

Qseven® Module with Intel® Bay Trail family processor

PQ7-M106

- intel® Atom™ Processor E3800 Series
- On Board DDR3L up to 8GB
- On Board eMMC up to 64GB
- 24-bit LVDS, DP/HDMI output
- GbE, 2x SATA 3Gb/s, 1x USB 3.0, 6x USB 2.0, 3x PCIe x1
- Operating Temperature: -40°C to 85°C

Specifications



CPU

Intel® Atom E3845, 4 cores, 1.91 GHz, 10W TDP

Intel® Atom E3827 2 cores, 1.75 GHz, 8W TDP

Intel® Atom E3825 2 cores, 1.33 GHz, 6W TDP

Intel® Atom E3815 1 Core, 1.46 GHz, 5W TDP

Intel® Atom E3805 2 core, 1.33 GHz Dual, 3W TDP

Cache

2 MB L2 cache

Memory

Onboard DDR3L up to 8GB at 1333 MT/s

Storage

Onboard eMMC flash up to 64 GB

DisplayPort Interface DDI0

DisplayPort 1.1 up to 2560x1600 or HDMI 1.4a up to 1920x1080

DisplayPort Interface DDI1

24-bit Dual channel LVDS up to 1920x1200@60Hz
or eDP up to 2560x1600

Audio

Intel® High Definition Audio

Ethernet

1x 10/100/1000 GbE (Intel® i210)

I/O Interfaces

PCIe

3x PCIe x1 Gen 2 (Opt. to 4)

USB

6x USB 2.0 (Opt. w/1x USB 3.0)

SATA

2x SATA 3.0 (6 Gbit/s)

Other I/O Interfaces

1x SDIO, 1x SPI, 1x I²C, 1x HDA, 1x SMBus, 1x LPC, 1x UART, 1x WDT

Video

GPU Feature Support

H.264, MPEG2, VC1, VP8

Embedded BIOS

AMI UEFI with Fast Boot support | Display Auto Detection |

Flash Update | Password Lock | OEM Logo for startup screen

Mechanical and Environmental

Form Factor

Qseven® 2.0

Dimension

Qseven module, 70 mm x 70 mm

Operating Temperature

Commercial: 0°C to +60°C, Industrial: -40°C to +85°C

Humidity

10-90% RH operating, non-condensing

5-95% RH storage (and operating with conformal coating)

Power

Standard Input

5V DC ±5%

Power Management

ACPI 5.0 compliant | Smart Battery Management on carrier

Power Consumption

3W~10W (CPU)

Operation System

Standard Support

Windows 10 | Windows 8.1 | Windows Embedded 8.1 Industry

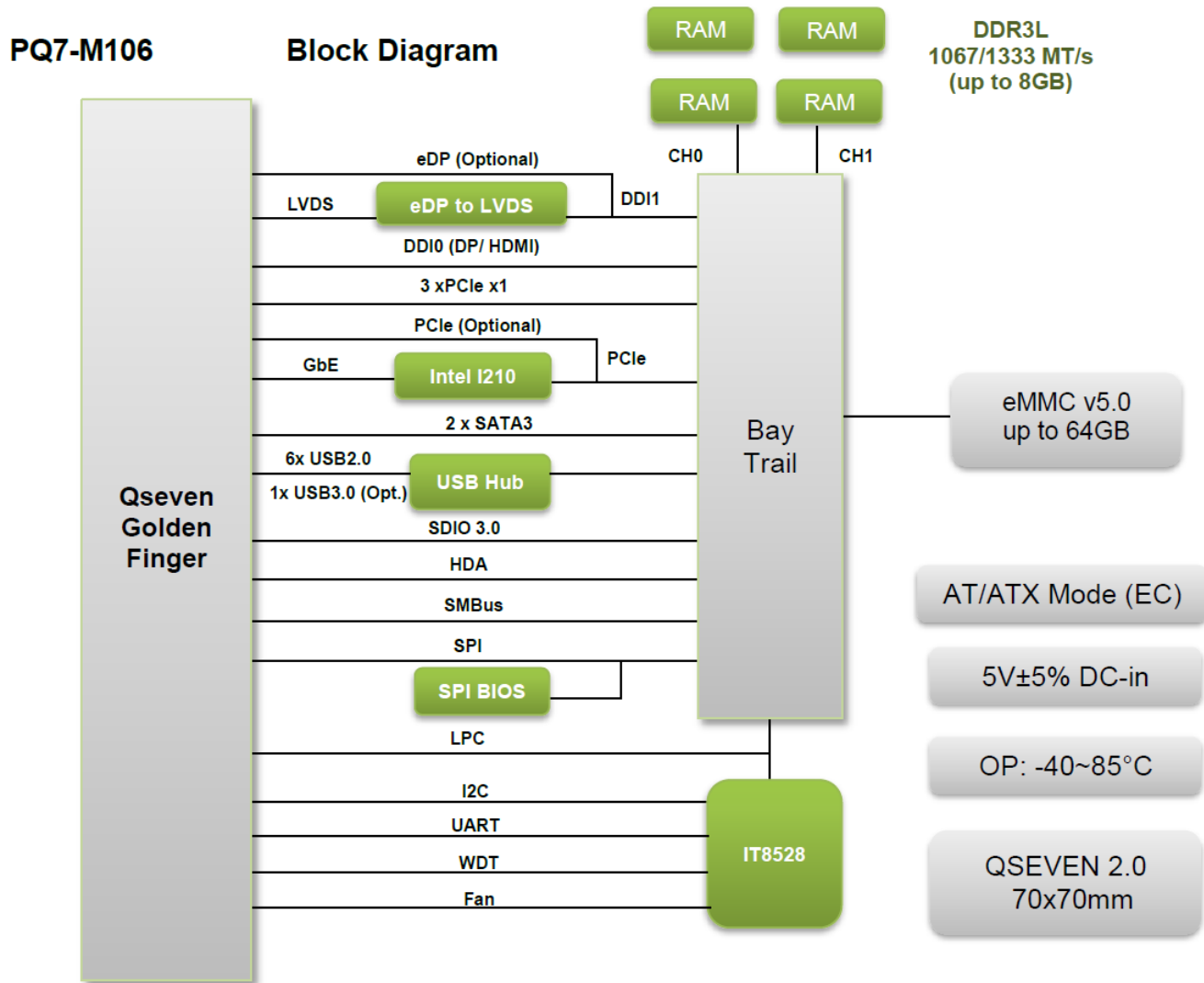
Windows 8 | Windows 8 Embedded Standard | Windows 8 Embedded

Windows 7 (no support if using eMMC5.0 or above)

Windows 7 Embedded Compact (no support if using eMMC5.0 or above)

Windows 7 Embedded Standard (no support if using eMMC5.0 or above)

Functional Diagram



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