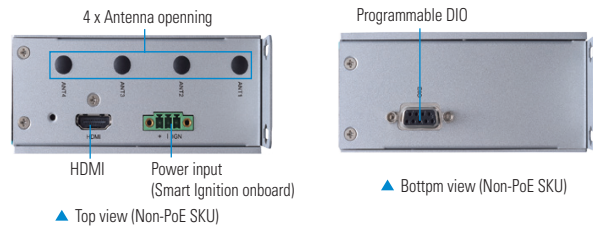
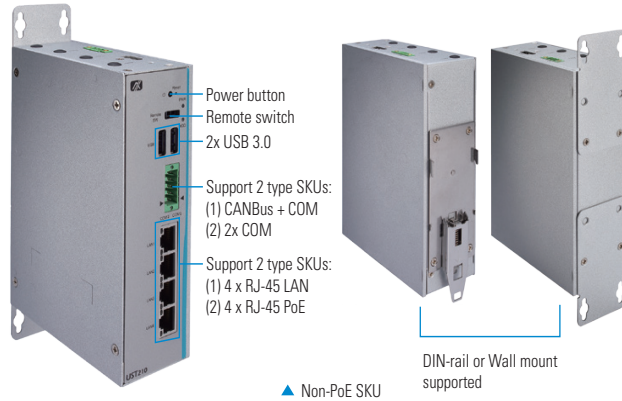


# UST210-83K-FL NEW

Robust and Compact DIN-rail Fanless Embedded System with Intel Atom® x5-E3940 Processor for In-Vehicle Gateway Application

## Features

- CE, FCC certified; ISO 7637-2 compliant
- Intel Atom® x5-E3940 processor
- Extreme cost-effective with fanless and cableless design
- Wide operating temperature range from -40°C to +70°C
- Supports 9-36 VDC & 12/24 VDC typical in-vehicle power input
- Smart Ignition for power on/off schedule, vehicle battery protection and different power mode
- Support COM, CAN, USB, GbE PoE LAN
- 8-bit programmable DIO for IoT gateway applications
- Supports SocketCAN
- AMS.AXView intelligent remote monitoring



## Specifications

Standard Color	Sliver	
Construction	Extruded aluminum 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	
TPM	TPM 2.0	
System I/O Outlet	Serial	Up to 2 x Terminal block Serial console or RS-232/422/485**
	CANBus	1 x Terminal block CANBus 2.0 A/B**, supports SocketCAN*
	Display	1 x HDMI (up to 1920x1080@60Hz)
	Ethernet	4 x RJ-45 isolated 10/100/1000 Mbps Ethernet (Intel® i211-AT) Isolation voltage: 1.5 kV
	USB	2 x USB 3.0
	DIO	1 x DB9 8-bit programmable DIO
	Others	4 x Antenna opening 1 x Power button 1 x Reset button 1 x Remote switch
Extension Interface	1 x Full-size Rev. 1.2 PCI Express Mini Card slot:	
	• USB with SIM slot 1 x Half-size Rev. 1.2 PCI Express Mini Card slot: • mSATA/USB	
Storage	SATA Drive	1 x Internal 2.5" SATA drive (9.5 mm height)
	mSATA	1 x Half-sized mSATA (occupied 1 x PCI Express Mini Card slot)
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	Non-PoE SKU: 9 VDC, 3.878A; 36VDC, 0.85A PoE SKU: 9VDC 6.298A, 36VDC 1.617A
PoE (PSE, Power Sourcing Equipment)**	Up to 4 x configurable RJ-45 PoE output max. 30W supports PoE & PoE+ • PoE (802.3af 15.4W/port) • PoE+ (802.3at 30W/port)	
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	Non-PoE SKU: 48 mm (1.89") (W) x 110.4 mm (4.33") (D) x 155 mm (6.1") (H)	
	PoE SKU: 67 mm (2.63") (W) x 110.4 mm (4.33") (D) x 155 mm (6.1") (H)	
Mounting	Wall mount, DIN-rail	
Weight (net/gross)	Non-PoE SKU: 0.51 kg (1.12 lb)/0.79 kg (1.74 lb)	
	PoE SKU: 0.84 kg (1.85 lb)/1.12 kg (2.47 lb)	
Certifications	CE (Class A), FCC (Class A) certified; ISO 7637-2 compliant	
	EMC/FCC EN 55032 (Class A), EN 55024, FCC part 15 B (Class A)	
Vibration Endurance	3 Gms with mSATA and SSD (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	AMS.AXView	

\* Please refer the detail in SocketCAN manual.

\*\* See Ordering information.

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

**Ordering Information**

Standard	
UST210-83K-FL-E3940-CANCOM-TVDC (P/N: E274210100)	Fanless embedded system with Intel Atom® x5-E3940 processor, 1 CAN, 1 COM, 4 LAN, 2 USB, 1 DIO and 1 HDMI, TPM 2.0 supported, with Smart Ignition  <i>Non-PoE SKU</i>
UST210-83K-FL-E3940-2COM-TVDC (P/N: E274210101)	Fanless embedded system with Intel Atom® x5-E3940 processor, 2 COM, 4 LAN, 2 USB, 1 DIO and 1 HDMI, TPM 2.0 supported, with Smart Ignition  <i>Non-PoE SKU</i>
UST210-83K-FL-E3940-4POE-CANCOM-TVDC (P/N: E274210102)	Fanless embedded system with Intel Atom® x5-E3940 processor, 1 CAN, 1 COM, 4 PoE LAN, 2 USB, 1 DIO and 1 HDMI, TPM 2.0 supported, with Smart Ignition  <i>PoE SKU</i>
UST210-83K-FL-E3940-4POE-2COM-TVDC (P/N: E274210103)	Fanless embedded system with Intel Atom® x5-E3940 processor, 2 COM, 4 PoE LAN, 2 USB, 1 DIO and 1 HDMI, TPM 2.0 supported, with Smart Ignition  <i>PoE SKU</i>

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

**Optional**

Communication Modules	8812C300GA0E	3G UC20GKit tBOX/ICQ(20) (E)
	8812C300HA0E	3G/GPS UC20GKit tBOX/ICQ(20) (E)
	8812C300IA0E	LTE SIM7100JC Kit for ICQ(20) JPN SFP(E)
	8812C300EA0E	LTE SIMCOM SIM7100C(TW) for ICQ300 SFP(E)
	8812C300DA0E	LTE SIMCOM SIM7100E(EU) for ICQ300 SFP(E)
AC to DC Adapter	50906D24000E	Adaptor 24V/120W, wire only, FSP120-AAAN3

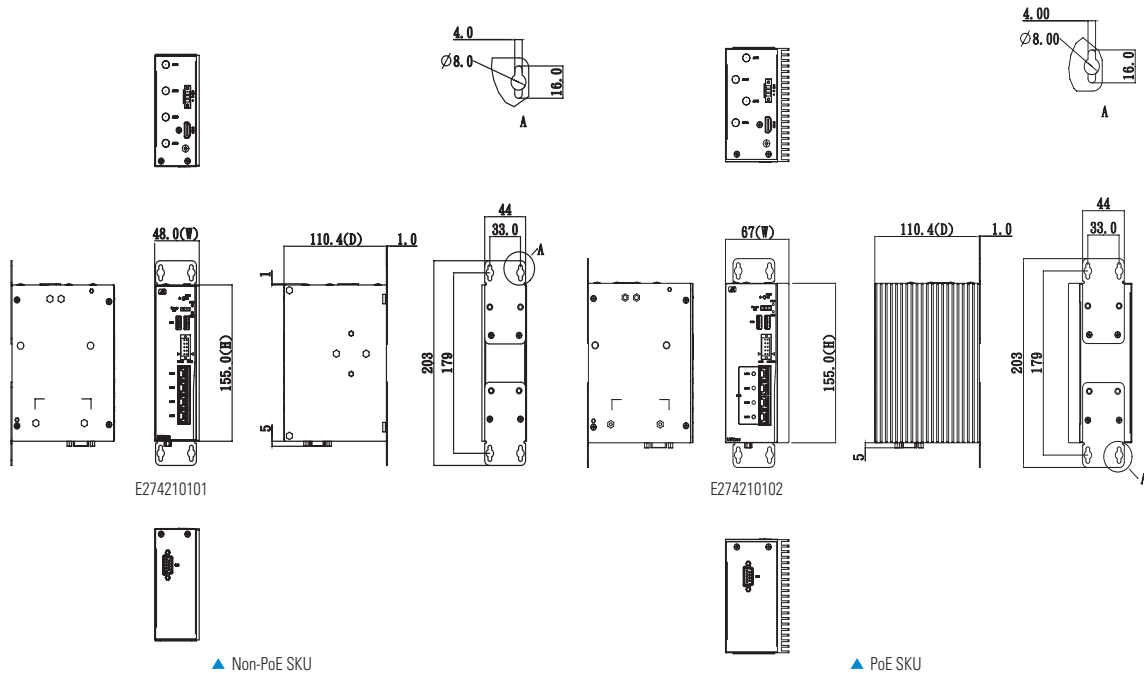
\* Specifications and certifications may vary based on different requirements.

**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**



## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660