



Automotive Box-PC 6000

PKBX5390/PKBX5395

The Automotive Box-PC 6000 is an innovative in-vehicle computer for use in any car, truck, or even for maritime applications. The design itself makes the system available as a complete system allowed the user easily define and build requirements. Thanks to the extremely low power consumption nature from Intel Atom processor, the Automotive Box-PC 6000 mechanical design is even more compact yet reach wider operating temperature range than ever. The Automotive Box-PC 6000 fulfills vehicle industry requirements. The design itself is in compliance with vehicle industrial standard such as eMark. More features required for in-vehicle operations, such as power ignition delay control, low power protection and SMBus connection, etc., are continued from others in-vehicle computer products. The GPS function navigates drivers to ultimate the fleet management. Optional 802.11b/g/n and 3.5G availability make the Automotive Box-PC 6000 ready for wider coverage and future trend. Multiple display connections make the Automotive Box-PC 6000 an ideal choice for in-vehicle signage platforms as well.



Front Side



Rear Side

Main Features

- Build-in Intel® Atom™ Z510/Z530 processor
- Availability of GSM/GPRS/WCDMA/HSDPA/GPS
- e13 mark certification
- External smart battery backup support
- Power ignition on/off delay control
- Circuitry design for low power protection
- 6 to 36VDC power input
- 1x PCI-104 expansion slot
- Multiple display interface connections (VGA, TV-out and LVDS)
- Optional IP65 enclosure

Applications

- Vehicle tracking/monitoring
- Real-time and data communication
- Computer-aided Dispatching
- Public transportation
- Infotainment systems
- Emergency medical services
- Fleet management
- Security



Target Users

- Bus/taxi /train operators
- Boat/yacht owners
- Trucking companies
- Police officers
- Service/delivery companies



Technical Specification

Main Chipset

- US15W SCH

CPU

- Atom Z500 series 1.1GHz (Z510), 1.6GHz (Z530)

Memory

- DDR2 400/533 SO-DIMM up to 2GB

Expansion

- 1x PCI-104
- 1x Bluetooth module (optional)
- 2x Mini PCI express sockets
 - 1x PCI express interface
 - 1x PCI express and USB interface

Expandable storage

- 1x 2.5" SATA II HDD and 1x CF

I/O Interface Front

- 4x SMA-type for WLAN, HSDPA
- 1x Power button
- 1x Reset switch
- 1x SIM socket
- 1x USB
- 4x LED's for standby, HDD, WLAN/HSDPA and GPO



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I/O Interface Rear

- 2x RS232
- 1x RS232/485 w/auto flow control
- 1x DB26 LVDS (with 12V for backlight power and USB 2.0)
- 1x DB15 VGA
- 1x RCA TV- out
- 2x USB 2.0
- 1x 10/100/1000 Ethernet
- 2x Mic-in and 2x Line-out
- 1x SMA-type for GPS
- 1x GPIO (4 input and 4 output)
- 6 to 36VDC thru 3-pin connector (Ignition, power and ground)
- 5/12VDC output, SMBus
5VDC (1A), 12VDC (1A), without monitor
5VDC (0.5A), 12VDC (0.5A), with monitor

Power management

- Selectable for boot-up and shut-down voltage for low power protection
- HW design ready for 8-level delay time on/off at user's self configuration
- Power on/off ignition, SW detectable
- S3, S4 suspend mode support

IP rating

- IP65 compliant

Dimensions

- 260 x 176 x 50 mm (W x D x H)

Construction

- Aluminium enclosure with fanless design

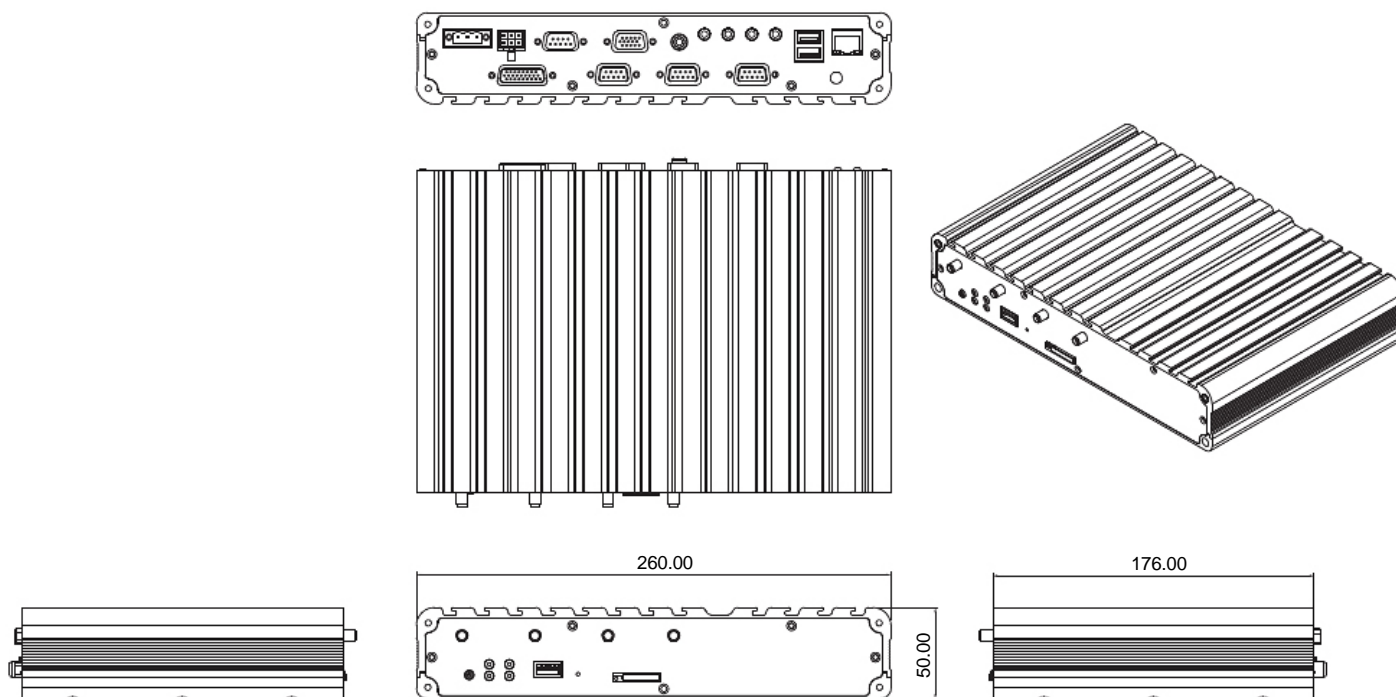
Environments

- Operating Temperature
-30°C to 60°C with CF or automotive HDD
- Storage Temperature
-40°C to 80°C at relative humidity 10% to 90% non-condensing
- Vibration
Operating:
2G at 5-500Hz random with CF
1G at 5-500Hz random with automotive HDD
2G at 5-500Hz random with automotive HDD (with vibration kit)
MIL-STD-810F method 514.5 C-1 category 20
Ground vehicle-highway truck
- Shock
Operating: MIL-STD-810F Method 516.5, Procedure I,
Trucks and semitrailers = 20g
Non-Operating: MIL-STD-810F Method 516.5, Procedure V,
Ground equipment - 75g

Certifications

- CE approval, FCC Class B, e13 mark

Dimension Drawing





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Ordering Information

PKBX5390 Automotive Box-PC 6000 - 510
with Intel Atom Z510 1.1GHz, with GPS

PKBX5395 Automotive Box-PC 6000 - 530
with Intel Atom Z530 1.6GHz, with GPS

Options



PKBD1100



PKBD2000



PKBZ3002-1



PKBZ3003



PKBZ3021

PKBD1100	DeltaTerminal 8.4" LCD-TFT f. Automotive Box-PC3300+6xxx sunlight readable, with touchscreen, surface-mount	PKBZ3002-1	Back-up Battery kit for 4 Hours in system full load for Automotive Box-PC 6100
PKBD2000	DeltaTerminal 8.4" SVGA 800x600 Alu-chassis w/ TouchScreen for Automotive Box-PC 3300E/6000	PKBZ3003	Fan and Antivibrationskit for Automotive Box-PC 3300E and 6xxx
		PKBZ3021	Protection Kit for Automotive Box-PC 6000 IP65 protection-Kit for anti-dust and anti-water

