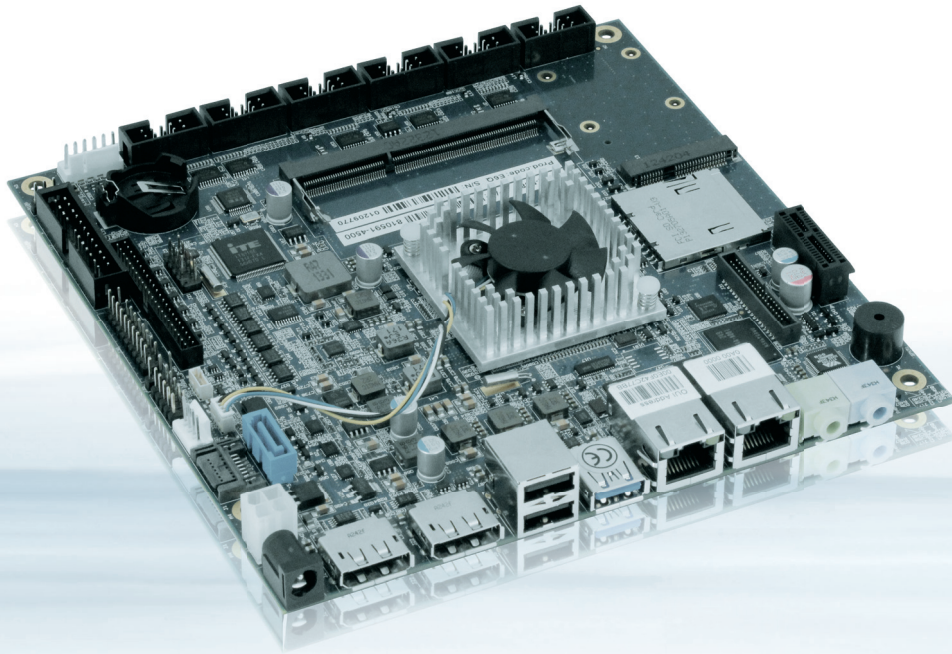


mITX-E38



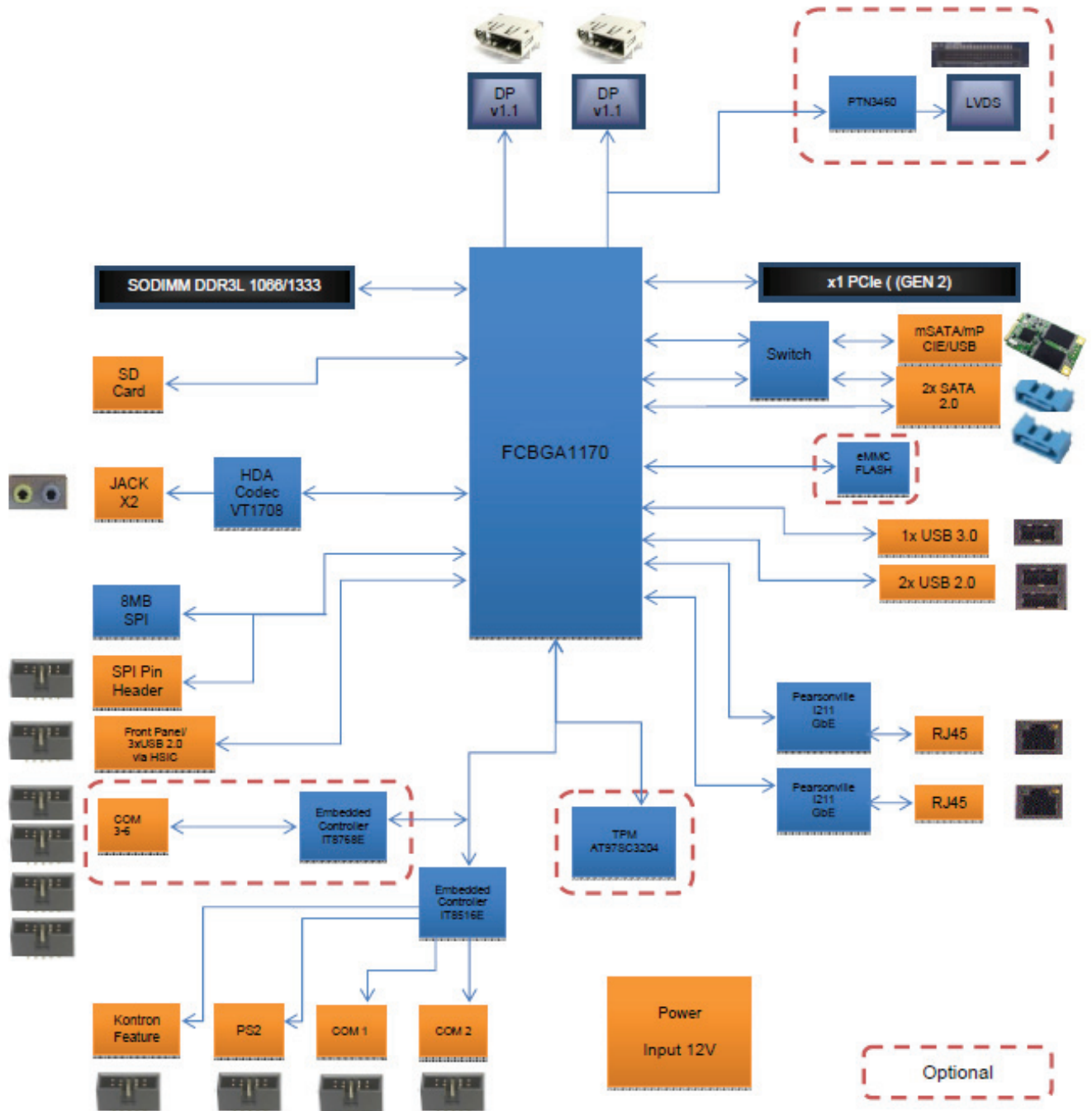
mITX BOARD WITH Intel® Atom™ E38XX SYSTEM ON CHIP (SOC)

- ▶ Intel® Atom™ E38xx SoC (1, 2 or 4 cores), TDP: 5-10 W
- ▶ SO-DIMM Socket DDR3L-1333 Memory (up to 8 GByte)
- ▶ Intel® Gen7 graphics, OpenGL 3.0, OpenCL 1.2, DX11, H.264, MPEG2, MCV, VC-1, VP8
- ▶ LVDS 24 Bit dual channel and Display Port 1.1a
- ▶ 10/100/1000 MBit RJ45 Ethernet LAN, SATA, mSATA or mPCIe

mITX-E38

Typical Applications

- ▶ POS/POI: Higher Graphics and CPU core performance, Low power, multi display support
- ▶ Medical: Higher Graphics and CPU core performance, longevity
- ▶ Industrial Automation: Wide range of I/Os, compact size, longevity
- ▶ Digital signage: Multi display support, low power, wide range of I/Os
- ▶ Future-oriented Devices: Display Port and LVDS, low power, compact size



► TECHNICAL INFORMATION

| MITX-E38XX | MITX-E3815 | MITX-E3826 | MITX-E3845 |
|------------------------------|---|---|---|
| SOC | E3815 SKU (1core), 1.46 GHz, max. 5 W TDP | E3826 SKU (2 cores), 1.46 GHz, max. 7 W TDP | E3845 SKU (4 cores), 1.91 GHz, max. 10 W TDP |
| MEMORY | 1x 8 GByte SODIMM slot supporting DDR3L-1066 | 1x 8 GByte SODIMM slot supporting DDR3L-1066 | 1x 8 GByte SODIMM slot supporting DDR3L-1333/1066 |
| GRAPHICS INTERFACE | 2x independent graphic outputs (2x Display Port 1.1a) | 2x independent graphic outputs (2x Display Port 1.1a) | 2x independent graphic outputs (1x Display Port 1.1a up to 2560x1600, 1x LVDS up to 1920x1200 dual channel 24 bit) |
| ETHERNET | 2x RJ45 10/100/1000 Mb/s Ethernet | 2x RJ45 10/100/1000 Mb/s Ethernet | 2x RJ45 10/100/1000 Mb/s Ethernet |
| MASS STORAGE | - | 1x SD card slot (SDXC) | 1x SD card slot (SDXC) |
| ONBOARD FLASH, EMMC | - | - | 16 GByte TLC Nand |
| SATA PORTS | 2x SATA Gen 2 (1 port shared with mSATA) | 2x SATA Gen 2 (1 port shared with mSATA) | 2x SATA Gen 2 (1 port shared with mSATA) |
| MPCIe / MSATA SLOT | 1x mPCIe / mSATA slot | 1x mPCIe / mSATA slot | 1x mPCIe / mSATA slot |
| SERIAL PORTS | 2x Serial ports UART 16550 | 6x Serial ports UART 16550 | 6x Serial ports UART 16550 |
| LAN PORTS | 2x GBE | 2x GBE | 2x GBE |
| USB PORTS | 4x USB 2.0, 1x USB 3.0 | 4x USB 2.0, 1x USB 3.0 | 8x USB 2.0, 1x USB 3.0 (4 on front I/O, 5 internal) |
| AUDIO | HD Analog audio interface (Line-In, Line-Out, Mic-In, SPDIF) | HD Analog audio interface (Line-In, Line-Out, Mic-In, SPDIF) | HD Analog audio interface (Line-In, Line-Out, Mic-In, SPDIF) |
| PCIe SLOTS | 1x PCIe x1 slot | 1x PCIe x1 slot | 1x PCIe x1 slot |
| TPM | No | No | Yes |
| I/O FEATURES | 1x mPCIe® 2.0 port (x1 lane), PCIe® x1 connector, Kontron embedded feature connector with ADC, DAC and up to 160 GPIO | 1x mPCIe® 2.0 port (x1 lane), PCIe® x1 connector, Kontron embedded feature connector with ADC, DAC and up to 160 GPIO | 1x mPCIe® 2.0 port (x1 lane), PCIe® x1 connector, Kontron embedded feature connector with ADC, DAC and up to 160 GPIO |
| POWER SUPPLY | Single supply 12 V DC, Internal and external connector | Single supply 12 V DC, Internal and external connector | Single supply 12 V DC, Internal and external connector |
| MTBF | Prediction Model: Telcordia Issue 2 Method I Case 3, 40° C & 60° C | Prediction Model: Telcordia Issue 2 Method I Case 3, 40° C & 60° C | Prediction Model: Telcordia Issue 2 Method I Case 3, 40° C & 60° C |
| SAFETY | IEC 60950-1: 2005, 2nd Edition UL 60950-1, CSA C22.2 No. 60950-1 | IEC 60950-1: 2005, 2nd Edition UL 60950-1, CSA C22.2 No. 60950-1 | IEC 60950-1: 2005, 2nd Edition UL 60950-1, CSA C22.2 No. 60950-1 |
| COOLING SOLUTIONS | Passive and active cooling solutions | Passive and active cooling solutions | Active cooling solution |
| OPERATING TEMPERATURE | 0 °C to 60 °C | 0 °C to 60 °C | 0 °C to 60 °C |
| REGULATORY | Comply with Emission: EN55022, Immunity EN55022. RoHS | Comply with Emission: EN55022, Immunity EN55022. RoHS | Comply with Emission: EN55022, Immunity EN55022. RoHS |
| DIMENSIONS | Thin Mini-ITX, 170 x 170 mm | Thin Mini-ITX, 170 x 170 mm | Thin Mini-ITX, 170 x 170 mm |
| OPERATING SYSTEMS | Win7, Win8, WES7, WES8, Linux, WxWorks | Win7, Win8, WES7, WES8, Linux, WxWorks | Win7, Win8, WES7, WES8, Linux, WxWorks |

▶ ORDERING INFORMATION

| ARTICLE | PART NO.* | DESCRIPTION** |
|------------------------------|-------------|-------------------------------------|
| MITX-E38 QC 1.91 GHZ (E3845) | 810590-4500 | Board, mlTX-E38 QC 1.91 GHz (E3845) |
| MITX-E38 DC 1.46 GHZ (E3826) | 810591-4500 | Board, mlTX-E38 DC 1.46 GHz (E3826) |
| MITX-E38 SC 1.46 GHZ (E3815) | 810592-4500 | Board, mlTX-E38 SC 1.46 GHz (E3815) |

| RECOMMENDED MEMORY MODULES | NEW SKU 04/16* | OLD SKU | SKU NAME** |
|----------------------------|----------------|-----------|-----------------------------|
| | 1060-2526 | 1055-9445 | DDR3-1600 SODIMM 1 GByte E2 |
| | 1060-2528 | 1055-9446 | DDR3-1600 SODIMM 2 GByte E2 |
| | 1060-2530 | 1055-9447 | DDR3-1600 SODIMM 4 GByte E2 |
| | 1060-2532 | 1055-9448 | DDR3-1600 SODIMM 8 GByte E2 |

*SKU changes were caused by administrative issues only, no hardware changes.

**Named are always the min. requirements, the shipped memory can fulfill a higher performance level

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