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Data Sheet

August 15, 2026

ADVANTECH

Advantech / Embedded Solutions ADLE3800PC-E3827 PCIe/104 Single Board Computers

The Advantech ADLE3800PC-E3827 is a PCIe/104 single board computer designed for embedded solutions. It features a compact form factor and solid construction, making it suitable for demanding environments. Equipped with an Intel Atom processor, it delivers reliable performance for a variety of applications.



MODEL

**Advantech
ADLE3800PC-
E3827**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

**ADLE3800PC-
E3827**

LISTING

[https://aumictechlabs.c
om/products/adle3800
pc-e3827-2/](https://aumictechlabs.com/products/adle3800pc-e3827-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantech ADLE3800PC-E3827 is a PCIe/104 single board computer designed for embedded applications in harsh industrial environments. Built around an Intel Atom E3827 64-bit processor with integrated HD Graphics, this compact SBC delivers the processing efficiency and thermal management required for transportation, automation, and defense deployments. The board operates across -40°C to 85°C and accepts 9-36 VDC input, making it suitable for mobile and field-mounted platforms requiring wide voltage tolerance. Technical Specifications Processor & Memory CPU: Intel Atom E3827, 64-bit architecture Memory: DDR3L SODIMM up to 8 GB at 1333 MHz Graphics: Integrated Intel HD Graphics with LVDS and VGA video outputs Storage &

Expansion Primary: 1 × SATA II (3 Gb/s) connector supporting 2.5" SSD/HDD Expansion: mSATA socket for modular storage or I/O cards Slots: PCIe ×1 and PCI 32-bit 33 MHz stackable connectors Connectivity Serial: 2 × RS-232/422/485 selectable + 1 × RS-232 port USB: 2 × USB 3.0 (5 Gb/s) and 4 × USB 2.0 Ethernet: 2 × Gigabit ports (10/100/1000 Mbps) Digital I/O: 8-channel configurable Power & Environment Input: 9-36 VDC wide-range supply Operating temperature: -40°C to 85°C Humidity: 5-95% RH non-condensing Form factor: Standard PCIe/104 with integrated watchdog timer

Key Features Dual Gigabit Ethernet for network redundancy Selectable RS-485/422/232 serial ports for legacy industrial device integration 8-channel Digital I/O for sensor and control connectivity Programmable watchdog timer ensures unattended operation reliability Optional TPM support for security-critical deployments Extended temperature range (-40°C to 85°C) eliminates thermal derating

Typical Applications Industrial automation controllers, transportation gateway modules, defense embedded systems, field-deployable data acquisition, and remote monitoring platforms requiring compact form factors with wide voltage input tolerance.

Compatibility & Integration Supports Windows 7/8/10 and Linux operating systems. PCIe/104 stackable architecture enables modular expansion within standard military-grade chassis. Dual serial interfaces and 8-channel Digital I/O provide straightforward integration with existing industrial sensor networks and legacy equipment.

ADLE3800PCE3827 Characteristics / Specifications

PARAMETER	VALUE
Model	ADLE3800PC
Configuration Example	ADLE3800PC-E3827
Instrument Type	PCIe/104 single board computer
Processor Family	Intel E3800 Bay Trail SoC
Cpu Tdp	8 W to 10 W
Memory	up to 8 GB DDR3L-1333 1.35 V SODIMM204
Form Factor	PCIe/104 90 mm x 96 mm
Pcie Stack	Type 2 downward stacking V2.01
Pcie Lanes	2 x Gen2 ×1 plus LPC SMBus 2x USB 2.0
Sata	2 × 3 Gb/s shared with mSATA socket
Ethernet	2 × 10/100/1000 Intel i210
Com Ports	2 x RS232
Usb 2p0 Total	8
Usb 3p	1 (backward compatible to USB 2.0)
Gpio	16 bit PCA9535BS no interrupt
Audio	7.1 HD with SPDIF in/out
Mini Card	PCI Express Mini Card 1.2 Mini PCIe or mSATA
Displayport Resolution	2560 × 1600 maximum
Hdmi Resolution	1920 × 1200 maximum
Input Power	5 VDC and 5VS (12 VDC for PCIe/104 connector)
Bios	AMI Aptio
Os Class	Windows 7/8/10 and Linux
Graphics Engine	Intel 7th generation class on E3800
Process	Intel 22 nm 3D Tri-Gate

ADLE3800PCE3827 Specifications

PARAMETER	VALUE
Applications	Fanless embedded control, industrial PCIe/104 stacks, and dual-LAN gateway or HMI computers.
Key Features	Intel E3800 SoC (E3815/E3827/E3845)
Two Intel i210 Gigabit Ethernet ports	PCIe/104 Type 2 with two Gen2 ×1 lanes
Technical Specifications	Model: ADLE3800PC

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 ADL Embedded Solutions ADLE3800PC datasheet/manual (E3800 SoC, memory, I/O, 90 x 96 mm). Catalog brand Advantech/Embedded Solutions ADLE3800PC-E3827 is this E3827-fitted board.

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.