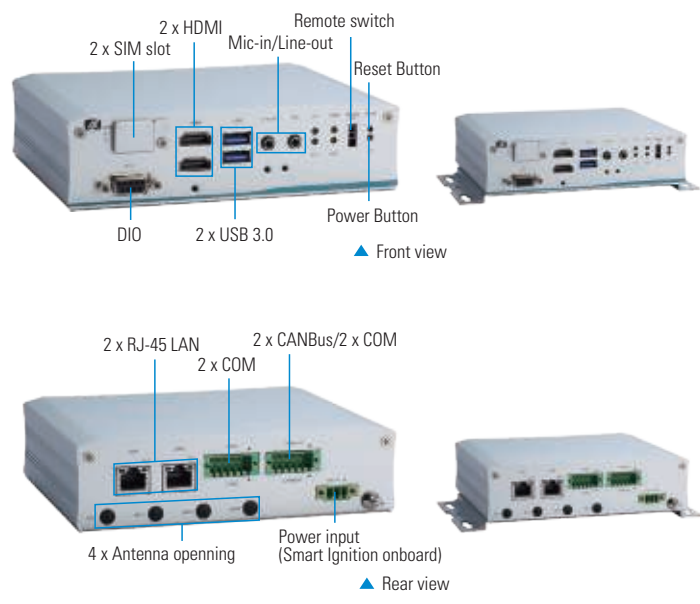


tBOX110 NEW

Fanless Embedded System with Intel Atom® Processor E3940 for Vehicle PC

Features

- CE and FCC certified and ISO 7637-2 compliant
- Intel Atom® processor E3940
- Fanless and wide operating temperatures from -40°C to +70°C
- Supports 9 to 36 VDC and 12/24 VDC typical in-vehicle power input
- Compact size with multiple COM, CANBus, and DIO for communication
- Smart Ignition for power on/off schedule, vehicle battery protection, and different power modes
- Suitable for transportation gateway applications



Specifications

Standard Color	Silver	
Construction	Aluminum extrusion and heavy-duty steel, IP20	
CPU	Intel Atom® x5-E3940 4C @1.6 GHz, TDP: 9.5W	
Chipset	SoC integrated	
System Memory	1 x DDR3L-1866 SO-DIMM, up to 8GB	
BIOS	AMI	
System I/O Outlet	Serial	2 x RS232/422/485 (4-wire) with shield grounding
	Display	2 x HDMI 1.4b (with keylock)
	Audio	1 x Mic-in, 1 x Line-out
	Ethernet	2 x RJ-45 10/100/1000 Mbps Ethernet (Intel® I210-IT)
	USB	2 x USB 3.0
	DIO	1 x DB9 8-bit programmable DIO
	Others	1 x Reset button 1 x Power button 1 x Remote switch 4 x Antenna opening
Expansion Interface	2 x Full-size Rev.1.2 PCI Express Mini Card slot: • 1 x USB/PCIe with external SIM socket • 1 x mSATA/USB/PCIe with external SIM socket	
Storage	SATA Drive	1 x Internal 2.5" SATA drive (9.5 mm height)
	mSATA	1 x mSATA (occupied 1 x PCI Express Mini Card slot)
Watchdog Timer	255 levels, 1 to 255 sec.	
Power	Power Supply	1 x Terminal block DC-in, (typical: 12/24 VDC) with ACC ignition General use: 1 x Terminal block, 9 to 36 VDC Vehicle: 1 x Terminal block, 12/24 VDC with smart ignition
	Power Consumption	9 VDC, 3.742A; 36 VDC, 0.907A

System Indicator	1 x LED indicator for SATA drive activity
	1 x LED indicator for power 2 x LED indicator for LAN activity 2 x Programmable indicator
Operating Temperature	-40°C to +70°C (-40°F to +158°F) with W.T. peripheral*
Humidity	0% to 95%, non-condensing
Dimensions	164.1 mm (6.46") (W) x 128 mm (5.03") (D) x 44.1 mm (1.73") (H) (without wall mount)
Mounting	Wall mount, Din-rail
Weight (net/gross)	0.97 kg (2.13 lb)/1.37 kg (3.01 lb)
Certifications	CE and FCC certified and ISO 7637-2 compliant
EMC	CE/FCC EN 55022 (Class A), EN 55024, FCC part 15 B (Class A)
Vibration Endurance	3 Grms w/ SSD (5 to 500Hz, X/Y/Z direction; random, operating) 1 Grms w/ HDD (5 to 500Hz, X/Y/Z direction; random, operating) MIL-STD-810G, Method 514.6C-VI Category 4 compliant
EOS Support	Windows® 10 64-bit, Ubuntu 20.04
Software Support	AXView

*Wide temperature . All W.T. supported products have to be sorted by Axiomtek.

Ordering Information

System

tBOX110-APL-TV (P/N: E26N110XXX)	Fanless vehicle grade embedded system with Intel Atom® processor E3940, 2 RJ-45 GbE LAN, terminal block DC-in, 2 USB, 2 HDMI, 2 COM, DIO, 2 CAN, audio mic-in/line-out, with Smart ignition, TPM 2.0, and 12/24 VDC
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Optional

Communication modules	8812C300CA0E	AP12356WT Wi-Fi kit for IC0300 SFP (E)
AC to DC adapter	50906D24000E	Adapter 24V/120W, wire only, FSP120-AAAN3

*Specifications and certifications may vary based on different requirements.

Power Protection

OCP (over current protection)
 OVP (over voltage protection)
 UVP (under voltage protection)
 RPP (reverse polarity protection)
 ISO 7637-2 pulse 1, 2a, 2b, 3a, 3b, 4 (vehicle version)
 Setting for in-vehicle battery protection: system will be automatically turned down at low voltage level
 Setting for ignition control: system will activate a counter while in-vehicle battery at low voltage, ACC-ON delay and shut down delay

Dimensions

