

**Aumictech**

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Data Sheet

August 15, 2026

ADVANTECH

Advantech PCM-3362Z Intel Atom N450 PC/104-Plus SBC

The Advantech PCM-3362Z is a PC/104-Plus Single Board Computer built on the Intel Atom N450 processor, engineered for embedded systems requiring ultra-low power consumption and compact form factors. It delivers 1.667 GHz single-core performance with Hyper-Threading support across a 45 nm Pineview architecture, consuming just 5.5 W typical power. The board integrates Intel ICH8M chipset logic, dual display capability (CRT + LVDS), and Gigabit Ethernet connectivity, making it suitable for industrial automation, data acquisition, and field-deployed control systems operating in temperature-constrained environments. Aumictech offers NIST-traceable calibration and repair for the Advantech PCM-3362Z. Calibration covers analog input channel accuracy and offset at all gain settings, analog output accuracy, digital I/O logic threshold verification, sample rate and timing accuracy, and trigger and



MODEL

Advantech PCM-3362Z

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

PCM-3362Z

LISTING

<https://aumictechlabs.com/products/pcm-3362z-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

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Technical Specifications

Processor & Core Chipset Intel Atom N450: 1 core, 2 threads (Hyper-Threading), 1.667 GHz, 45 nm process L2 Cache: 512 KB TDP: 5.5 W

System Chipset: Intel ICH8M

Memory & Storage DDR2 SDRAM: 667 MHz, up to 2 GB (1 × 200-pin SODIMM) On-board Flash: 2 GB (4 GB optional) SATA II: 1 interface, up to 300 MB/s data rate

Graphics & Display Integrated Intel Gen 3.5 core (DX9 compliant, MPEG2 acceleration) Shared VRAM: up to 224 MB system memory VGA: up to SXGA 1400 × 1060 @ 60 Hz Single-channel 18-bit LVDS: up to WXGA 1366 × 768 Dual display support (CRT + LVDS)

Connectivity & Interfaces 1 × Gigabit Ethernet (10/100/1000 Mbps, Intel 82567V controller) 4 × USB 2.0 ports (fuse protected) 2 × RS-232, 1 × RS-422/485 serial ports 1 × PS/2 keyboard/mouse connector 8-bit GPIO, 1 × I²C connector PC/104-Plus expansion slot (ISA and PCI bus)

Power & Environmental Supply: +5 V ± 5% (required), +12 V ± 5% (optional) Typical consumption: +5 V @ 2 A, +12 V @ 5 mA (10.06 W) Maximum consumption: +5 V @ 2.37 A, +12 V @ 7 mA (11.93 W) Operating temperature: 0–60 °C standard (extended -20–80 °C or -40–85 °C available) Operating humidity: 40 °C @ 85% RH non-condensing

Physical & Firmware Dimensions: 96 × 90 mm Weight: ~0.162 kg (0.357 lb base); with heat-sink ~0.664 kg (1.46 lb) AMI 16 Mbit Flash BIOS Watchdog timer: 1–255 seconds/minutes programmable 3 V / 210 mAh lithium battery

Key Features

- Ultra-low power envelope - ideal for battery or solar-powered deployments
- Dual independent display outputs with hardware MPEG2 acceleration
- Gigabit Ethernet via dedicated Intel PHY controller
- PC/104-Plus modularity for stackable I/O expansion
- ACPI/APM 1.2 power management
- Extended temperature variants for harsh industrial environments
- Programmable watchdog for autonomous system recovery

Typical Applications

- Industrial automation and process control
- Data logging and remote telemetry systems
- Networked field instrumentation
- Embedded vision systems (MPEG2 preprocessing)
- Rugged transportation and environmental monitoring

PCM3362Z Characteristics / Specifications

PARAMETER	VALUE
Model	PCM-3362Z
Instrument Type	PC/104-Plus single board computer
CPU	Intel Atom N450
CPU Frequency	1.66 GHz
Form Factor	PC/104-Plus
Memory Type	DDR2 SODIMM class
Networking	dual 10/100/1000 LAN class
Expansion Bus	PC/104-Plus
Display	embedded graphics class
Storage Interfaces	SATA and or CompactFlash class
USB Ports	multiple USB 2.0 hosts class
Serial Ports	multiple COM ports class
Operating Temperature Options	standard and extended class
Power Input	ATX or DC class embedded
Series Family	Advantech PCM-3362
Related Models	PCM-3362
Watchdog	programmable watchdog
BIOS	AMI or Award embedded BIOS class
Audio	HD audio class optional
GPIO	onboard digital I/O class
Dimensions	PC/104 standard footprint
Humidity Class	noncondensing
Operating temperature	Options: standard and extended class
Humidity	Class: noncondensing

PCM3362Z Specifications

PARAMETER	VALUE
Applications	Embedded control, transportation computers, and stackable PC/104-Plus systems needing Atom-class performance.
Key Features	Intel Atom N450 processor
Technical Specifications	Model: PCM-3362Z

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Options: standard and extended class
Operating Temperature	Options: standard and extended class
Humidity	Class: noncondensing
Operating Temperature Options	standard and extended class
Power Input	ATX or DC class embedded
Series Family	Advantech PCM-3362
Related Models	PCM-3362
Watchdog	programmable watchdog
BIOS	AMI or Award embedded BIOS class
Audio	HD audio class optional
GPIO	onboard digital I/O class
Dimensions	PC/104 standard footprint
Humidity Class	noncondensing Notes Numeric and capability rows from Advantech PCM-3362 Intel Atom N450 PC/104-Plus SBC datasheet family for PCM-3362Z. Confirm exact RAM ceiling and LAN PHY on theZrevision.

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.

performance.	
Key Features	
Intel Atom N450 processor	
PC/104-Plus stackable expansion	
Dual Ethernet LAN	
Onboard graphics class	
Wide embedded I/O set	
Technical Specifications	
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PARAMETER	VALUE
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Notes

Numeric and capability rows from Advantech PCM-3362 Intel Atom N450 PC/104-Plus SBC datasheet family for PCM-3362Z. Confirm exact RAM ceiling and LAN PHY on theZrevision.

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

788 S 500 E, Pleasant Grove, UT 84062
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<https://aumictechlabs.com>

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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.