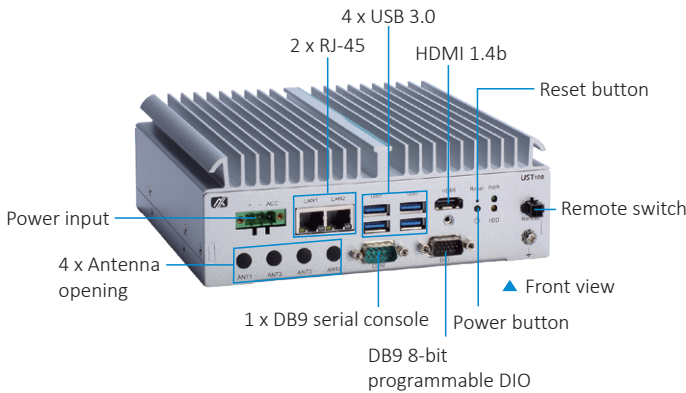


UST100-504-FL

Fanless Compact Embedded System with 7th/6th Gen Intel® Core™, Pentium® and Celeron® Processor for Video Analytics in Vehicle PC Market



Features

- CE, FCC certified; ISO 7637-2 compliant
- LGA1151 7th/6th gen Intel® Core™ & Pentium® processors (up to 35W) with Intel® H110
- Fanless and wide operating temperatures from -40°C to +60°C
- 12/24 VDC power input, with power management (Smart Ignition)
- Single-sided I/O design for easy maintenance
- Three PCI Express Mini Card slots and two internal SIM card slots



▲ Slide rail design for easy maintenance

Specifications

Standard Color	Silver	
Construction	Aluminum extrusion and heavy-duty steel, IP30	
CPU	LGA1151 7th gen Intel® Core™ processors, TDP: 35W LGA1151 6th gen Intel® Core™ processors, TDP: 35W	
Chipset	Intel® H110	
System Memory	1 x DDR4-1866/2133/2400 SO-DIMM, up to 16GB	
BIOS	AMI	
TPM	TPM 2.0	
System I/O Outlet	Serial	1 x DB9 Serial console or RS-232/422/485
	Display	1 x HDMI 1.4b supports up to 4K/2K @30Hz
	Ethernet	2 x RJ-45 10/100/1000 Mbps Ethernet (Intel® I210-AT)
	USB	4 x USB 3.0
	DIO	1 x DB9 8-bit programmable DIO
	Others	1 x Reset button 1 x Power switch 1 x Remote switch 4 x Antenna opening
Expansion Interface	2 x Full-size Rev.1.2 PCI Express Mini Card slot:	<ul style="list-style-type: none"> • 1 x USB/PCIe with SIM socket • 1 x mSATA/USB/PCIe with SIM socket
	1 x Half-size Rev.1.2 PCI Express Mini Card slot:	<ul style="list-style-type: none"> • 1 x mSATA/USB
Storage	SATA Drive	1 x Internal 2.5" SATA drive (9.5 mm height)
	mSATA	1 x Full-sized mSATA (occupied 1 x PCI Express Mini Card slot) 1 x Half-sized mSATA (occupied 1 x PCI Express Mini Card slot)
Watchdog Timer	255 levels, 1 to 255 sec.	

Specifications

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, 7.774A/36V, 2.01A
System Indicator	1 x LED indicator for SATA drive activity 1 x LED indicator for power	
Operating Temperature	-40°C to +60°C (-40°F to +140°F) with W.T. peripheral*	
Humidity	0% to 95%, non-condensing	
Dimensions	185 mm (7.09") (W) x 150 mm (5.91") (D) x 65 mm (2.56") (H) (without wall mount)	
Mounting	Wall mount	
Weight (net/gross)	1.71 kg (3.77 lb)/2.19 kg (4.83 lb)	
Certifications	CE (Class A), FCC (Class A) certified; and ISO 7637-2 compliant	
EMC	CE/FCC EN 55032 (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) 2 Grms w/ HDD & Anti-Vibration Kit (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, Windows® 7 64/32-bit (for 6th gen Intel® CPU), Linux	
Software Support	AXView	



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

Packing List

- 1 x UST100-504-FL system unit
- 1 x HDMI cable fixed
- 1 x Cable tie
- 4 x HDD screws
- 1 x Terminal block
- 1 x Wall mount kit
- 4 x Wall mount kit screws
- 3 x Mini Card slot screws


Ordering Information

System

UST100-504-FL-i7-TDC (P/N: E274100101)	Fanless embedded system with LGA1151 Intel® Core™ i7-7700T desktop processor, H110, HDMI, 4 USB 3.0, 2 RJ-45 GbE LAN, RS-232/422/485, DIO, SATA drive and Smart Ignition	
UST100-504-FL-i5-TDC (P/N: E274100102)	Fanless embedded system with LGA1151 Intel® Core™ i5-7500T desktop processor, H110, HDMI, 4 USB 3.0, 2 RJ-45 GbE LAN, RS-232/422/485, DIO, SATA drive and Smart Ignition	

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

Optional

Anti-vibration Kit (P/N: 8816N1000A0E)	For in-vehicle/rolling stock applicable systems which improve HDD/SSD stability		
Communication Modules	8816N3239A0E	3G UC20GKit for tBOX/UST (3G ANT) (E)	
	8816N3235A0E	3G/GPS UC20GKit tBOX/UST(3G/GPS ANT) (E)	
	886N50014A0E	MCR8822CE-P WiFi Kit(30) for tBOX(E)	
	8816N810DA0E	GPS kit M8U with adapter for tBOX SFP (E)	
	887410010A0E	GPS RYP8838 Kit(30)for UST(E)	
	881745001A0E	GPS kit without adapter for UST SFP (E)	
	886N50010A0E	LTE LE910C4-AP KIT(30)for tBOX(E)	
AC to DC Adapter	886N50012A0E	LTE LE910C4-NF KIT(30)for tBOX(E)	
	509000001500	PWS FSP120-AAAN3(9NA1206647) FSP 120W	

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

