                          | SATA                                 | 1   |
|                          | IDE                                  | 1   |
|                          | Floppy                               | 1 (share with LPT)  |
| Rear I/O                 | Serial                               | 1 (COM1 supports RS-232)  |
|                          | Ethernet                             | 1 (10/100 Mbps)   |
|                          | KB/Mouse                             | 1   |
|                          | VGA                                  | 1   |
|                          | Reset Button                         | 1   |
| Internal I/O             | USB                                  | 4 x USB 2.0   |
|                          | Serial                               | 3 x COM<br>COM3/COM4 supports RS-232<br>COM2 supports RS-232/422/485  |
|                          | IDE                                  | 1 UDMA 33/66  |
|                          | Parallel (LPT)                       | 1 (share with LPT)  |
|                          | FDD                                  | 1 (share with LPT)  |
|                          | GPIO                                 | 8-bit GPIO  |
|                          | I <sup>2</sup> C                     | optional  |
|                          | PC/104 Slot                          | PC/104 Expansion(8/16-Bit ISA)  |
| Power                    | Power Type                           | AT/ATX  |
|                          | Power Supply Voltage                 | 5V + 5%, 12V + 5% (LCD, PC/104)   |
|                          | Power Consumption (Typical)          | Typical: 0.6 A @ 5 V, 0.03 A @ 12 V   |
|                          | Power Consumption (Max, test in HCT) | MAX: 1.2 A @ 5 V, 0.23 A @ 12 V   |
|                          | Power Management                     | APM 1.2, ACPI   |
| Environment              | Battery                              | Lithium 3 V/196 mAH   |
|                          | Operational                          | 0 - 60° C (32 - 140° F)   |
| Physical Characteristics | Non-Operational                      | Operating: 0 - 60° C (32 - 140° F) (Operating humidity: 40° C @ 85% RH non-condensing)<br>Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing |
|                          | Dimensions (L x W)                   | 146 x 102 mm (5.7" x 4")  |
|                          | Weight                               | 0.85 kg (1.87 lb), weight of total package  |

## Board Diagram



## Ordering Information

| Part No.          | CPU       | CRT | LVDS | TTL | LAN  | IDE/SATA | USB2.0 | RS-232 | RS-232/422/485 | LPT | GPIO  | CF | PC/104 | Thermal Solution | Operating Temp. |
|-------------------|-----------|-----|------|-----|------|----------|--------|--------|----------------|-----|-------|----|--------|------------------|-----------------|
| PCM-9375F-J0A1E   | AMD LX800 | 1   | -    | 1   | 2 FE | 1 IDE    | 4      | 3      | 1              | 1   | 8-bit | 1  | 1      | Passive          | 0 - 60° C       |
| PCM-9375E-J0A1E   | AMD LX800 | 1   | 1    | -   | 2 FE | 1 IDE    | 4      | 3      | 1              | 1   | 8-bit | 1  | 1      | Passive          | 0 - 60° C       |
| PCM-9375SF-J0A1E  | AMD LX800 | 1   | -    | 1   | 2 FE | 1 SATA   | 4      | 3      | 1              | 1   | 8-bit | 1  | 1      | Passive          | 0 - 60° C       |
| PCM-9375SE-J0A1E  | AMD LX800 | 1   | 1    | -   | 2 FE | 1 SATA   | 4      | 3      | 1              | 1   | 8-bit | 1  | 1      | Passive          | 0 - 60° C       |
| PCM-9375FZ-J0A1E  | AMD LX800 | 1   | -    | 1   | 2 FE | 1 IDE    | 4      | 3      | 1              | 1   | 8-bit | 1  | 1      | Passive          | -20 - 80° C     |
| PCM-9375EZ-J0A1E  | AMD LX800 | 1   | 1    | -   | 2 FE | 1 IDE    | 4      | 3      | 1              | 1   | 8-bit | 1  | 1      | Passive          | -20 - 80° C     |
| PCM-9375FZ2-J0A1E | AMD LX800 | 1   | -    | 1   | 2 FE | 1 IDE    | 4      | 3      | 1              | 1   | 8-bit | 1  | 1      | Passive          | -40 - 85° C     |
| PCM-9375EZ2-J0A1E | AMD LX800 | 1   | 1    | -   | 2 FE | 1 IDE    | 4      | 3      | 1              | 1   | 8-bit | 1  | 1      | Passive          | -40 - 85° C     |

## Packing List

| Part No.   | Description            | Quantity |
|------------|------------------------|----------|
|            | PCM-9375 SBC           |          |
|            | Startup Manual         |          |
|            | Utility CD             |          |
| 1701440351 | IDE cable (44p/44p)    | x 1      |
| 1700060202 | KB/MS cable            | x 1      |
| 1701100202 | LAN cable              | x 1      |
| 1700001971 | COM 2/3/4 RS-232 cable | x 1      |
| 1700260250 | Parallel Port cable    | x 1      |
| 1703160160 | Audio cable            | x 1      |
| 1703100121 | USB cable (2 ports)    | x 1      |

## Optional Accessories

| Part No.   | Description               |
|------------|---------------------------|
| 1703040157 | COM2 cable for RS-422/485 |
| 1703200201 | ATX power control cable   |

## Floppy Disk Module

| Part No.    | Description                 |
|-------------|-----------------------------|
| 9696937580E | PCM-9375-FDD module         |
| 1701340700  | Flat cable 34-pin for FDD   |
| 1700016261  | 2 x LPT cable 2 LPT 1.27 mm |

## Embedded OS/API

| Embedded OS/API    | Part No.   | Description  |
|--------------------|------------|--|
| WinCE 5.0          | 2070000729 | Image PCM-9375 CE 5.0 Pro Plus Eng                       |
|                    | 2070001612 | CE60 Pro GX3 4Com V1.0 ENG                               |
|                    | 2070007509 | CE 6.0 Pro PCM-9375_4COM V1.1 JPN                        |
| WinCE 6.0          | 2070007810 | CE60 Pro GX3 4COM V1.2 ENG                               |
|                    | 2070000732 | Win XPe SP2 for PCM-9375 V2.10, English version (430 MB) |
| Win XPE            | 2070001576 | XPE FP2007 GX3(LX800) V3.0 ENG                           |
|                    |            | ONX 6.3.2  |
| ONX                |            | ONX 6.4.1  |
|                    |            | Linux WDT Driver Ubuntu08.04 PCM-9375 V1.0 ENG           |
| Linux Software API | 205E375000 | Linux WDT Driver Ubuntu08.04 PCM-9375 V1.0 ENG           |
|                    | 2066002300 | CD SUSI Library V1.0                                     |

