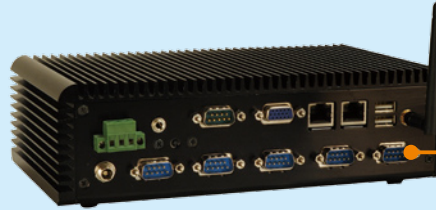


ECW-281B/B2 Series

Fanless Embedded System for Intel® Atom™ Dual core D525/N270

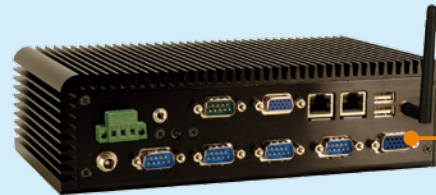


Extended Temperature



6 COM

COM2 for ECW-281B Series



Dual VGA

2nd VGA for ECW-281B2 Series

Features

- ◆ Fanless system with
 - » 1.8 GHz Intel® Atom™ D525 dual-core CPU
 - » 1.6 GHz Intel® Atom™ N270 CPU
- ◆ Supports four USB 2.0 ports and six COM ports
- ◆ Dual GbE LAN ideal for high speed network applications
- ◆ Supports CompactFlash®, 2.5" SATA HDD and SSD storage devices
- ◆ 12 VDC and 9 VDC - 36 VDC power input models available
- ◆ Supports dual VGA display (B2 model only)



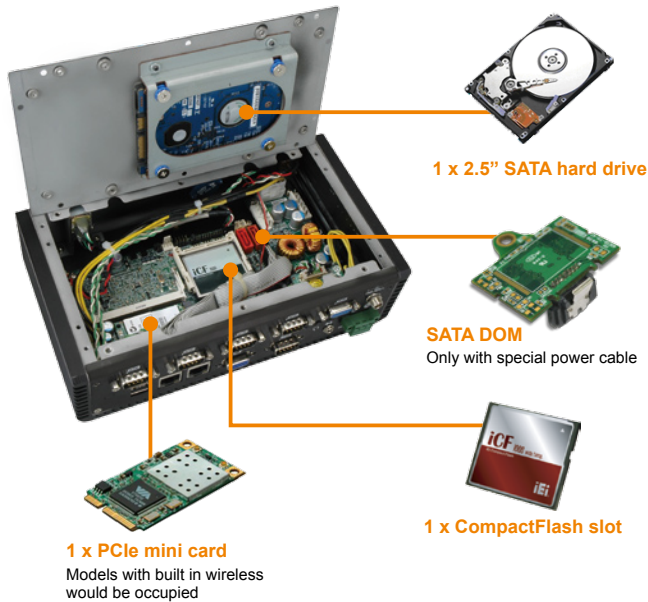
Specifications



| Model Name | ECW-281B-D525 (ECW-281B2-D525) | ECW-281B-N270 (ECW-281B2-N270) | ECW-281B-N270-WT |
|-----------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Platform | Intel® | | |
| Color | Black | | |
| Dimensions | 229 x 132 x 64mm | | |
| Chassis Construction | Aluminum alloy with heavy duty metal | | |
| Motherboard Model | WAFAER-PV-D5252 | WAFAER-945GSE-N270 | WAFAER-945GSE-N270W2 |
| Processor CPU | Intel® Atom™ D525 Processor 1.8GHz / 1MB L2 cache | Intel® Atom™ N270 1.6GHz / 512KB L2 cache | |
| Chipset | ICH8M | Intel® 945GSE + ICH7M | Intel® 945GSE + ICH7M |
| System Memory | 1 x 204-pin 1GB DDR3 SODIMM (2GB for optional) | 1 x 200-pin 1GB DDR2 SODIMM (2GB for optional) | 1 x 200-pin 1GB DDR2 SODIMM (2GB for optional) |
| Hard Drive | 1 x 2.5" SATA HDD space | | |
| Compact Flash | 1 | 1 | 1 |
| USB 2.0 | 4 | 4 | 4 |
| Ethernet | 2 x Realtek RTL8111E PCIe GbE | 2 x Realtek RTL8111CP PCIe GbE | 2 x Realtek RTL8111CP PCIe GbE |
| RS-232 | 6 RS-232 ports for ECW-281B-D525 (COM2: Default RS-232, RS422/485 optional) 5 RS-232 ports for ECW-281B2-D525 | 6 RS-232 ports for ECW-281B-N270 (COM2: Default RS-232, RS422/485 optional) 5 RS-232 ports for ECW-281B2-N270 | 6 RS-232 ports for ECW-281B-N270 (COM2: Default RS-232, RS422/485 optional) 5 RS-232 ports for ECW-281B2-N270 |
| Display | 1 (2) x VGA | 1 (2) x VGA | 1 x VGA |
| Resolution | 2048 x 1536 @ 60Hz | 1920 x 1200 @ 60Hz | 1920 x 1200 @ 60Hz |
| Audio | 1 x speaker out | | |
| Wireless | 1 x 802.11 b/g/n | 1 x 802.11 b/g/n | N/A |
| Expansions | 1 x PCIe Mini Card slot (reserved for wifi) | 1 x PCIe Mini Card slot (reserved for wifi) | 1 x PCIe Mini Card slot |
| Power Consumption | 12V@1.79A (Intel® Atom™ D525 1.8GHz with DDR3 1GB) | 12V@1.25A (Intel® Atom™ N270 1.6G with 1GB DDR2) | 12V@1.25A (Intel® Atom™ N270 1.6G with 1GB DDR2) |
| Power input | 12VDC in 9-36V (WD Model) | 12VDC in 9-36V (WD Model) | 12VDC in |
| Mounting | DIN mount, VESA 75 mount, wall mount | | |
| Operating Temperature | -20°C ~ 65°C with CF/SSD -10°C ~ 50°C with HDD | -10°C ~ 60°C with CF/SSD -10°C ~ 50°C with HDD | -20°C ~ 70°C with CF/SSD |
| Operating Shock | Half sine wave 3G; 11ms 3axis | | |
| Operating Vibration | * MIL-STD-810F 514.5C-1 MIL-STD-810F 514.5C-2 | MIL-STD-810F 514.5C-2 | MIL-STD-810F 514.5C-2 |
| Weight (Net/Gross) | 2.1kg/3.9kg | | |

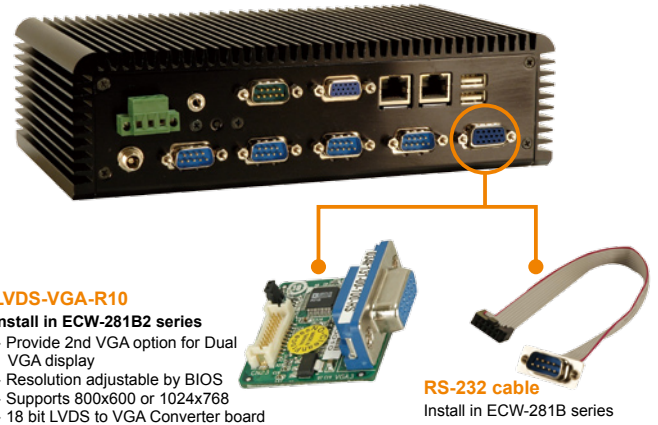
*The system that with Hard drive can meet the Standard testing MIL-STD-810F 514.5C-1. and with SSD/CF can meet MIL-STD-810F 514.5C-2

Storage & Expansions



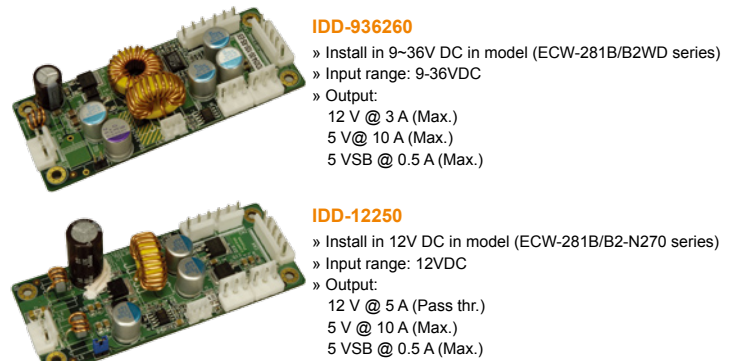
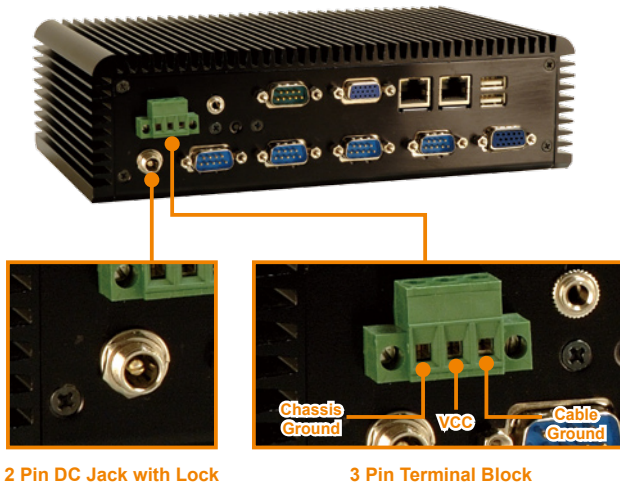
Dual Display

The models of the ECW-281B series, either with Intel® Atom™ N270 single-core processor or D525 dual-core processor, all support dual VGA display through the optional LVDS to VGA converter module. The first VGA output signal is from on-board chipset and supports resolutions up to 2048x1536 (D525) while the second display output is made through the LVDS to VGA converter board (LVDS-VGA-R10) via the LVDS interface and supports resolutions up to 1024x768.

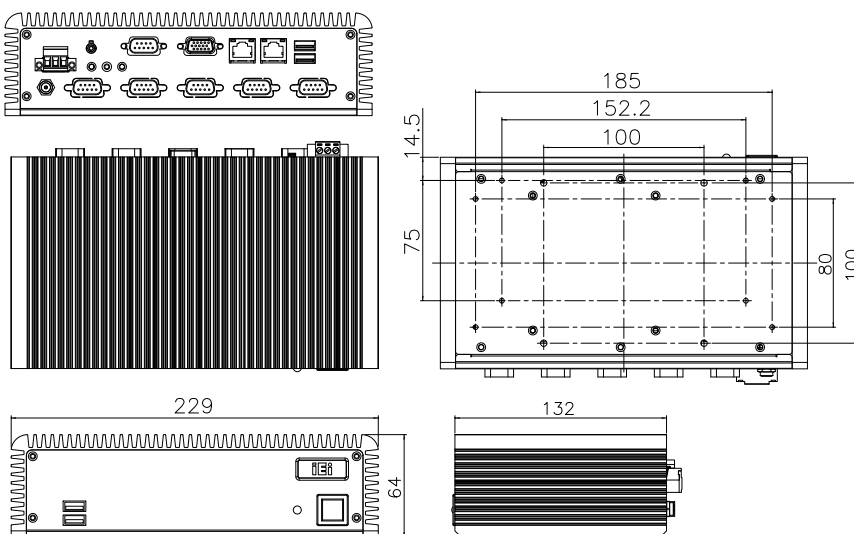


Extended Voltage Input

The ECW-281B rear panel has two types of power input connectors which support either single 12 V DC input or 9~36 V DC input depending on the power module installed in the system.



Dimensions (Unit: mm)



Packing List

| |
|---------------------------------------------------------------------------------|
| 1 x QIG |
| 1 x Screw set |
| 1 x DIN mount |
| 1 x Hard drive thermal pad |
| 2 x Wall mount bracket |
| 1 x Driver & user manual CD |
| 1 x 12V 60W power adapter (optional for WD model) (P/N:63000-FSP060DBAB1552-RS) |
| 1 x Power cord (optional for WD model) |
| 1 x Wireless antenna (for wireless model) |



DK-84MB

Extended Temperature

The ECW-281B series with Intel® Atom™ N270 single-core processor is a fanless system which supports a wide range of temperature from -20°C to 70°C. The ECW-281B series industrial computer is powerful and can meet customers' needs with its various add-on functions. The table below is a model selection guide for the ECW-281B series.



Spec Comparison table

| Model | ECW-281B | ECW-281B2 | ECW-281BWD | ECW-281B2WD | ECW-281B-WT |
|----------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------|
| Wireless model | ECW-281BW | ECW-281B2W | ECW-281BWDW | ECW-281B2WDW | N/A |
| Main board | WAFER-945GSE-N270 WAFER-PV-D5252 | WAFER-945GSE-N270 WAFER-PV-D5252 | WAFER-945GSE-N270 WAFER-PV-D5252 | WAFER-945GSE-N270 WAFER-PV-D5252 | WAFER-945GSE-N270W2 |
| Com port | 6 | 5 | 6 | 5 | 6 |
| VGA display | 1 | 2 | 1 | 2 | 1 |
| Power input | 12V DC in | 12V DC in | 9~36V DC in | 9~36V DC in | 12V DC in |
| Adaptor | 60W | 60W | N/A | N/A | N/A |

Ordering Information

| | | | |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D525 | 12VDC input | ECW-281B-R10/D525/1GB | Fanless embedded system with WAFER-PV-D5252, with dual core Intel® ATOM™ D525 1.8G, with 6 serial ports, with 1GB DDR3 memory, 12VDC in, 60W power adapter with ERP and PSE certificates, black, RoHS |
| | | ECW-281BW-R10/D525/1GB | Fanless embedded system with WAFER-PV-D5252, with dual core Intel® ATOM™ D525 1.8G, with 6 serial ports, built-in 802.11b/g/n wireless, with 1GB DDR3 memory, 12VDC in, 60W power adapter with ERP and PSE certificates, black, RoHS |
| | | ECW-281B2-R10/D525/1GB | Fanless embedded system with WAFER-PV-D5252, with dual core Intel® ATOM™ D525 1.8G, with dual VGA display and 5 serial ports, with 1GB DDR3 memory, 12VDC in, 60W power adapter with ERP and PSE certificates, black, RoHS |
| | | ECW-281B2W-R10/D525/1GB | Fanless embedded system with WAFER-PV-D5252, with dual core Intel® ATOM™ D525 1.8G, with dual VGA display and 5 serial ports, built-in 802.11b/g/n wireless, with 1GB DDR3 memory, 12VDC in, 60W power adapter with ERP and PSE certificates, black, RoHS |
| | 9~36VDC input | ECW-281BWD-R10/D525/1GB | Fanless embedded system with WAFER-PV-D5252, with dual core Intel® ATOM™ D525 1.8G, with 6 serial ports, with 1GB DDR3 memory, 9-36VDC in, w/o power adapter, black, RoHS |
| | | ECW-281BWDW-R10/D525/1GB | Fanless embedded system with WAFER-PV-D5252, with dual core Intel® ATOM™ D525 1.8G, with 6 serial ports, built-in 802.11b/g/n wireless, with 1GB DDR3 memory, 9-36VDC in, w/o power adapter, black, RoHS |
| | | ECW-281B2WD-R10/D525/1GB | Fanless embedded system with WAFER-PV-D5252, with dual core Intel® ATOM™ D525 1.8G, with dual VGA display and 5 serial ports, with 1GB DDR3 memory, 9-36VDC in, w/o power adapter, black, RoHS |
| | | ECW-281B2WDW-R10/D525/1GB | Fanless embedded system with WAFER-PV-D5252, with dual core Intel® ATOM™ D525 1.8G, with dual VGA display and 5 serial ports, built-in 802.11b/g/n wireless, with 1GB DDR3 memory, 9-36VDC in, w/o power adapter, black, RoHS |
| N270 | 12VDC input | ECW-281B-R21/N270/1GB | Fanless embedded system with Intel® Atom™ N270 1.6GHz CPU, 945GSE, built-in 1GB DDR2 memory, 12VDC in, 60W power adapter with ERP and PSE certificates, black, RoHS |
| | | ECW-281BW-R21/N270/1GB | Fanless embedded system with Intel® Atom™ N270 1.6GHz CPU, 945GSE, built-in 802.11b/g/n wireless, with 1GB DDR2 memory, 12VDC in, 60W power adapter with ERP and PSE certificates, black, RoHS |
| | | ECW-281B2-R21/N270/1GB | Fanless embedded system with Intel® Atom™ N270 1.6GHz CPU, 945GSE, dual VGA, built-in 1GB DDR2 memory, 12VDC in, with 60W power adapter with ERP and PSE certificates, black, RoHS |
| | | ECW-281B2W-R21/N270/1GB | Fanless embedded system with Intel® Atom™ N270 1.6GHz CPU, 945GSE, dual VGA, built-in 802.11b/g/n wireless, with 1GB DDR2 memory, 12VDC in, 60W adapter with ERP and PSE certificates, black, RoHS |
| | 9~36VDC input | ECW-281B-WT-R21/N270/1GB | Extend temperature fanless embedded system with Intel® Atom™ N270 1.6GHz CPU, 945GSE, built-in 1GB DDR2 memory, 12VDC in, w/o power adapter, -20°C ~ 70°C degree, black, RoHS |
| | | ECW-281BWD-R21/N270/1GB | Fanless embedded system with Intel® Atom™ N270 1.6GHz CPU, 945GSE, built-in 1GB DDR2 memory, 9-36VDC in, w/o power adapter, black, RoHS |
| | | ECW-281BWDW-R21/N270/1GB | Fanless embedded system with Intel® Atom™ N270 1.6GHz CPU, 945GSE, built-in 802.11b/g/n wireless, with 1GB DDR2 memory, 9-36VDC in, w/o power adapter, black, RoHS |
| | | ECW-281B2WD-R21/N270/1GB | Fanless embedded system with Intel® Atom™ N270 1.6GHz CPU, 945GSE, dual VGA, built-in 1GB DDR2 memory, 9-36VDC in, w/o power adapter, black, RoHS |
| ECW-281B2WDW-R21/N270/1GB | Fanless embedded system with Intel® Atom™ N270 1.6GHz CPU, 945GSE, dual VGA, built-in 802.11b/g/n wireless, with 1GB DDR2 memory, 9-36VDC in, w/o power adapter, black, RoHS | | |

Embedded OS

| | |
|-------------------------|-------------------------------------------------------------------------------------------|
| ECWCF-281B-D525-XPE | Windows XP Embedded OS image, for ECW-281B-D525, with 1GB CompactFlash® memory card, RoHS |
| ECWCF-281B-D525-CE060 | Windows CE 6.0 OS image, for ECW-281B-D525, with 128MB CompactFlash® memory card, RoHS |
| ECWCF-281B-945GSE-XPE | Windows XP Embedded OS image, for ECW-281B-N270, with 1GB CompactFlash® memory card, RoHS |
| ECWCF-281B-945GSE-CE060 | Windows CE 6.0 OS image, for ECW-281B-N270, with 128MB CompactFlash® memory card, RoHS |