tBOX322-882-FL

Fanless Embedded System with
4th Generation Intel® Core™ Processor
for Railway PC

NEW

▲ Front view

EN45545   EN60950   M12 LAN Connector   Isolation   CFast™   Swappable HDD

EN50155   IP40   Fanless   Extended Temperature   DDR3

Features

- 4th Generation Intel® Core™ i7 1.7 GHz up to 3.3 GHz or Intel® Core™ i3 1.7 GHz processor onboard (Haswell)
- High performance DDR3L-1600 4 GB/8 GB memory onboard
- EN50155, EN50121 certificates
- Fanless with operating temperature range of -40°C ~ +70°C (EN50155 class TX)
- Isolated RS-232/422/485 and DIO
- Supports USB 3.0 and SATA3
- 1 removable & lockable 2.5" SATA HDD and 1 CFast™
- 3 internal PCI Express Mini Card slot and 2 SIM slots
- Lockable I/O interface and M12 LAN, audio, power and USB connector
- Comply to fire protection of railway vehicles Europe standard PrCEN TS 45545-2
- Suspension designed for HDD

▲ Rear view

Specifications

Standard Color	Silver-Black
Construction	Aluminum extrusion and heavy-duty steel, IP40
CPU	4th Generation Intel® Core™ processor onboard; 4th Gen. Intel® Core™ i7-4650U (1.7 GHz up to 3.3 GHz) or 4th Gen. Intel® Core™ i3-4010U (1.7 GHz)
System Memory	DDR3L-1600 4 GB or 8 GB DRAM onboard
Chipset	N/A
BIOS	AMI UEFI BIOS with OA 3.0 built
System I/O Outlet	2 x 10/100/1000Mbps Ethernet (M12 female A-coded) (Intel® I210IT) 2 x isolated RS-232/422/485 1 x isolated DI/DO (4-IN/4-OUT) 2 x USB 2.0 (rear side) (M12 connector) 2 x USB 3.0 (front side) 1 x Audio (Mic-in/Line-out) (M12 or screw type) 1 x HDMI (Fixable) 1 x DVI-I 1 x VDC power input connector (M12 connector) 1 x reset switch 1 x power switch 3 x antenna opening
Watchdog Timer	255 levels, 0 ~ 255 sec.
Storage	1 x 2.5" SATA HDD (Removable and with lock protection) 1 x CFast™
Expansion Interface	3 x PCI Express Mini Card 2 x SIM card slot
System Indicator	1 x green LED for system power on 1 x blue LED for HDD active 1 x green LED for LAN1 link 1 x green LED for LAN2 link

Power Supply	Power input : 14VDC ~ 32VDC (isolation) Typical : 24VDC
Power Consumption	1.8A @ 24V
Operating Temperature	-40°C ~ +70°C (-40°F ~ +158°F) W/T SSD -25°C ~ +55°C (-13°F ~ +131°F) W/T HDD
Storage Temperature	-40°C ~ +80°C (-40°F ~ +176°F)
Humidity	5% ~ 95%, non-condensing
Vibration Endurance	5 Grms w/ CFast (5-500Hz, X, Y, Z directions) 2 Grms w/ HDD (5-500Hz, X, Y, Z directions)
Dimensions	244 mm (9.6") (W) x 185.4 mm (7.3") (D) x 70.4 mm (2.77") (H)
Weight (net/gross)	2.5 kg (5.5 lb)/ 3.5 kg (7.7 lb)
Certification	CE (Class A), EN50155, EN50121, EN45545, EN60950 compliance
EOS Support	WES 8, WES 7, Linux

Ordering Information

Standard

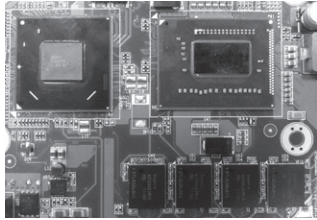|	
tBOX322-882-FL-i7-DC	Fanless Embedded System with 4th Generation Intel® Core™ i7 processor, 4 GB DDR3-1600, 2 10/100/1000Mbps Ethernet (M12), 2 isolated COM, CFast™
tBOX322-882-FL-i3-DC	Fanless Embedded System with 4th Generation Intel® Core™ i3 processor, 4 GB DDR3-1600, 2 10/100/1000Mbps Ethernet (M12), 2 isolated COM, 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	
M12 USB cable	
M12 audio cable	
Remote switch cable	

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

* All specifications and photos are subject to change without notice.

Expansion & Installation

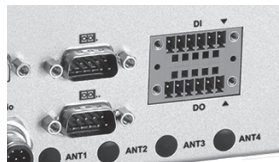Onboard 4th Gen. Intel® Core™ i CPU and 4 GB/ 8 GB DDR3L -1600 DRAM

Swappable and lockable SATA3 HDD/SSD, Audio jack, USB 3.0 and CFast
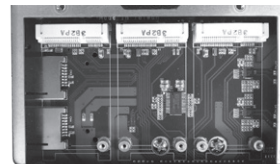

M12 connector for Giga LAN, USB 2.0 and audio ports

M12 power connector and remote switch connector

Isolated RS-232/422/485 and DIO

3 x Mini Card slots 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