# tBOX323-835-FL

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





# **Features**

- Intel<sup>®</sup> Atom™ Bay Trail Processor E3845 (4C@1.91GHz) onboard
- High performance DDR3L-1333 memory onboard
- EN50155, EN50121, EN45545 Certificate
- Fanless operating temperature range of -40°C ~ +70°C (EN50155 class TX)
- Isolated RS-232/422/485 and DIO
- Lockable I/O interface and M12 LAN, power connector
- Support USB 2.0 and SATA2
- suspension 2.5" SATA HDD and one CFast™
- internal PCI Express Mini Card slot and SIM socket



#### **Specifications**

Standard Color	Silver-Black
Construction	Aluminum extrusion and heavy-duty steel
CPU	Intel® Atom™ Processor E3845 (1.91 GHz ) processor onboard
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) 4 x isolated RS-422/485 (rear side) (terminal) 1 x isolated RS-232 (rear side)(DB9) 1 x isolated DI/D0 (6-IN/2-OUT) (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 (M12 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)
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) One PCle mini card support mSATA
System Indicator	1 x green LED for HDD active 1 1x yellow LED for LAN1 active 1 x yellow LED for LAN2 active 1 x red LED for power
Power Supply	Power input : 12 ~ 32 Vdc(typical 24Vdc)
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	5 Grms w/ SSD & CFast™ (5-500Hz, X, Y, Z direction; Random) (IEC60068-2-34)
	2 Grms w/ HDD (5-500Hz, X, Y, Z direction; Random)
	(IEC60068-2-34) , MIL-STD-810G , Method 514.6, Category 4 & 11 & 20
Shock	50G w/SSD/CFast™ (operating), MIL-STD-810G Method 516.6, procedure I, peak 20g 11ms
Dimensions	244 mm (9.6") (W) x 185.4 mm (7.2") (D) x 70.4 mm (2.74") (H)
Weight (net/gross)	TBD
Certification	CE, EN50155, EN50121, EN45545
EOS support	WES7/8, Compac2013, Linux

#### **Ordering Information**

Standard tB0X323-835-FL-DC

	4 GB DDR3-1333, 2 10/100/1000Mbps Ethernent (M12), 4 isolated RS-422/ 485, CFast™
Optional	
2.5' SATA HDD/SSD	16 GB or above
CFast™	1 GB or above
3G module	
Wifi module	
Wifi+Bluetooth	
GPS module	
M12 Giga LAN cable	
M12 power cable	
Remote switch cable	

Fanless Embedded System with Intel® Atom™ processor,

<sup>\*</sup>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



Overview

Embedded Systems

Embedded Systems for Transportation

> Embedded Field Controllers

MicroBoxes

Barebone

Systems

Industrial

Backplanes

Peripherals & Accessories

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**

- 1 x quick manual
- 1 x driver CD
- 1 x screw pack
- 4 x foot pad
- 1 x wall-mount kit

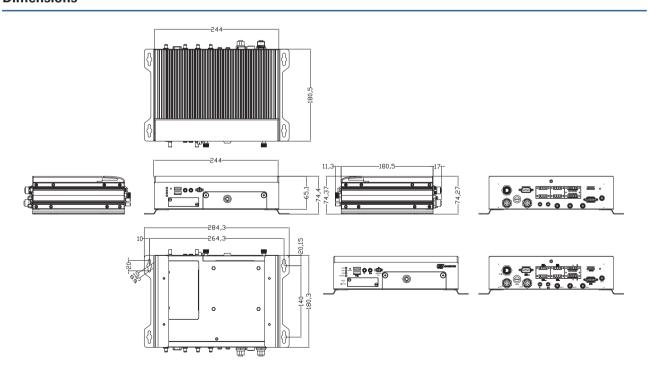
### **Power Protection**

#### DC Version

SCP (short circuit protection) OVP (over voltage protection)

#### UVP (under voltage protection)

## **Dimensions**



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