

AX-234BT | Fanless Embedded Edge computer | CAN Bus GPIO | Wide Voltage



Features:

- * 13th Gen Intel® Core™ i5-1345U — 10 cores / 12 threads, up to 4.6 GHz, DDR5-5200
- * Dual LAN (1 GbE + 2.5 GbE), dual RS232/422/485, one CAN Bus — built for machine & vehicle integration
- * Wide voltage 9–36 VDC input with Phoenix terminal and remote power on/off — designed for in-vehicle and mobile power
- * Fanless, cable-less, jumper-less unibody aluminium design; multi-mount (wall / side / DIN-rail / VESA)
- * OEM/ODM ready with optional SDK and OS customization



SKU	AX-234BT	
Product type	Industry Computers (FANLESS)	
Product color	Extruded Aluminum with Heavy Duty Metal	
Operating system	Windows 10 · Windows 11 · Linux	
FOR IN-VEHICLE & MOBILE APPLICATIONS		
Wide Voltage Input	9–36 VDC, Phoenix terminal + remote power on/off (2-pin terminal block)	
Fieldbus & I/O	1× CAN Bus · 2× RS232/422/485 (up to 6× COM via expansion) · 8-bit GPIO	
Industrial EMC	EN 61000-6-2 (immunity) & EN 61000-6-4 (emissions), 24 VDC input — suitable for workshop and in-vehicle environments	
Ruggedized	Fanless –20 °C to +60 °C operation · shock 15 G · vibration 5–500 Hz / 1 Grms	
PROCESSOR/RAM/STORAGE		
Processor Name	Intel® Core i5 1345U (up to 4.7 GHz with Intel® Turbo Boost Technology, 12MB L3 cache, 10 cores, 12 threads)	
Processor Base Power(TDP)	15 W (configurable 12–28 W)	
Max Turbo Power	up to 55 W (package peak)	
Memory	2x DDR5 SO-DIMM socket, support DDR5 up to 5200MHz(13th Gen),	
Storage	1x 2.5" SATA HDD/SSD or 1x Half-slim SSD (SATA3.0)	
	1x M.2 M-Key 2280 (PCIe_4X)	
TPM2.0	TPM2.0	
BIOS	AMI BIOS	
Graphics		
Graphic card	Integrated Intel® Iris® Xe Graphics 80EU	
Display	1× 24-bit LVDS (LVDS/eDP selectable)	
	1× HDMI 2.1 (4K @ 60 Hz) · 1× Mini DisplayPort 1.4b (4K @ 60 Hz) · 1x Type C (4K @ 60 Hz)	
I/O PORTS (front & rear panel)		
I/O ports	USB	3 x 5Gbps USB 3.2 Gen1, Type A
		1x USB2.0, Type C (USB+DP)
	COM	2× RS232/422/485 (standard) · expandable to 6× COM (COM3–6, RS232/RS485)
	CAN	1× CAN Bus (CAN 2.0 A/B)
	LAN	LAN1: 1 GbE, Intel® i219 · LAN2: 2.5 GbE, Intel® i226-LM (supports Intel® AMT)
	Audio	1 x 3.5mm Combo audio jack
	GPIO	1× 8-bit GPIO expandable

WIRELESS & EXPANSION	
4G/5G	1x M.2 B-Key (PCIe+USB3.0, 4G/5G Module), 1x Slim slot
Wi-Fi / BT	1x M.2 E-Key (PCIe_1X, Wifi module)
Expansion	COM3–6 (RS232/RS485) · 1× LPT (2× 13-pin) · 1× SPDIF · AT/ATX · CMOS (2-pin)
Power	
	DC 9-36 v, Ø5.5x2.5 mm
Power input	1x Phonex terminal
	1x Remote Power On/Off, 2-pin Terminal Block
Environment	
Operation Temperature	• -20°C to +60°C • PassMark BurnInTest: 100% CPU, 2D/3D Graphics (without thermal throttling) • With extended temperature peripherals; Ambient with air flow • According to IE61000-3-2, IE61000-3-3
Storage Temperature	-40°C to +85°C
Relative Humidity	• 95% RH @ 70°C (Non-condensing)
Shock	15G, 11ms
Vibration	5 - 500 Hz/1 Grms
Certification & EMC/EMI/EMS	
Certification	• CE, UKCA, FCC, ICES-003 Class A
EMC	• EN61000-6-4, EN61000-6-2 (24VDC Input Only)
EMI	• CISPR 32 Conducted & Radiated: Class A • EN/BS EN 55032 Conducted & Radiated: Class A • EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A • EN/BS EN61000-3-3 Voltage fluctuations & flicker • FCC 47 CFR Part 15B, ICES-003 Conducted & Radiated: Class A
EMS	• EN/IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV • EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 10 V/m • EN/IEC 61000-4-4 EFT: AC Power: 2 kV; DC Power: 1 kV; Signal: 1 kV • EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV • EN/IEC 61000-4-6 CS: 10V (**Compliant with the standard when utilizing shielded ethernet cable.) • EN/IEC 61000-4-8 PFMF: 50 Hz, 30A/m • EN/IEC 61000-4-11 Voltage Dips & Voltage Interruptions: 1 cycles at 60 Hz
Dimensions And Weight	
Dimensions (W x D x H)	210 x 150 x 70 mm
Weight	1.8 kg
Mounting	• Wall / Side / DIN-RAIL / VESA Moun
Physical Design	Fanless · cable-less · jumper-less · unibody extruded aluminium with heavy-duty metal
Lifecycle/Warranty/Quality	
Product Lifecycle	7+ years lifecycle for mainboard, modules, shells, ICs.
Warranty	24-Month for completely unit
Quality Assurance	AQL-audited consistency · 100% 18-hour power-on burn-in under load · full serial-number traceability
Technical support	lifetime for OS support, BIOS/Firmware updates, CAN/RS485/PLC debugging,
Business Terms (OEM/ODM)	
MOQ	MOQ 100 Light Customization NRE Refund @ 2K Units
Customization	I/O layout changes · wireless pre-integration · storage upgrades · front-panel branding · pre-loaded system images for volume projects
Delivery time	35 days for light customization; NRE projects quoted per requirement
Platform	Scalable hardware platform with optional SDK and OS customization for fast system integration