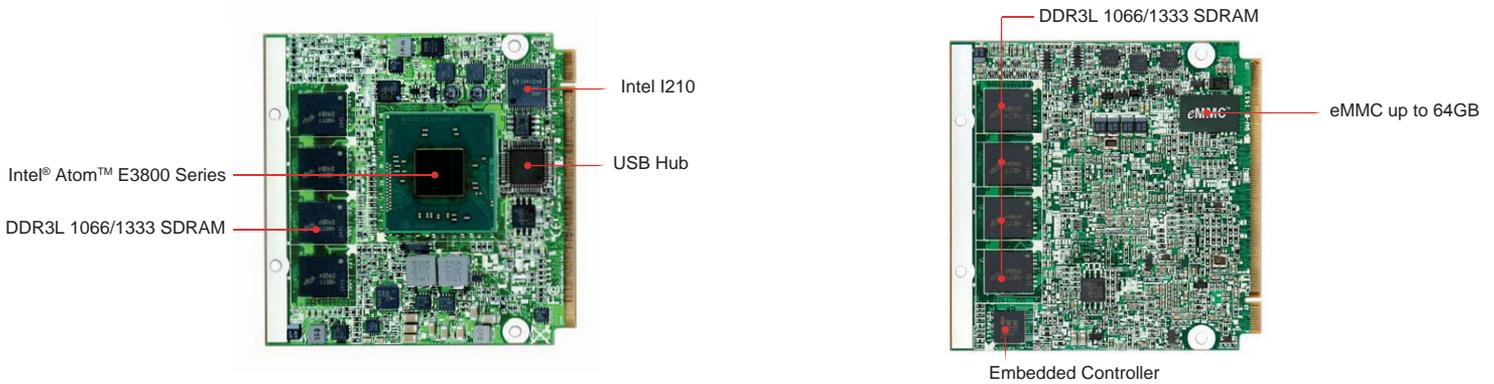


PQ7-M106IE

Intel® Atom™ Based Qseven 2.0 module board with memorydown, Dual DP, SATA, PCIE, Gigabit Ethernet and eMMC



Powrtwell PQ7-M106IE series are designed with Intel Atom E3800 series and excellent power-design for critical environment for stable operation. Lower power consumption and high performance are parallel features better than the last Atom™ generation. PQ7-M106IE is designed with qualified components for wide-temp support Hence industrial-grade eMMC storage is adopted to keep system working in -40°C to 85°C. In addition, through USB hub, USB 2.0 can be expanded as 6 ports. For Transportation or Outdoor application, PQ7-M106IE will be appropriate solution to meet customer's requirement.

FEATURES

- Intel Atom™ Bay Trail SoC E3800 series processor with industrial support
- On Board DDR3L memory-down, up to 8GB
- On Board eMMC driver, up to 64GB
- Support Dual DP interface
- Support Smart Battery feature
- Three PCI Express lanes (optional to 4)

ORDERING GUIDE

AB1-3B10Z	PQ7-M106IE-E3845-4G (Industrial) with MOQ
AB1-XXXXZ	PQ7-M106IE-E3845-2G (Industrial)
AB1-XXXXZ	PQ7-M106IE-E3827-2G (Industrial)
AB1-XXXXZ	PQ7-M106IE-E3825-2G (Industrial) with MOQ
AB1-XXXXZ	PQ7-M106IE-E3815-2G (Industrial)

GENERAL

Processor	- Intel® Atom™ processor E3800 family, 22nm process technology - Cache up to 2MB (for Quad Core) - DPM (Defect Per Million devices) <50 - Support Intel® VT-x technology
BIOS	- Phoenix EFI BIOS
Memory	- Support up to 8GB DDR3L 1066/1333 SDRAM
Storage Devices	- SATA 3.0 Gb/s x2 with AHCI support - Secure Digital I/O(SDIO) x1 with Revision 1.1 - Support wide-temp eMMC driver up to 64GB
Watchdog Timer	- Programmable by embedded controller
Ethernet	Intel® I210 Gigabit LAN x 1
Audio	Intel® High Definition Audio (2x channels delivering 192-kHz 32-bit, and 8x channels delivering 96-kHz 32-bit)
Expansion Interface	- 3x PCI Express x1 Gen2 (5 GT/s) (optional to 4) - LPC Interface - 6 x USB 2.0 - 1 x USB 3.0 - SPI Interface up to 50 MHz - SM Bus interface - UART interface - I2C interface
Hardware Monitoring	- EMC1402 CPU and System Temperature
Power Requirement	- Typical: 5VCC, 5VSB, VBAT
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
MTBF	- Relative Humidity: 5~90% Over 120,000 hours at 40 Degree Celsius

DISPLAY

Graphic Controller	Intel® HD Graphics 4600 supports DirectX*11, OCL 1.2, OGL 3.2 Video decode hardware acceleration supports for H.264, MPEG2, MVC, VC-1, WMV9 and VP8 formats
Display Interface	Support Dual Display Port interface which can be configured DVI/HDMI



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