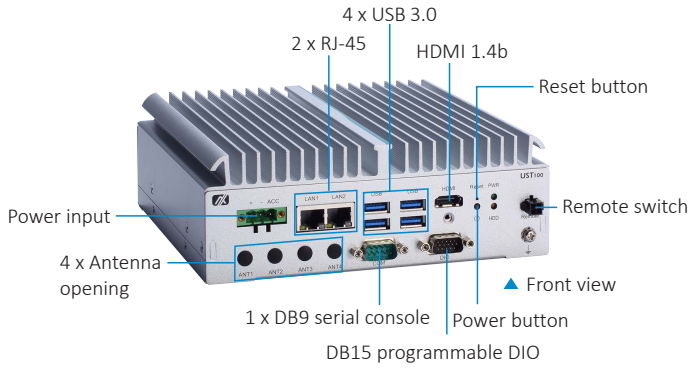


# UST100-504-FL

Fanless Compact Embedded System with LGA1151 7th/6th gen Intel® Core™ or Pentium® Processor for Video Analytics in Vehicle PC Market



## Features

- CE, FCC certified; ISO 7637-2 compliant
- LGA1151 7th/6th gen Intel® Core™ or Pentium® processor (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



## 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 DB15 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"> <li>• 1 x USB/PCIe with SIM socket</li> <li>• 1 x mSATA/USB/PCIe with SIM socket</li> </ul>
	1 x Half-size Rev.1.2 PCI Express Mini Card slot:	<ul style="list-style-type: none"> <li>• 1 x mSATA/USB</li> </ul>
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 Smart Ignition**
System Indicator	1 x LED indicator for SATA drive activity	
	1 x LED indicator for power	

## Specifications


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® 10/7 64-bit, Ubuntu 18.04
Software Support	AXView

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

\*\*The UST100 also supports 9 to 36VDC for general purposes. Please refer to the user's manual for settings.

## Ordering Information

### System

UST100-504-FL-TV (P/N: E274100105)	Fanless embedded system with LGA1151 Intel® desktop processor, H110, HDMI, 4 USB3.0, 2 RJ-45 GbE LAN, RS-232/422/485, DIO, SATA drive and Smart Ignition	
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### Optional

Anti-vibration Kit (P/N: 8816N1000A0E)	For in-vehicle applicable systems which improves HDD/SSD stability	
Communication Modules	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)
	886N50011A0E	LTE LE910C4-EU KIT(30)for tBOX(E)
	886N50012A0E	LTE LE910C4-NF KIT(30)for tBOX(E)
AC to DC Adapter	509000001500	PWS FSP120-AAAN3(9NA1206647) FSP 120W
Cable/Power Cord	599000001100	Power cord YP12/YC12_CY-U0032 YUNG_LI 1830mm
	59906000010E	Power cord YP-12/YC-12 (Japan)
	59903000000E	Power cord YP-22/YC-12 (Europe)
	59905000000E	Power cord YP-35/YC-12 (Australia)
	59904010000E	Power cord YP-61A/YC-12 (UK), L=1830mm
		509000001500

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## Packing List

- 1 x HDMI cable fixed
- 1 x Cable tie
- 4 x HDD screws
- 1 x Power input 3-pin terminal block connector
- 1 x Wall mount kit
- 4 x Wall mount kit screws
- 3 x Mini Card slot screws

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## 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, IGN ON delay and IGN OFF delay

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## Dimensions

