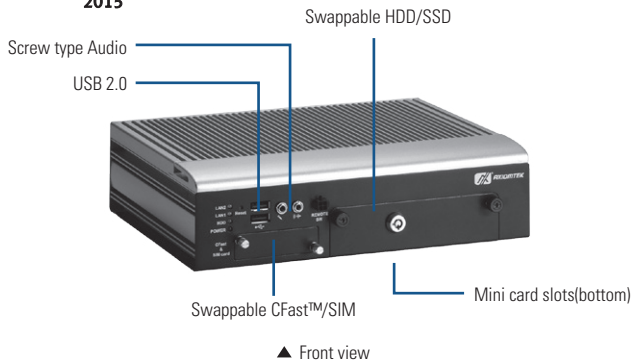


# tBOX323-835-FL

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

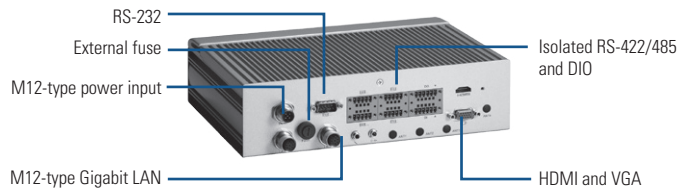


▲ Front view



## Features

- EN50155, EN50121 certified, EN45545-2 complied
- Fanless operating temperature range of -40°C ~ +70°C (EN50155 class TX)
- Intel® Atom™ Bay Trail-I E3845 4C@1.91GHz
- High performance DDR3L-1333 4 GB memory onboard
- Isolated RS-422/485 and DIO
- Lockable I/O interface and M12 LAN, power connector
- Supports USB 2.0 and SATA2
- Instant fuse repair design
- Suspension 2.5" SATA HDD and one CFast™
- Internal PCI Express Mini Card slot and SIM socket



▲ Rear view

## Specifications

Standard Color	Silver-Black				
Construction	Aluminum extrusion and heavy-duty steel				
CPU	Intel® Atom™ processor E3845 (4C@1.91GHz)				
System Memory	DDR3L-1333, 4 GB memory				
Chipset	SoC integrated				
BIOS	AMI				
System I/O Outlet	<table border="0"> <tr> <td>Rear Side</td> <td>                     2 x GbE LAN (M12 A-coded)                      4 x isolated RS-422/485 (terminal)                      1 x RS-232 (DB9)                      1 x isolated DI/DO (6-in/2-out)                      2 x audio (mic-in/line-out, screw type)                      1 x HDMI                      1 x VGA                      1 x VDC power input (M12 A-coded)                      4 x antenna opening                      1 x fuse                 </td> </tr> <tr> <td>Front Side</td> <td>                     2 x USB 2.0                      1 x audio (mic-in/line-out, screw type)                      1 x reset switch                      1 x remote power switch                      1 x 2.5" SATA drive tray                      1 x CFast™ slot + 2 x SIM card sockets                 </td> </tr> </table>	Rear Side	2 x GbE LAN (M12 A-coded) 4 x isolated RS-422/485 (terminal) 1 x RS-232 (DB9) 1 x isolated DI/DO (6-in/2-out) 2 x audio (mic-in/line-out, screw type) 1 x HDMI 1 x VGA 1 x VDC power input (M12 A-coded) 4 x antenna opening 1 x fuse	Front Side	2 x USB 2.0 1 x audio (mic-in/line-out, screw type) 1 x reset switch 1 x remote power switch 1 x 2.5" SATA drive tray 1 x CFast™ slot + 2 x SIM card sockets
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Front Side	2 x USB 2.0 1 x audio (mic-in/line-out, screw type) 1 x reset switch 1 x remote power switch 1 x 2.5" SATA drive tray 1 x CFast™ slot + 2 x SIM card sockets				
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 slots (two front accessible) One PCIe mini card support 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 : 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	-40°C ~ +80°C (-40°F ~ +176°F)				
Humidity	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)
Shock	Comply EN 61373 section 10 table 3 category 1 class A and class B up to 5Grms (30ms, ±X/Y/Z direction)
Dimensions	244 mm (9.6") (W) x 180.5 mm (7.1") (D) x 65.1 mm (2.56") (H)
Weight (net/gross)	3 kg (6.61 lb)/ 3.8 kg (8.38 lb)
Certificate	CE, EN50155, EN50121, EN45545-2 compliance
EOS support	WES7/8, Compac2013, Linux

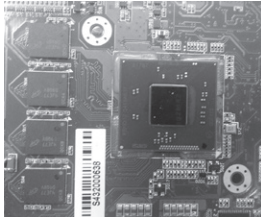
## Ordering Information

Standard	
tBOX323-835-FL-DC	Fanless railway embedded system with Intel® Atom™ E3845 (4C@1.91 GHz), 4 GB DDR3-1333, 2 GbE LAN (M12), 1 RS-232, 4 isolated RS-422/485, and CFast™

Optional	
2.5" SATA HDD/SSD	16 GB or above
CFast™	1 GB or above
3G module	
Wi-Fi module	
Wi-Fi & bluetooth	
GPS module	
M12 Gigabit LAN cable	
M12 power cable	
Remote switch cable	

\*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



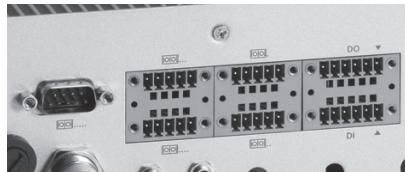
Removable CFast™, SIM slot and suspension 2.5" SATA HDD/SSD



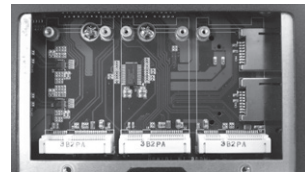
M12 railway power input and two Gigabit LAN connectors



HDMI and VGA display



Isolated RS-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

