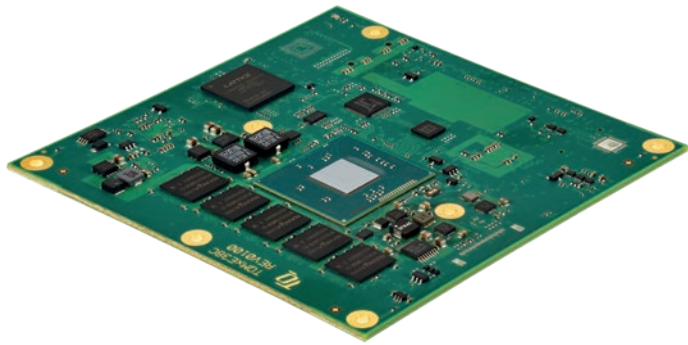


TQMxE38C

x86 Family



COM Express® Compact Type 6 Module with Intel® Atom™ E3800 ("Bay Trail-I").

Based on

COM Express



HIGHLIGHTS

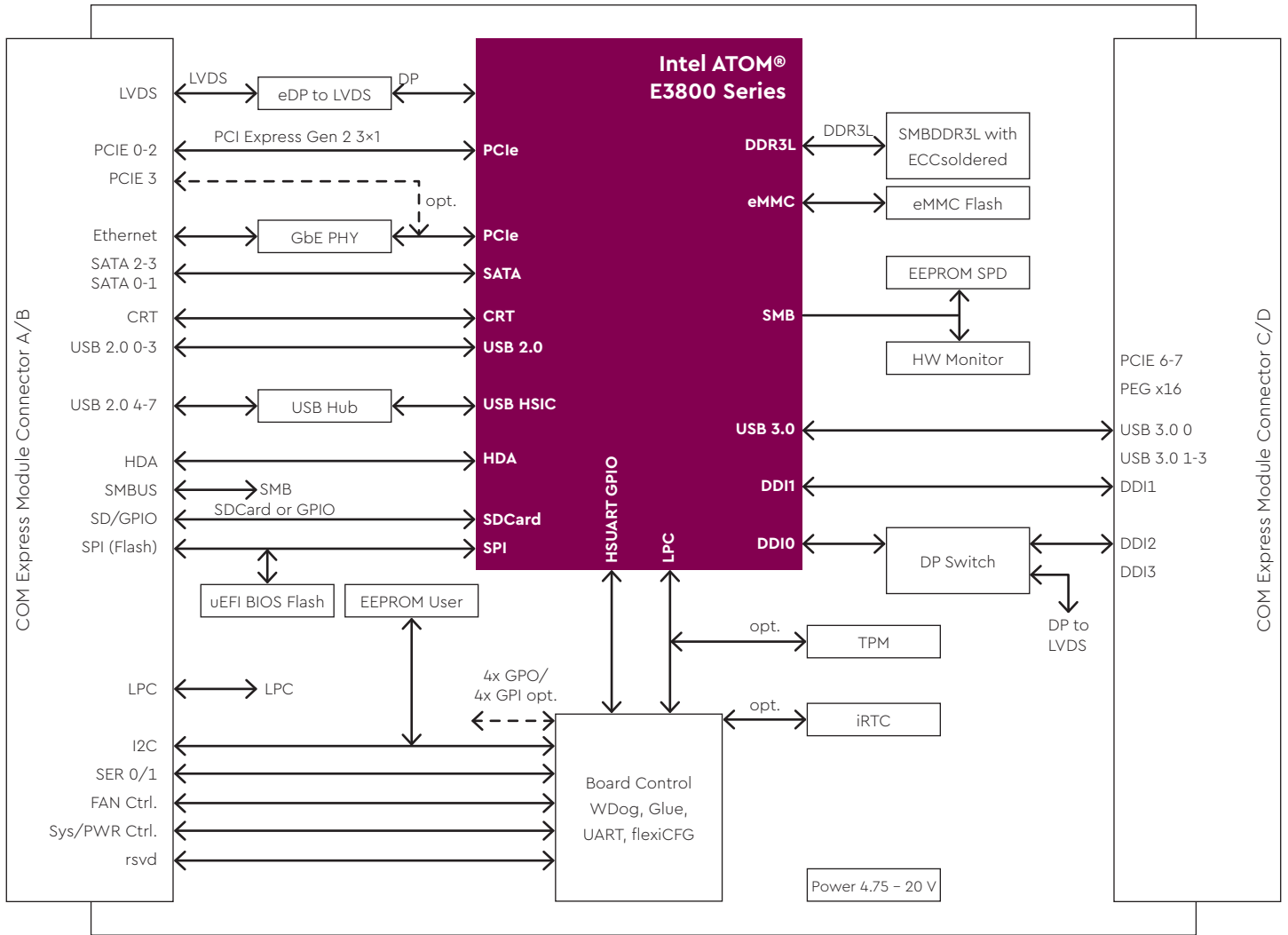
- ▶ Intel® Atom™ E3800 ("Bay Trail-I")
- ▶ Up to 8 GB DDR3L with ECC support
- ▶ Optimized for ultra low power
- ▶ Extended temperature support
- ▶ Feature-rich uEFI BIOS with easy-config, multi-setup and touch support
- ▶ TQMx86 board controller with flexible customization options (flexiCFG)
- ▶ TPM 1.2/2.0
- ▶ iRTC (highly accurate industrial real time clock)
- ▶ "Green ECO-Off" (minimum of standby power)
- ▶ Watchdog und thermal management
- ▶ Highest reliability, 24/7 certified
- ▶ Very robust design
- ▶ Conformal coating capability

TECHNICAL SPECIFICATION

CPU	Intel Atom® E3800 („Bay Trail-I“) E3815: 1x 1.46 GHz, 512 KB L2-Cache, 5 W E3805: 2x 1.33 GHz, 1 MB L2-Cache, 3 W, without graphics E3825: 2x 1.33 GHz, 1 MB L2-Cache, 6 W E3826: 2x 1.46 GHz, 1 MB L2-Cache, 7 W E3827: 2x 1.75 GHz, 1 MB L2-Cache, 8 W E3845: 4x 1.91 GHz, 2 MB L2-Cache, 10 W
Memory	DDR3L: 2 GB, 4 GB, 8 GB, ECC support, soldered down EEPROM: 32-kbit (24LC32) eMMC: up to 64 GB
Graphics	2x Digital Display Interface (DDI)/LVDS a) for DP 1.1a, DVI, HDMI 1.4a b) for DP 1.1a, DVI, HDMI 1.4a or LVDS Interface (18/24 bit, Single/Dual Channel) 1x VGA (CRT) (max. 2 independent display outputs)
Interfaces	1x Gbit Ethernet (Intel® i210) (external IEEE1588 sync optional through TQ flexiCFG) 1x USB 3.0 (with USB 2.0 backward compatibility) 7x USB 2.0 (includes 4 ports via onboard HSIC USB Hub)

Peripheral interfaces	2x SATA 2.0 (up to 3 Gb/s), eSATA capable 3x PCIe 2.0 (up to 5 Gb/s) (4th lane optional, if no Ethernet) 1x LPC bus 1x Intel® HD audio (HDA) 1x I2C, (2nd I2C optional) (master/slave capable) 1x SMBus 1x SPI (for external uEFI BIOS flash) 2x Serial port (Rx/Tx, legacy compatible) (4 wire optional through TQ flexiCFG) 1x SD card interface (default)/optional 8x GPIO (assembly option)
Security components	TPM (SLB9660 TPM 1.2, alternatively SLB9665 TPM 2.0)
Others	TQMx86 board controller with watchdog and flexiCFG Industrial real time clock (iRTC), Hardware monitor
Power supply	Voltage: 4.75 V – 20 V 5 V Standby (optional) 3 V Battery/GoldCAP (optional) Power: typ. 2 – 6 W/max. 13 W (Green ECO-Off: < 5 mW)
Environment	Standard temperature: 0°C...+60°C Extended temperature: -40°C...+85°C
Form factor/ dimensions	COM Express™ Compact, type 6, 95 mm x 95 mm

BLOCK DIAGRAM TQMxE38C



ORDERING INFORMATION

TQMxE38C-AA

E3845 (Quad Core, 1.91 GHz, 2 MB L2-Cache, HD Gfx 542/792 MHz, 10 W), 4GB DDR3L-1333 ECC, TPM 1.2, Extended-Temp. -40..+85°C

TQMxE38C-AF

E3827 (Dual Core, 1,75 GHz, 1 MB L2-Cache, HD Gfx 542/792 MHz, 8 W), 2GB DDR3L-1333 ECC, Standard-Temp. 0..+60°C

Other configurations on request

MB-COME6-1

Mainboard for COM Express™ Compact/Basic, Type 6 Interfaces: DP, LVDS, 2x Gb Ethernet, 5x USB, 3x COM, audio, mini PCIe, mSATA, 2.5" SSD, SD card, riser extension with 2x PCIe and USB, fan, debug, 170 mm x 170 mm

STKxE38C

Starterkit Set with Mainboard MB-COME6-1, Module (TQMxE38C-xx) (please specify exact Version), Cooling solution (Heat spreader), Accessories

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