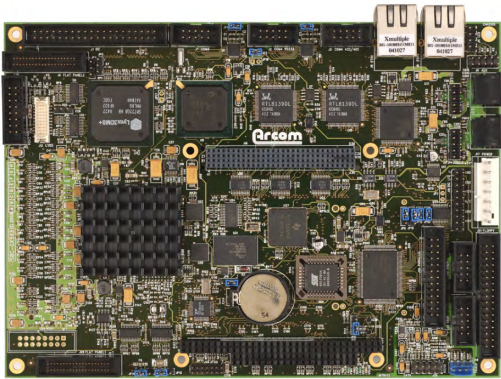# SBC-GX533

Fan-less 400MHz Geode™ GX single board computer

The SBC-GX533 is a low profile, fan-less, EBX form factor board, based on the AMD Geode GX 533@1.1W embedded processor. It includes all the standard PC interfaces, including an onboard graphics controller to drive a standard analogue display or a TFT flat panel, dual 10/100baseTx Ethernet, onboard 32MB Flash drive, CompactFlash port, four USB ports, four serial ports, PC/104 and PC/104-*Plus*.

The PC/104-*Plus* connector provides an embedded PCI expansion port for a wide variety of third party I/O boards. This board is RoHS compliant and ideal for compact systems with restricted ventilation.

Typical applications

The SBC-GX533 is targeted at applications which require the benefits and compatibility of a standard PC along with low power, embedded, fan-less system design. The integrated 2D graphics accelerator makes the SBC-GX533 ideal for human-machine interface panels, such as kiosks and information terminals.

Features

- AMD Geode GX embedded processor
  - 400MHz clock rate with Pentium® 533MHz performance
  - Integrated CRT or TFT graphics controller
  - 32kB L1 cache (16kB instruction, 16kB data)
- Up to 512MB 266MHz DRAM (SO-DIMM on solder side)
- Up to 32MB onboard AMD MirrorBit™ Flash memory
- 256kB battery-backed SRAM
- Integrated graphics controller (either CRT or TFT)
  - 1600 x 1200 x 16 @ 85Hz (CRT)
  - 1280 x 1024 x 24 @ 85Hz (CRT)
  - 1280 x 1024 x 24 @ 60Hz (TFT)
- 4-wire analogue touchscreen interface
- Dual 10/100baseTx Ethernet controllers (Realtek 8139DL)
- FDD, IDE, resident Flash and CompactFlash (CF+)
- Four high speed 16C550 compatible UARTs: 3 x RS232, 1 x RS232/422/485
- Two high speed USB 2.0 ports and two USB 1.1 ports
- Standard keyboard, mouse, printer port, RTC
- 16-bit AC97 audio codec
- 16-bit ISAbus PC/104 and PCI PC/104-*Plus* expansion
- Eight TTL compatible digital I/O lines (four buffered)
- LM87 Hardware Monitor for temperature and voltage
- Programmable watchdog timer 1ms to 60s timeout
- Real time clock, accuracy +/- 1 minute/month @ 25°C
- Power requirements: 1.5A (typical) @ +5V +/- 5%
- Dimensions: EBX form factor board – 146mm x 203mm
- Operating temperature: -20°C to +60°C
- Humidity: 10% to 90% RH (non-condensing)

Development Kits

The SBC-GX533 is supported with rapid application Development Kits for Windows® CE 5.0, Windows XP Embedded and embedded Linux.

Industrial Compact Enclosure

The SBC-GX533 can be supplied inside a rugged industrial compact enclosure (SBC-GX533 ICE) offering easy-to-use system solutions for embedded SBC applications.

ETL-SB-001