UST100-504-FL

Fanless Embedded System with 7th/6th Gen Intel® Core™, Pentium® and Celeron® Processor, Compact Size 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 (ACC ignition)
- Single-sided I/O design for easy maintenance
- Expansion capability for three PCI Express Mini Card slot and two internal SIM card slot

Ultra-compact size (65.15 mm height)





Specifications

Standard Color	Silver			
Construction	Aluminum extrusion and heavy-duty steel, IP30			
CPU	LGA1151 7th gen Intel® Kaby Lake processors, TDP: 35W LGA1151 6th gen Intel® Skylake 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			
	Serial	1 x DB9 Serial console or RS-232/422/485		
	Display	1 x HDMI 1.4b supports up to 4K/2K @60Hz		
	Audio	1 x Mic-in, 1 x Line-out		
System I/O Outlet	Ethernet	2 x RJ-45 10/100/1000 Mbps Ethernet (Intel® i211-IT)		
System // Outlet	USB	4 x USB 3.0		
	DIO	1 x DB9 4-in/4-out 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: • 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: • 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.			
Power	Power Supply	1 x Terminal block, 12/24 VDC with ACC ignition		
	Power Consumption	12V, 5.06A; 24V,2.72A		
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%, nor	-condensing		

Dimensions	185 mm (7.09") (W) x 150 mm (5.91") (D) x 65.15 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-VL Category 4 compliant		
EOS Support	Windows® 10 64-bit, Windows® 7 64/32-bit (for 6th gen Intel® CPU), Ubuntu 18.04		
Software Support	AMS.AXView		

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

Ordering Information

System

UST100-504-FL-i7-TDC (P/N: E274100101) UST100-504-FL-i5-TDC (P/N: E274100102)

Fanless embedded system with LGA1151 7th gen Intel® i7-7700T/i5-7500T desktop processor, H110, HDMI, 4 USB 3.0, 2 RJ-45 GbE LAN, RS-232/422/485, Mic-in/ Line-out, DIO, SATA drive and ACC ignition

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

Optional

Anti-vibration Kit (P/N: 8816N1000A0E)	For in-vehicle/rollir applicable systems improves HDD/SSE	which		
Communication Modules	8816K6603A0E 8816N5003A0E	AMPAK AP12356 Wi-Fi kit (E) AP12356 WT Wi-Fi kit for tBOX/ UST SFP (E)		
AC to DC Adapter	50906D24000E	Adaptor 24V/120W, wire only, FSP120-AAAN3		

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

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

