

tBOX313-835-FL

Fanless Embedded System with Intel® Atom™ Processor E3845 Quad Core (1.91 GHz) for Vehicle PC



▲ Front view



Specifications

Standard Color	Silver-Black
Construction	Aluminum extrusion and heavy-duty steel
CPU	Intel® Atom™ processor E3845 (1.91 GHz)
System Memory	DDR3L-1333, 4GB memory onboard
Chipset	SoC integrated
BIOS	AMI
System I/O Outlet	2 x 10/100/1000Mbps Ethernet (M12 rear side) (optional PoE, RJ-45) 4 x isolated RS-422/485 (rear side)(terminal) 1 x isolated RS-232 (rear side)(DB9) 1 x isolated DI/DO (6-IN/2-OUT) (rear side) 1 x isolated CAN bus (rear side) 2 x USB 2.0 (front side) 2 x Audio (MIC-in/LINE-out)(both rear side & front side) 1 x HDMI (rear side) 1 x VGA (rear side) 1 x VDC power input connector (rear side) 1 x reset switch(front side) 1 x remote Power switch(front side) 4 x Antenna opening (front side) 1 x fuse (rear side)
Instant Fuse Repair	Current Rating 15A, Voltage Rating: 125V
Watchdog Timer	255 levels, 0 ~ 255 seconds/minutes
Storage	1 x 2.5" SATA HDD (Suspension designed, HDD height support 7/9.5/12.5/15mm) 1 x CFast™ (front accessible)
Expansion Interface	3 x PCI Express Mini Card with 2 x SIM card slot (two front accessible) 1 x PCIe mini card supports mSATA
System Indicator	1 x green LED for HDD active 1 x yellow LED for LAN1 active 1 x yellow LED for LAN2 active 1 x red LED for power
Power Supply	Power input : Typical 12/24vdc(9 ~ 36 Vdc)

Features

- Intel® Atom™ Bay Trail-I E3845 4C@1.91GHz onboard
- High performance DDR3L-1333 4GB memory board
- Fanless operation with IP40
- Operating temperature range of -40°C ~ +70°C
- Isolated RS-232/422/485, CANbus 2.0A/B and DIO
- Support USB 2.0 and SATA2
- Suspension 1x 2.5" SATA HDD and 1x CFast™
- Instant fuse repair design
- Internal mini PCIe slots and SIM socket
- eMark, ISO7637 certificated



▲ Rear view

Operating Temperature	-40°C~+70°C (-40°F~+158°F) with W/T SSD -25°C~+55°C (-13°F~+131°F) with W/T HDD
Storage Temperature Humidity	-40°C ~ +80°C (-40°F ~ +176°F) 5% ~ 95%, non-condensing
Vibration Endurance	3 Grms with SSD & CFast™ (5-500Hz, X, Y, Z direction; Random)(IEC60068-2-34) 2 Grms with HDD (5-500Hz, X, Y, Z direction; Random) (IEC60068-2-34), MIL-STD-810G, Method 514.6, Category 4 & 11 & 20, ISO16750(Vehicle body)
Shock	50G with SSD/CFast™ (operating), MIL-STD- 810G, Method 516.6, procedure I, peak 20g 11ms
Dimensions	244 mm (9.6") (W) x 180.5mm (7.1") (D) x 65.1mm (2.56") (H)
Weight (net/gross)	TBD
Certification	CE, eMark, ISO 7637
EOS support	WES7, WE8S, Compac2013, Linux

Ordering Information

Standard

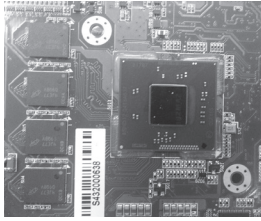
tBOX313-835-FL-DC	Fanless Embedded System with Intel® Atom™ processor E3845 (1.91 GHz) for Vehicle PC, 4GB DDR3L-1333, 2 x Giga Lan, 1x isolated RS-232, 4 x isolated RS-422/485, 1 x CAN
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Optional

2.5" SATA HDD/SSD
CFast™
3G module
Wi-Fi module
Wi-Fi & bluetooth
GPS module

*Specifications and certifications are based on options and may vary.

Expansion & Installation



On board Intel® Atom™ Bay Trail-I (E3845, 4C@ 1.91GHz) processor and 4GB DDR3L-1333 DRAM



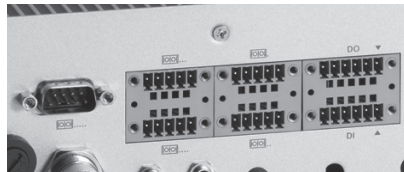
Removable CFast™, SIM slot and suspension 2.5" SATA HDD/SSD



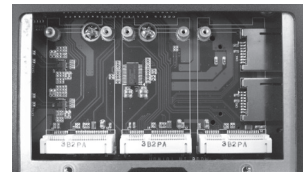
M12 railway power input and Two Giga LAN connector



HDMI and VGA display



Isolated RS-232/422/485 and DIO



3 x Mini Card with 2 x SIM slot

Packing List

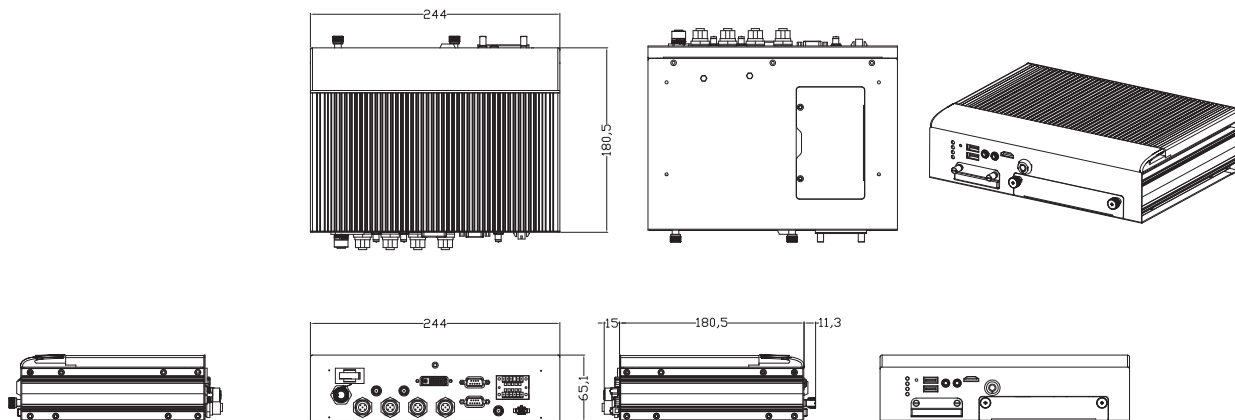
Part Number	Description	Qty	Qty
	Quick Installation Guide	1	1
	Support CD	1	1
	Screw pack	1	1
	Foot pad	4	4
	Wall-mount kit	1	1

Power Protection

DC Version

- SCP (short circuit protection)
- OVP (over voltage protection)
- UVP (under voltage protection)
- ISO7637 pulse 1/29/39/3b/4/5a
- Battery protection setting: Low voltage, Very low voltage
- Ignition control setting: Low voltage counter, ACC-ON delay, Shut down delay

Dimensions



Overview

Embedded Systems

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Embedded Systems for Transportation

Embedded Field Controllers

Embedded MicroBoxes

Industrial Barebone Systems

Industrial Chassis

Backplanes

Power Supplies

Peripherals & Accessories

