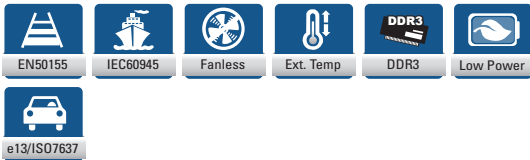


# tBOX810-838-FL

Fanless Embedded System with Intel® Atom™ Processor E3845/E3827 for Vehicle, Railway and Marine PC



▲ Front view



## Features

- eMark, ISO7637, EN50155, EN50121 and IEC60945 certificated
- Intel® Atom™ Bay Trail-I E3845 4C@1.91 GHz or E3827 2C@1.75GHz
- DDR3 4 GB system memory onboard comes with high performance and reliability
- Fanless with operating temperature range of -40°C ~ +70°C (EN50155 class TX)
- Intelligent power management solution
- Compact size with rich multiple I/Os, DIN rail and wall mount supported
- 2x full size mini PCIe card slots, 1x SIM card socket for various applications



▲ Rear view

## Specifications

Standard Color	Silver-Black
Construction	Aluminum extrusion and heavy-duty steel
CPU	Intel® Atom™ processor E3845 (4C@1.91 GHz) Intel® Atom™ processor E3827 (2C@1.75 GHz)
System Memory	DDR3L-1333, 4 GB memory onboard
Chipset	SoC integrated
BIOS	AMI
System I/O Outlet	<p>Rear Side</p> <p>Option #1: 2 x M12 A-coded GbE LAN + 1x M12 A-coded DC power input Option #2: 2 x RJ-45 GbE LAN + 1 x Phoenix DC power input (Intel® i210 LAN chip x2) 2 x audio (mic-in/line-out) (optional)</p> <p>Front Side</p> <p>2 x RS-232/422/485 1 x DI/DO (8bit programmable) 1 x VGA 2 x USB 2.0 1 x remote switch 1 x reset button 4 x antenna opening</p>
Watchdog Timer	255 levels, 0 ~ 255 seconds/minutes
Storage	1 x 2.5" 9.5 mm SATA drive 1 x mSATA
Expansion Interface	2 x full size mini PCIe card slots, 1x supported mSATA 1 x SIM card socket
System Indicator	1 x green LED indicator for system power 1 x green LED indicator for programmable #1 1 x green LED indicator for programmable #2 1 x yellow LED indicator for HDD active 1 x green LED indicator for LAN #1 active 1 x green LED indicator for LAN #2 active
Power Supply	Power input: 9 ~ 36VDC typical: 12/24VDC
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 w/ SSD (5-500Hz, X, Y, Z direction; random) 0.8 Grms w/ 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	163.8 mm (6.44") x 108 mm (4.25") (D) x 44 mm (1.73") (H)
Weight (net/gross)	0.77 kg (1.69 lb)/ TBC
Certificate	CE (Class A), EN50155, EN50121, eMark, ISO7637, IEC60945 certificated
EOS support	WE8S, WES 7, Linux

## Ordering Information

Standard	
tBOX810-838-FL-M12-DC	Fanless Vehicle/Railway/Marine Grade embedded system, E3827 1.75GHz processor, 4 GB DRAM, 2 x USB, VGA, 2 x M12 Giga LAN, M12 DC-in, 2 x COM, DIO (8-bit programmable)
tBOX810-838-FL-RJ45-DC	Fanless Vehicle/Railway/Marine Grade embedded system, E3827 1.75GHz processor, 4 GB DRAM, 2 x USB, VGA, 2 x RJ-45 Giga LAN, Phoenix DC-in, 2 x COM, DIO (8-bit programmable)
tBOX810-838-FL-E3845-RJ45-DC	Fanless Vehicle/Railway/Marine Grade embedded system, E3845 1.91GHz processor, 4 GB DRAM, 2 x USB, VGA, 2 x RJ-45 Giga LAN, Phoenix DC-in, 2 x COM, DIO (8-bit programmable)
tBOX810-838-FL-E3845-M12-DC	Fanless Vehicle/Railway/Marine Grade embedded system, E3845 1.91GHz processor, 4 GB DRAM, 2 x USB, VGA, 2 x M12 Giga LAN, M12 DC-in, 2 x COM, DIO (8-bit programmable)

### Optional

2.5" SATA HDD/SSD  
mSATA SSD  
3G/4G module  
Wi-Fi module  
Wi-Fi & bluetooth  
GPS module  
CANbus module  
Video card module

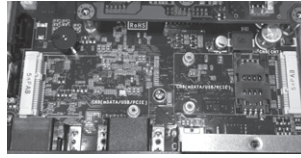
\*Specifications and certifications are based on options and may vary.

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

## Expansion & Installation



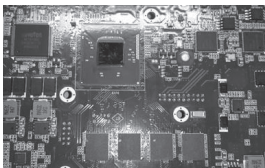
Compact size 163.8 x 108 x 44 mm, such thin and light as palm size



2x mini PCIe card slots + 1x SIM card socket  
Excellent extensibility in such compact size



Optional I/O ports Option for audio, LAN jack type and DC-in jack type



Onboard processor and system memory  
Comes with great reliability and stability



Simple storage maintenance



DIN rail, wall mount supported  
For various application, without space limitation

## Packing List

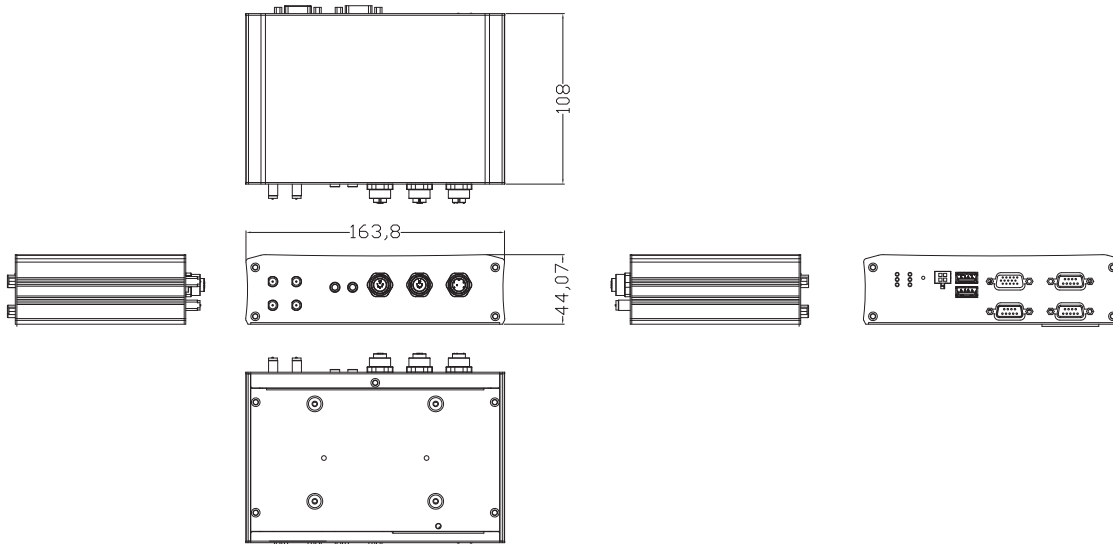
- 1 x quick manual
- 1 x driver CD
- 1 x screw pack
- 4 x foot pad
- 1 x wall-mount kit
- 1 x DIN rail kit

## Power Protection

### DC Version

- SCP (short circuit protection)
- OVP (over voltage protection)
- UVP (under voltage protection)
- ISO7637 pulse 1/2/3/4/5a
- Battery protection setting: Low voltage, Very low voltage
- Ignition control setting: Low voltage counter, ACC-ON delay, Shut down delay

## Dimensions



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