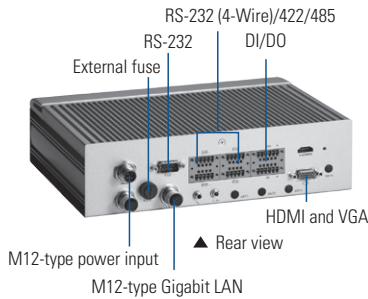
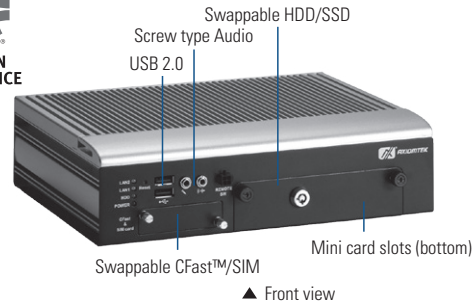


tBOX323-835-FL

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

Features

- EN 50155, EN 50121 certified and EN 45545-2 compliance
- Fanless operation and wide temperature range from -40°C to +70°C (EN 50155 class TX)
- Intel® Atom™ Bay E3845 4C@1.91GHz
- DDR3L-1333 4GB memory onboard
- Isolated RS-232 (4-Wire)/422/485 and DIO
- Lockable M12 LAN and power connector
- USB 2.0 and SATA2
- 24V/110VDC input (optional)
- Suspension 2.5" SATA HDD and 1 CFast™/mSATA
- Internal 4 PCIe Mini Card slot and SIM slot



Specifications

| | | | | | |
|-----------------------|--|-----------|---|------------|---|
| Standard Color | Silver-Black | | | | |
| Construction | Aluminum extrusion and heavy-duty steel | | | | |
| CPU | Intel® Atom™ processor E3845 (4C@1.91GHz) | | | | |
| System Memory | DDR3L-1333, 4GB 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-232 (4-Wire)/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-232 (4-Wire)/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 |
| Rear Side | 2 x GbE LAN (M12 A-coded) 4 x Isolated RS-232 (4-Wire)/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 | | | | |
| Watchdog Timer | 255 levels, 0 ~ 255 seconds/minutes | | | | |
| Storage | 1 x 2.5" SATA HDD (suspension designed, HDD height support 7/9.5/12.5/15 mm) 1 x CFast™/ 1 x mSATA | | | | |
| Expansion Interface | 3 x PCIe Mini card with 2 x SIM slots (two front accessible) | | | | |
| 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 24 VDC 77 ~ 137.5 VDC, typical 110 VDC | | | | |
| 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 | | | | |
| Humidity | 5% ~ 95%, non-condensing | | | | |

| | |
|---------------------|--|
| Vibration Endurance | 3 Grms with SSD & CFast™ (5 ~ 500Hz, X, Y, Z direction; Random) (IEC 60068-2-34) 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, EN 50155, EN 50121, EN 45545-2 compliance |
| EOS support | Windows® 10, WEBS, WES 7, Linux |

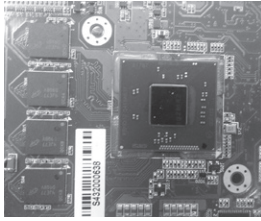
Ordering Information

| Standard | |
|---|---|
| tBOX323-835-FL-DC (P/N: E26N323100) | Fanless railway embedded system with Intel® Atom™ E3845 (4C@1.91 GHz), 4GB DDR3-1333, 2 GbE LANs (M12), 1 RS-232, 4 isolated RS-422/485 and CFast™ |
| tBOX323-835-FL-110VDC (P/N: E26N323102) | Fanless railway embedded system with Intel® Atom™ E3845 (4C@1.91 GHz), 4GB DDR3-1333, 2 GbE LANs (M12), 1 RS-232, 4 isolated RS-422/485, and CFast™, 110VDC input |

| Optional | |
|-----------------------|---------------|
| 2.5" SATA HDD/SSD | 16GB or above |
| CFast™ | 1GB 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 may vary according to various options.

Expansion & Installation



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



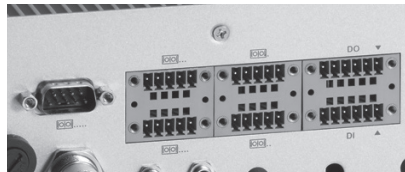
Removable CFast™, SIM slot and suspension
2.5" SATA HDD/SSD



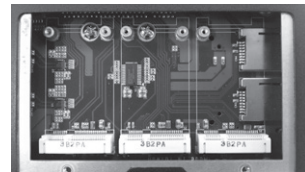
M12 railway power input and two Gigabit LAN connectors



HDMI and VGA display



RS-232 (4-Wire)/422/485 and DIO ports



3 PCIe Mini Card slots and
2 SIM slots

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

