# SBC-GX533

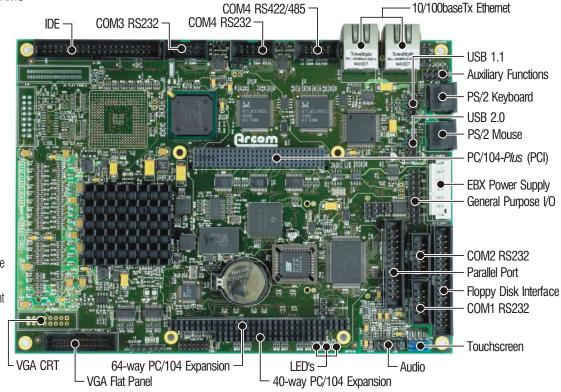
# RoHS compliant, fan-less 400MHz Geode™GX embedded PC

# **Features**

- AMD Geode™GX embedded CPU
  - 400MHz clock rate with 533MHz performance at @1.1W power dissipation
  - Integrated CRT or TFT graphics controller
  - 32KB L1 cache (16KB instruction, 16KB data)
- Up to 512Mbytes 266MHz DRAM (SODIMM on solder side)
- Up to 32Mbytes onboard AMD MirrorBit Flash memory
- 256Kbytes of 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 analog touchscreen interface
- Dual 10/100baseTx Ethernet Controllers (Realtek 8139DL)
- FDD, IDE, resident Flash and CompactFlash (CF+)
- 4 high speed 16C550 compatible UARTs
  - 3x RS232, x1 RS232/422/485
- 2 high speed USB 2.0 ports and 2 USB 1.1 ports
- Standard keyboard, mouse, printer port, RTC
- 16-bit AC'97 audio CODEC
- 16bit ISAbus PC/104 and PCI PC/104-Plus expansion
- 8 TTL compatible digital I/O lines (4 buffered)
- LM87 Hardware Monitor for temperature and voltage
- Programmable watchdog timer 1ms to 60s timeout
- Fan-less operating temperature range  $-20^{\circ}$ C to  $+60^{\circ}$ C (4°F to  $+140^{\circ}$ F)
- Industry standard EBX board footprint 5.75" x 8.00" (146mm x 203mm)

# Description

The SBC-GX533 is a low profile, fan-less, EBX form factor board, based on the AMD Geode<sup>™</sup>GX 533@1.1W embedded processor. It includes all the standard PC interfaces as well as an onboard graphics controller to drive a standard analog display or a TFT flat panel, dual 10/100baseTx Ethernet, onboard 32Mbyte Flash drive. CompactFlash port, four USB ports, four serial ports 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 is ideal for compact systems with restricted ventilation.

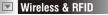




**Embedded Boards** 



PCs & Enclosures



✓ Industrial Networking ✓ Design & Build



# **Specifications**

### **Temperature**

- Operating  $-20\,^\circ\text{C}$  to  $+60\,^\circ\text{C}$  ( $-4\,^\circ\text{F}$  to  $+140\,^\circ\text{F}$ ) Storage  $-40\,^\circ\text{C}$  to  $+70\,^\circ\text{C}$  ( $-40\,^\circ\text{F}$  to  $+158\,^\circ\text{F}$ )

# Humidity

10% to 90% RH (non-condensing)

### Real Time Clock accuracy

• +/- 1min/month @ 25°C (77°F)

- General Software Embedded BIOS
- Datalight ROM-DOS operating system
- Datalight FlashFX Flash media management
- Eboot (for Windows CE 5.0)
- JFFS2 (for embedded Linux)

### **Power requirements**

• +5V + /-5% = 1.5A (typical)

• 3.0V Lithium 180mAh (CR2032 Coin Cell)

### **Dimensions**

- · EBX compatible format
- 5.75" x 8.00" (146mm x 203mm)

### Weight

• 270 grams

# **Associated Products**

## SBC-GX533 ICE

## High-performance multimedia EBX format compact enclosure

- · A fully CE/FCC compliant enclosure for the SBC-GX533 single board computer
- Universal AC input 90 132 / 180 264 (auto-ranging) with switched IEC input socket
- Optional DC/DC (nominal 24V input) power supply with (battery backed) safe-shutdown capability for Windows XP systems
- Operating temperature range 0°C to 55°C (32°F to 131°F)
- PS/2 mouse/keyboard sockets
- VGA outlet (D-type 15 way socket)
- 4 x serial ports (D-sub 9 way) and 2 x USB ports
- 2 x RJ45 Ethernet ports (10/100baseTx)
- Expansion space for up to two PC/104 cards
- · Space for 2.5" IDE hard disk



# **Ordering Information**

SBC-GX533-T-MO-FO-R6 Standard board with TFT display output, no Flash or DRAM fitted SBC-GX533-FM0-F32-R6 Standard board with TFT display output, 32MBytes Flash, no DRAM fitted SBC-GX533-C-M0-F0-R6 Standard board with CRT display output, no Flash or DRAM fitted SBC-GX533-C-MO-F32-R6 Standard board with CRT display output, 32MBytes Flash, no DRAM fitted

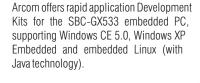
Contact Arcom for more information and availability of SBC-GX533 boards pre-installed with SDRAM options. Modified/depopulated versions are available subject to minimum order quantities. Please contact our Sales team to discuss your requirements.



# **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 systems design. The integrated 2D graphics accelerator makes the SBC-GX533 ideal for human-machine interface panels, kiosks and information terminals.





Windows CE 5.0







Adapter module to connect to a variety of TFT flat panel displays directly to the SBC-GX533.



### Check our website for more details

Specifications are subject to change and do not form part of any contract. All trademarks are recognized.



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