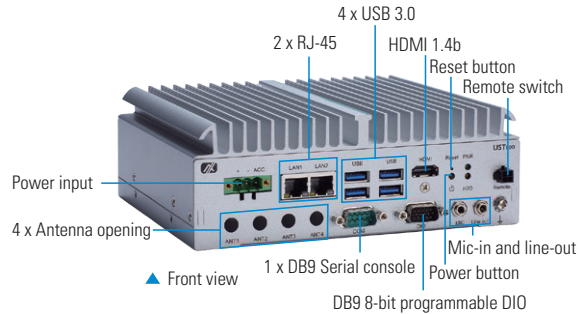


# UST100-504-FL

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 (Kaby Lake/Skylake)
- 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



## 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
	Audio	1 x Mic-in, 1 x Line-out
	Ethernet	2 x RJ-45 10/100/1000 Mbps Ethernet (Intel® i211-IT)
	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: • 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, 9 to 36 VDC (Typical 12/24 VDC) with ACC 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 65.15 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-VI 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)	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
UST100-504-FL-i5-TDC (P/N: E274100102)	

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

Optional	
Anti-vibration Kit (P/N: 8816N1000A0E)	For in-vehicle/rolling stock applicable systems which improves HDD/SSD stability
Communication Modules	8816N3239A0E 3G UC20GKit for tBOX/UST (3G ANT) (E)
	8816N3235A0E 3G/GPS UC20GKit tBOX/UST(3G/GPS ANT) (E)
	8816N5003A0E AP12356 WT Wi-Fi kit for tBOX/UST SFP (E)
	8816N810DA0E GPS kit M8U with adapter for tBOX SFP (E)
	881745001A0E GPS kit without adapter for UST SFP (E)
	8816N5009A0E LTE SIM7100A(US) kit (30) UST/tBOX SFP (E)
	8816N5000A0E LTE SIM7100JC kit for tBOX, JPN SFP (E)
88160620BA0E LTE SIMCOM SIM7100(EU) for eBOX 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 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

