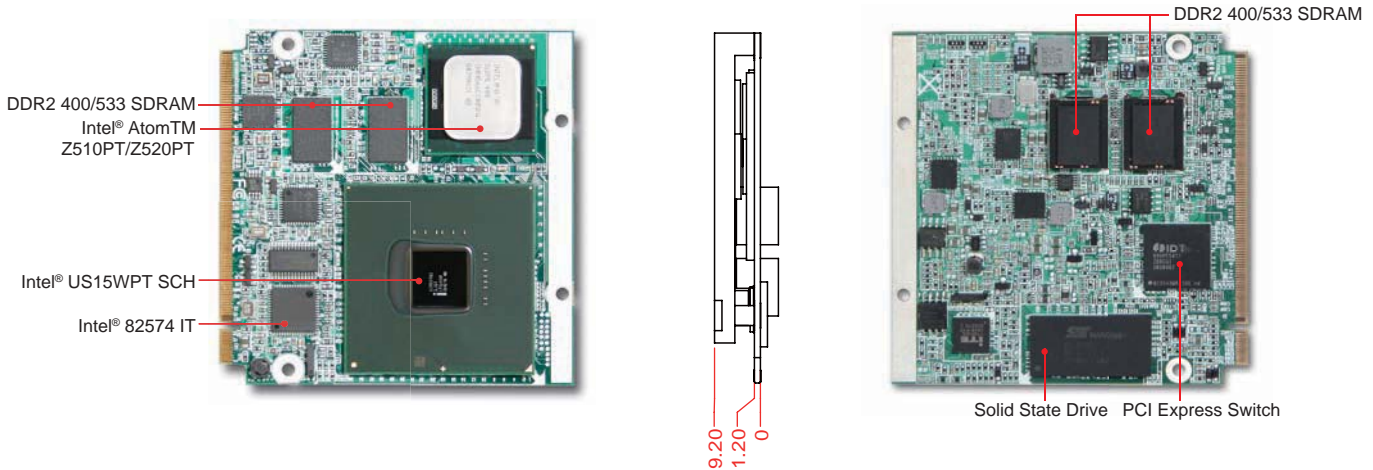


PQ7-M103XL

Qseven, Based on Intel® eMenlow XL Platform with DDR2 SDRAM, SATA LVDS Display, Gigabit Ethernet, SDVO and NANDrive



Portwell PQ7-M103XL is designed with Intel's ultra low power US15WPT chipset which features less than 5W overall power consumption, -40~85 degree wide temperature support and on board SSD. It is suitable for mission critical application such as wind powered generators which are generally located at remote locations that required to stand for extraordinary high or low temperature environment, and vibration from spinning blades.

FEATURES

- Atom™ Z510PT (1.1GHz) or Z520PT (1.33GHz)
- Intel® US15WPT integrated GMA 500 Graphic
- Ultra Low CPU and SCH TDP (Under 5W) for fan-less application
- LVDS and SDVO interface for dual independent display
- Full Hardware acceleration of H.264, MPEG2, VC1 and WMV9 is supported
- On board DDR2 supported up to 1GB
- 4Mbit flash ROM for easy BIOS upgrade and video BIOS for DFP

ORDERING GUIDE

AB1-3400	PQ7-M103XL-1100-0512
AB1-3401	PQ7-M103XL-1100-1024-4G SSD
AB1-3402	PQ7-M103XL-1330-0512-4G SSD
AB1-3403	PQ7-M103XL-1330-1024-4G SSD
AB1-3724	PQ7-M103XL-1100-1024
AB1-3725	PQ7-M103XL-1330-0512
AB1-3726	PQ7-M103XL-1330-1024
B8303350	(GP).Heat Spreader. 70x62x8mm for PQ7-M103XL-0512
B8303360	(GP).Heat Spreader. 70x62x8mm for PQ7-M103XL-1024

GENERAL

Processor	- Intel® 45nm Atom™ Z520PT/Z510P up to 1.33 GHz (2.2W) with 512KB Cache in FC-BGA package - FSB: 533/400 Mhz/s - Support Intel® Hyper-Threading, Virtualization, Execute Disable Bit, and SpeedStep Technology
Chipset	- Intel® US15WPT (3.5W) - Support Intel® Graphics Media Accelerator 500 Technology
BIOS	- AMI Core8 BIOS - Support ACPI 3.0, SMBIOS 2.3.3, Legacy Free
Memory	- Memory down, up to 1GB DDR2 533MT/s SDRAM
Storage Devices	- SATA 3.0 Gb/s x2 - Onboard IDE Solid State Drive, Up to 8 GB(Optional) - Secure Digital I/O(SDIO) x1 with Revision 1.1
Watchdog Timer	- Programmable via S/W from 1sec to 255min
Ethernet	Intel® 82574IT Gigabit LAN x 1 (supported vPro, Jumbo Frames, sync protocol indicator)
Audio	Intel® High Definition Audio (2x channels delivering 192-kHz 32-bit, and 8x channels delivering 96-kHz 32-bit)
Expansion Interface	- 1x SDVO Port up to 160 MHz pixel clock - 2x PCI Express x1 Gen1 (2.5 GT/s) - 3rd PCI Express x1 is available, if no GbE support - LPC Interface (4-bit-wide bus operating at 4 times the clock speed , 33.3 MHz) - 8x Universal Serial Bus 2.0 (480 Mb/s bus comprehends the high-speed / full-speed / low-speed data ranges)
Hardware Monitors	- EMC1402 CPU and System Temperature
Power Requirement	- Typical: 5VCC, 5VSB, VBAT - Support AT and ATX mode
Dimension	70mm(L) x 70mm(W), 2.7"(L) x 2.7"(W), PCB: 10 layers
Environment	- Operation Temperature: -40~85 °C - Storage Temperature: -40~85 °C - Relative Humidity: 5~90%
MTBF	Over 120,000 hours at 40 Degree Celsius

DISPLAY

Graphic Controller	Intel® US15WPT integrated Graphics Media Accelerator 500, up to 200MHz.
Graphic Memory	Intel® Dynamic Video Memory Technology (Max 8MB UMA / Max 256MB DVMT)
Display Interface	SDVO: resolution up to 1024 x 768 (XGA) LVDS: 1x 18bpp/24bpp (resolution up to 1366 x 768)

