



Portwell PEM-E200VLA is designed with Intel® N270 1.6 GHz processor with 945GSE and ICH7 chipset, with less than 10W overall TDP and dual 24bit LVDS support it is suitable for supermarket, health and industrial weighing scale applications which nowadays equipped with dual screen. For addition requirement the application will also require serial and USB ports to connect to thermal printer, barcode scanner to do self service while using weighing scale.

## FEATURES

- The Intel® Atom™ N270 and 945GSE platform that provides cost effective solution and technology
- The Intel® platform brings under 10W TDP solution for easy fan-less design
- SATA and IDE interface provide best cost effective functions for market
- Architecture of module and carrier boards speeds up time-to-market of tailor-made equipment
- Support one SODIMM socket and up to 2GB memory size

## ORDERING GUIDE

AB1-3512Z	PEM-E202VLA
B8302300	(GP).Heat Spreader. 114x95x23mm

## GENERAL

Processor	- Intel® 45nm Atom™ N270 processor 1.6 GHz (2.5W) and 512KB Cache in FC-BGA package - FSB 533 MHz - Support Intel® Hyper-Threading, SpeedStep Technology and Execute Disable Bit
Chipset	- Intel® 945GSE (6W), Intel® Gen 3.5 Integrated Graphics Engine - Intel® ICH7M(2.5W), Intel® AHCI Technology
BIOS	- Award BIOS - Support ACPI 2.0, SMBIOS 2.1
Memory	- Support up to 2GB DDR2 533/667 MT/s SDRAM on one 200-pin SODIMM sockets
Storage Devices	- SATA 3.0 Gb/s x 2 - EIDE x 2 with Ultra DMA 100/66/33
Watchdog Timer	- Programmable via S/W from 1sec to 255min
Ethernet	Realtek® RTL8102EL 10/100 LAN x 1 (Supports Full Duplex flow control (IEEE 802.3x))
Audio	Intel® High Definition Audio (2x channels delivering 192-kHz 32-bit, and 8x channels delivering 96-kHz 32-bit)
Expansion Interface	- 4x PCI devices at 33 MHz - ISA Interface supports Bus Master, up to 4 devices - 4x Universal Serial Bus 2.0 (480 Mb/s bus comprehends the high-speed / full-speed / low-speed data ranges)
Hardware Monitors	- Winbond83627THG CPU, Voltage and Temperature
Power Requirement	- Typical: 5V,3V, 5VSB, VBAT - Support AT and ATX mode
Dimension	114mm(L) x 95mm(W), 4.5"(L) x 3.7"(W), PCB: 10 layers
Environment	- Operation Temperature: 0~60 °C - Storage Temperature: -20~80 °C - Relative Humidity: 5~90%"
MTBF	Over 120,000 hours at 40 Degree Celsius

## DISPLAY

Graphic Controller	Intel® 945GSE integrated Graphics Media Accelerator (Intel® GMA 950)
Graphic Memory	Intel® Dynamic Video Memory Technology (Intel® DVM T 3.0)
Display Interface	VGA: resolution up to 2048 x1536 LVDS: 2x 18bpp/24bpp (resolution up to 1600 x 1200)

