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Data Sheet

August 15, 2026

AXIOM TECHNOLOGY

Axiom SBC8251 Motherboard CPU Card

Queue model SBC8251 is the Axiom Technology / Axiomtek half-size ISA CPU card. OEM SBC8251 Pentium All-in-One CPU Card Family manual lists Intel Pentium P54C/P55C, AMD K5/K6/K6-2, Cyrix 6x86 family, and IDT C6/Winchip2-3D CPUs to 366 MHz; Intel Triton II / 430HX chipset with SMC37C669 Super I/O; two 72-pin SIMM sockets for 1/2/4/8/16/32/64 MB FPM/EDO modules with ECC; 512 KB burst L2 cache on the SBC8251 row; no onboard VGA controller on base SBC8251 (ISA external bus; SBC8251V/PV add C&T 65550 and 2 MB display memory); DiskOnChip socket; two PCI mode 4 EIDE channels; two floppy drives (3.5 inch and/or 5.25 inch); watchdog 0 to 64 s in 16 levels; PS/2 keyboard and mouse mini-DIN; EPP/ECP parallel; one USB; COM1 RS-232 and COM2 RS-232/422/485 with 16C550 UARTs; 16-bit PC/104; +5 V only; 0 to 60 C; 185 mm by 122 mm (7.3 by 4.8 inch); 6-layer PCB. CPU bus jumpers include 50/55/60/66 MHz. Half-size ISA industrial PCs, embedded controllers, and PC/104-expanded operator interfaces using a Pentium-class CPU card without onboard CRT/LCD silicon. Onboard Video: none on base SBC8251 (VGA silicon on V and PV siblings) External Bus: ISA on SBC8251 (PCI/ISA on SBC8251PV) Disk On Chip: M-Systems DiskOnChip socket Ide Interface: up to two PCI mode 4 enhanced IDE devices



MODEL

**Axiom Technology
SBC8251**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

SBC8251

LISTING

<https://aumictechlabs.com/products/sbc8251-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Axiom Technology SBC8251 is an industrial-grade, half-size CPU card designed for demanding embedded and industrial applications. It integrates the Intel Triton II HX chipset and an enhanced I/O chipset, ensuring compatibility with ISA bus passive backplanes and offering excellent performance for Windows-based applications through its PCI Local Bus architecture. This motherboard card is engineered to support Intel P54C/P55C and Cyrix 6×86 microprocessors, featuring a 6-layer structure to minimize signal noise and incorporating power management features for green functionality.

Technical Specifications

- * **CPU Support:** Intel P54C/P55C, Cyrix 6×86 microprocessors.
- * **Chipset:** Intel Triton II HX chipset and enhanced I/O chipset.
- * **Processor Socket:** Not specified.
- * **L2 Cache:** 512KB Burst cache memory.
- * **Memory:** * Onboard Memory: Not explicitly specified.
- * **Display Memory:** 2MB EDO DRAM (for SBC8251V and SBC8251PV models; not available on SBC8251).
- * **Expansion Bus:** ISA, PCI/ISA (model dependent).
- * **Onboard VGA Controller:** Not available on the SBC8251 model. The SBC8251V and SBC8251PV models feature a CHIPS 65550 display controller with 2MB EDO DRAM, supporting resolutions up to 640×480 on flat panels and true color on CRTs.
- * **EIDE Interface:** 32-bit PCI interface.
- * **BIOS:** BIOS utility diskette included.
- * **Clock Speed Selection:** * 50MHz: Short 1-2, 3-4 (JP12). * 55MHz: Open (JP12). * 66MHz: Default (JP12).
- * **Form Factor:** Half-Size CPU Card.
- * **Power Management:** Built-in power management feature for green functions.
- * **Construction:** 6-layer structure to reduce signal noise.
- * **Interfaces:** * EIDE: 32-bit PCI interface.
- * **Expansion Slots:** ISA and PCI slots (specific configurations vary by model, with the SBC8251 featuring ISA and PCI/ISA support).
- * **Physical Characteristics:** * **Dimensions:** Half-Size form factor.
- * **Compatibility:** * **Operating Systems:** Designed to work with Windows-based applications.
- * **Processor Compatibility:** Intel P54C/P55C, and Cyrix 6×86 microprocessors.
- * **Backplane Compatibility:** ISA bus passive backplane compatible.

Environmental Considerations

- * **Temperature Support:** Extended temperature support suitable for demanding environments. (Note: Specific temperature ranges were not found in verifiable documentation.)

Why Choose Aumictech for Axiom Technology SBC8251 Motherboard Card? At Aumictech, we specialize in sourcing and supplying industrial computing hardware. Whether you need a solid motherboard card for embedded systems, reliable components for automation and control applications, or a versatile solution for demanding environments, our team ensures the Axiom Technology SBC8251 delivers maximum performance and integration for your application.

SBC8251 Characteristics / Specifications

PARAMETER	VALUE
Model	SBC8251
Instrument Type	Half-size all-in-one Pentium ISA CPU card
Family	Axiomtek SBC8251 / SBC8251V / SBC8251PV
Cpu Support	Pentium P54C/P55C, AMD K5/K6/K6-2, Cyrix 6×86 family, IDT C6/Winchip2-3D to 366 MHz
System Chipset	Intel Triton II / 430HX
Io Chipset	SMC37C669
System Memory	two 72-pin SIMM, 1/2/4/8/16/32/64 MB FPM/EDO, ECC
L2 Cache	512 KB burst cache (SBC8251 row)
Onboard Video	none on base SBC8251 (VGA silicon onVand PV siblings)
External Bus	ISA on SBC8251 (PCI/ISA on SBC8251PV)
Disk On Chip	M-Systems DiskOnChip socket
Ide Interface	up to two PCI mode 4 enhanced IDE devices
Floppy Interface	up to two 3.5 inch and/or 5.25 inch drives
Watchdog Timer	system reset, 0 to 64 seconds, 16 levels
Keyboard Mouse	two 6-pin mini-DIN PS/2 on the mounting bracket
Parallel Port	enhanced bidirectional EPP/ECP
Usb Port	one USB connector
Serial Ports	COM1 RS-232; COM2 RS-232/422/485; 16C550 UARTs
Expansion Bus	16-bit PC/104
Supply Voltage	+5 V only
Operating Temperature	0 C to 60 C (32 F to 140 F)
Board Size	185 mm by 122 mm (7.3 inch by 4.8 inch)
Pcb Layers	6-layer construction
Cpu Bus Clocks	50, 55, 60, 66 MHz jumper table
Manufacturer	Axiom Technology / Axiomtek

PARAMETER	VALUE
Literature	Axiomtek SBC8251 Pentium All-in-One CPU Card Family user manual, specifications 1.1 and 1.2

SBC8251 Specifications

PARAMETER	VALUE
Key Features	Half-size Pentium-class ISA CPU card to 366 MHz
Intel 430HX Triton II plus SMC37C669 Super I/O	Two 72-pin SIMMs to 64 MB FPM/EDO with ECC
Technical Specifications	Model: SBC8251

General Specifications & Supplementary Characteristics

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Operating temperature	0 C to 60 C (32 F to 140 F)
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Manufacturer	Axiom Technology / Axiomtek
Literature	Axiomtek SBC8251 Pentium All-in-One CPU Card Family user manual, specifications 1.1 and 1.2 Notes From the Axiomtek SBC8251 family user manual. Base SBC8251 has no onboard VGA controller; display memory and C&T 65550 figures apply to SBC8251V and SBC8251PV only.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

From the Axiomtek SBC8251 family user manual. Base SBC8251 has no onboard VGA controller; display memory and C&T 65550 figures apply to SBC8251V and SBC8251PV only.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.