

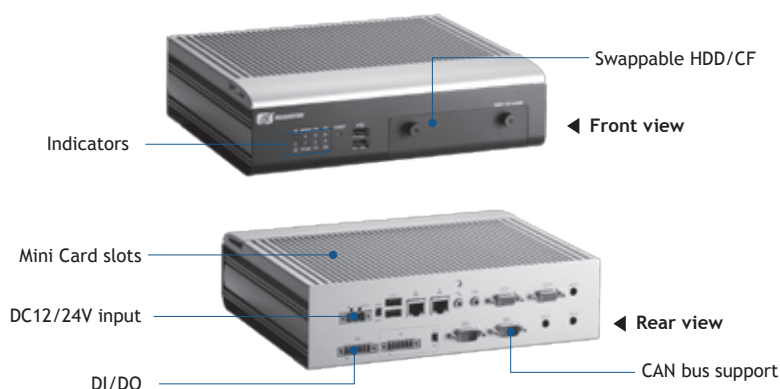
tBOX311-820-FL

Fanless Embedded System with Intel® Atom™ Processor
Z520PT 1.33 GHz for Vehicle PC



Features

- Intel® Atom™ processor Z520PT 1.33 GHz onboard
- Intel® US15WPT chipset
- Fanless operation
- Operating temperature range of -40°C ~ +65°C
- 1 isolated RS-232/422/485 and 1 isolated CAN bus (optional for RS-232/422/485)
- High performance DDR2-667 SODIMM max. up to 2 GB
- One 2.5" swappable SATA drive bay and one CompactFlash™ slot
- 3 internal PCI Express Mini Card slots with one SIM slot



Specifications

Standard Color	Silver-Black
Construction	Aluminum extrusion and heavy-duty steel
CPU	Intel® Atom™ processor Z520PT 1.33 GHz onboard
System Memory	1 x 200-pin DDR2 SO-DIMM max. up to 2 GB
Chipset	Intel® US15WPT
BIOS	AMI
System I/O Outlet	1 x isolated RS-232/422/485 (COM 1) 1 x isolated CAN bus (optional RS-232/422/485) 2 x VGA 1 x Audio (Mic-in/Line-out) 2 x 10/100/1000Mbps Ethernet 4 x USB 2.0 1 x V _{oc} power input connector 1 x DI/DO power input connector (4-IN/4-OUT) 1 x dry/wet switch 1 x 12V/24V switch 1 x reset switch 3 x antenna opening
Watchdog Timer	255 levels, 0 ~ 255 sec.
Storage	1 x 2.5" SATA HDD drive bay 1 x CompactFlash™
Expansion Interface	3 x PCI Express Mini Card 1 x SIM card slot

System Indicator	1 x green LED for system power-on 1 x red LED for HDD active 1 x green LED for WWAN 1 x green LED for WLAN 4 x Programmable LED (P1-P4)
Power Supply	DC12V mode: Operating voltage: DC9 ~ 16V Start voltage: DC12V or higher DC24V mode: Operating voltage: DC18 ~ 32V Start voltage: DC24V or higher
Power Consumption	1.7A @ 12V 0.9A @ 24V
Operating Temperature	-40°C ~ +65°C (-40°F ~ +149°F) (with 1.33 GHz CPU, W.T. HDD)
Storage Temperature	-40°C ~ +80°C (-4°F ~ +176°F)
Humidity	10% ~ 90%, non-condensing
Vibration Endurance	2 Grms with CF (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, e13, ISO7637 (ongoing)
EOS Support	XPE, WinCE, Linux

*XPE: Windows® XP Embedded

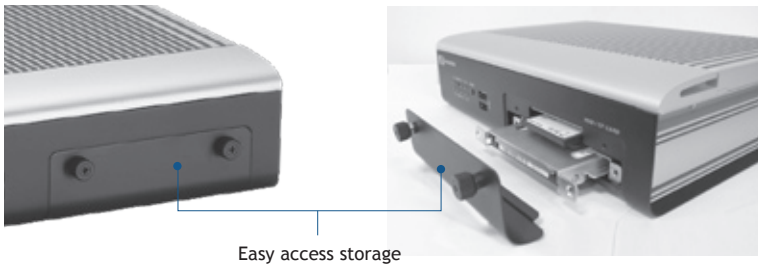
Ordering Information

	Standard
tBOX311-820-FL 1.33G-CAN	Fanless embedded system with Intel® Atom™ Z520PT 1.33 GHz processor, 2 VGA, CF & HDD support, 2 10/100/1000Mbps, 1 RS-232/422/485, 1 CAN and 4 USB
tBOX311-820-FL 1.33G-COM	Fanless embedded system with Intel® Atom™ Z520PT 1.33 GHz processor, 2 VGA, CF & HDD support, 2 10/100/1000Mbps, 2 RS-232/422/485 and 4 USB

	Optional
2.5" SATA HDD	40 GB or above
DDR2 SODIMM	512 MB or above
CompactFlash™	1 GB or above
3G module	826K3101010E
Wifi module	849WM520100E
Wifi+Bluetooth	82231560120E
GPS module	82606200270E
Graphic accelerator codec	849XM100000E

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

Expansion & Installation



Easy access storage

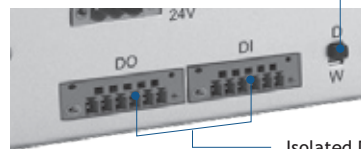


Rich indicators

User define LED



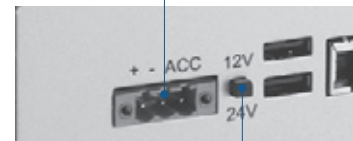
Reset function



Dry & wet switch

Isolated DIO

Vehicle power input with ACC support



12 & 24V input switch



3 x Mini Card with SIM



D520PT with US15WPT supports wide temperature of -40°C ~ +70°C

Packing List

1 x quick manual
1 x driver CD
1 x screw pack
4 x foot pad
4 x HDD antivibration damper
1 x wallmount Kit

Power Protection

DC Version

ISO7637 pulse1/2a/3a/3b/4/5a	OVP (over voltage protection)
UVP (under voltage protection)	OCP (over current protection)
OTP (over temperature protection)	OPP (over power protection)
OLD (over load protection)	SCP (short circuit protection)
Reverse protection	Battery-low protection

Dimensions

