UST200-83H-FL
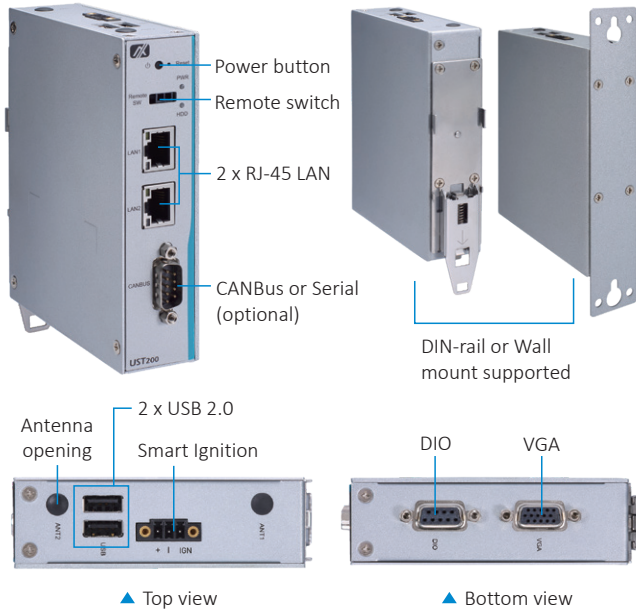
Robust and Compact DIN-rail Fanless Embedded System with Intel Atom® x5-E3930 Processor for In-Vehicle Gateway Application

Power button
Remote switch
2 x RJ-45 LAN
CANBus or Serial (optional)

DIN-rail or Wall mount supported

Antenna opening
2 x USB 2.0
Smart Ignition

DIO
VGA

▲ Top view
▲ Bottom view

Features

- CE, FCC certified; ISO 7637-2 compliant
- Intel Atom® x5-E3930 processor
- Extreme cost-effective with fanless and cableless design
- Wide operating temperature range from -40°C to +70°C
- Supports 12 & 24 VDC typical in-vehicle power input
- Smart Ignition for power on/off schedule, vehicle battery protection and different power mode
- Supports COM, CAN, USB, GbE LAN
- Supports SocketCAN
- AMS.AXView intelligent remote monitoring

Fanless | Ext. Temp | Compliant ISO 7637-2 | AMS.AXView | Smart Ignition | SocketCAN* | TPM

Specifications

Standard Color	Sliver		
Construction	Extruded aluminum and heavy-duty steel, IP20		
CPU	Intel Atom® x5-E3930 2C @1.3 GHz, TDP: 6.5W		
Chipset	SoC integrated		
System Memory	1 x DDR3L-1866 SO-DIMM, up to 8GB		
BIOS	AMI		
TPM	TPM 2.0		
System I/O Outlet	Serial	1 x DB9 Serial console or RS-232/422/485**	
	CANBus	1 x DB9 CANBus 2.0 A/B**, supports SocketCAN*	
	Display	1 x VGA (up to 1920 x 1200 @60Hz) (HDMI optional)	
	Ethernet	2 x RJ-45 10/100/1000 Mbps Ethernet (Intel® i211-AT)	
	USB	2 x USB 2.0	
	DIO	1 x DB9 8-bit programmable DIO	
	Others	2 x Antenna opening 1 x Power button 1 x Remote switch	
Extension Interface	1 x Full-size Rev. 1.2 PCI Express Mini Card slot: • USB/PCIe with SIM socket 1 x Half-size Rev. 1.2 PCI Express Mini Card slot: • mSATA/USB/PCIe		
Storage	mSATA	1 x Half-sized mSATA (occupied 1 x PCI Express Mini Card slot)	
	eMMC	Optional***	
Watchdog Timer	255 levels, 1 to 255 sec.		
Power	Power Supply	General Use: 1 x Terminal block, 9 to 36 VDC Vehicle: 1 x Terminal block, 12/24 VDC with smart ignition	
	Power Consumption	9V, 2.06A/36V, 0.55A	

AXIOMTEK

Specifications

System Indicator	1 x LED indicator for SATA drive activity 1 x LED indicator for power
Operating Temperature	-40°C to +70°C (-40°F to +158°F) with W.T. peripheral****
Humidity	0% to 95%, non-condensing
Dimensions	31 mm (1.22") (W) x 100.4 mm (3.93") (D) x 125 mm (4.92") (H)
Mounting	Wall mount, DIN-rail
Weight (net/gross)	0.3 kg (0.67 lb)/0.45 kg (0.99 lb)
Certifications	CE (Class A), FCC (Class A) certified; ISO 7637-2 compliant
EMC	CE/FCC EN 55032 (Class A), EN 55024, FCC part 15 B (Class A)
Vibration Endurance	3 Gms with mSATA (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 18.04
Software Support	AXView

* Please refer the detail in SocketCAN manual.
** See Ordering infomation.
*** Please contact Axiomtek for the details of mounting and pre-installed software.
**** Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

Ordering Information

Standard

UST200-83H-FL-E3930-CAN-TVDC (P/N: E274200100)	Fanless embedded system with Intel Atom® x5-E3930 processor, 1 CAN, 2 LAN, 2 USB and 1 DIO, operating temperature from-40 to 70°C, TPM 2.0 supported, and Smart Ignition
UST200-83H-FL-E3930-COM-TVDC *By request.	Fanless embedded system with Intel Atom® x5-E3930 processor, 1 COM, 2 LAN, 2 USB and 1 DIO, operating temperature from-40 to 70°C, TPM 2.0 reserved, and Smart Ignition

*TDC: terminal block DC-in connector, DC voltage input

Optional

Communication Modules	8812C300GA0E	3G UC20GKit tBOX/ICO (20) (E)
	8812C300HA0E	3G/GPS UC20GKit tBOX/ICO (20) (E)
	8812C1200A0E	AP12356 Wi-Fi kit for tBOX/ICO (E)
	8812C1201A0E	AP12356 WT Wi-Fi kit for tBOX/ICO (E)
	886N32310A0E	LTE LE910C4-AP KIT(20)for tBOX(E)
	886N32311A0E	LTE LE910C4-EU KIT(20)for tBOX(E)
	886N32312A0E	LTE LE910C4-NF KIT(20)for tBOX(E)
AC to DC Adapter	509000001500	PWS FSP120-AAAN3(9NA1206647) FSP 120W

* 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