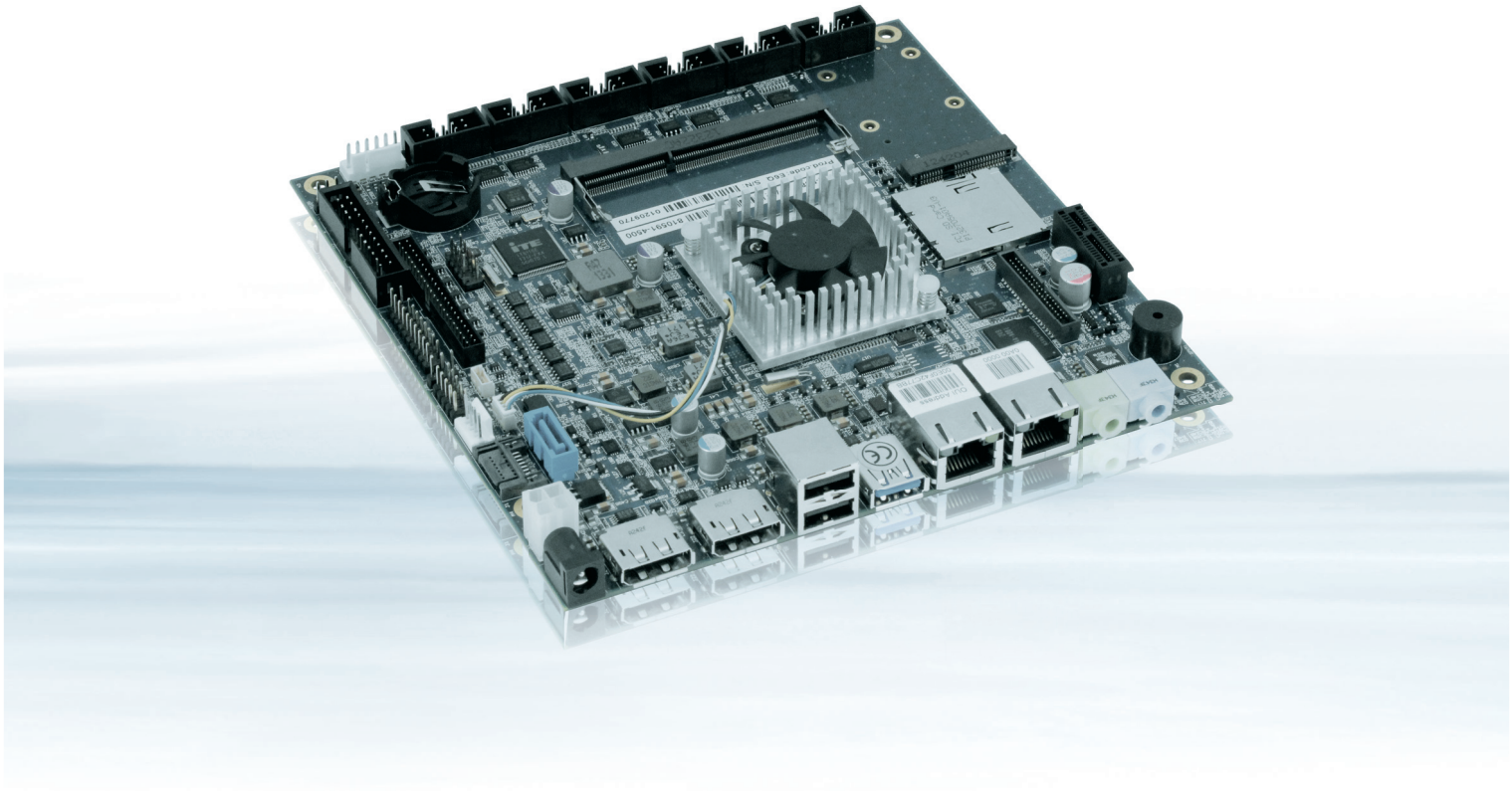
mITX-E38



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

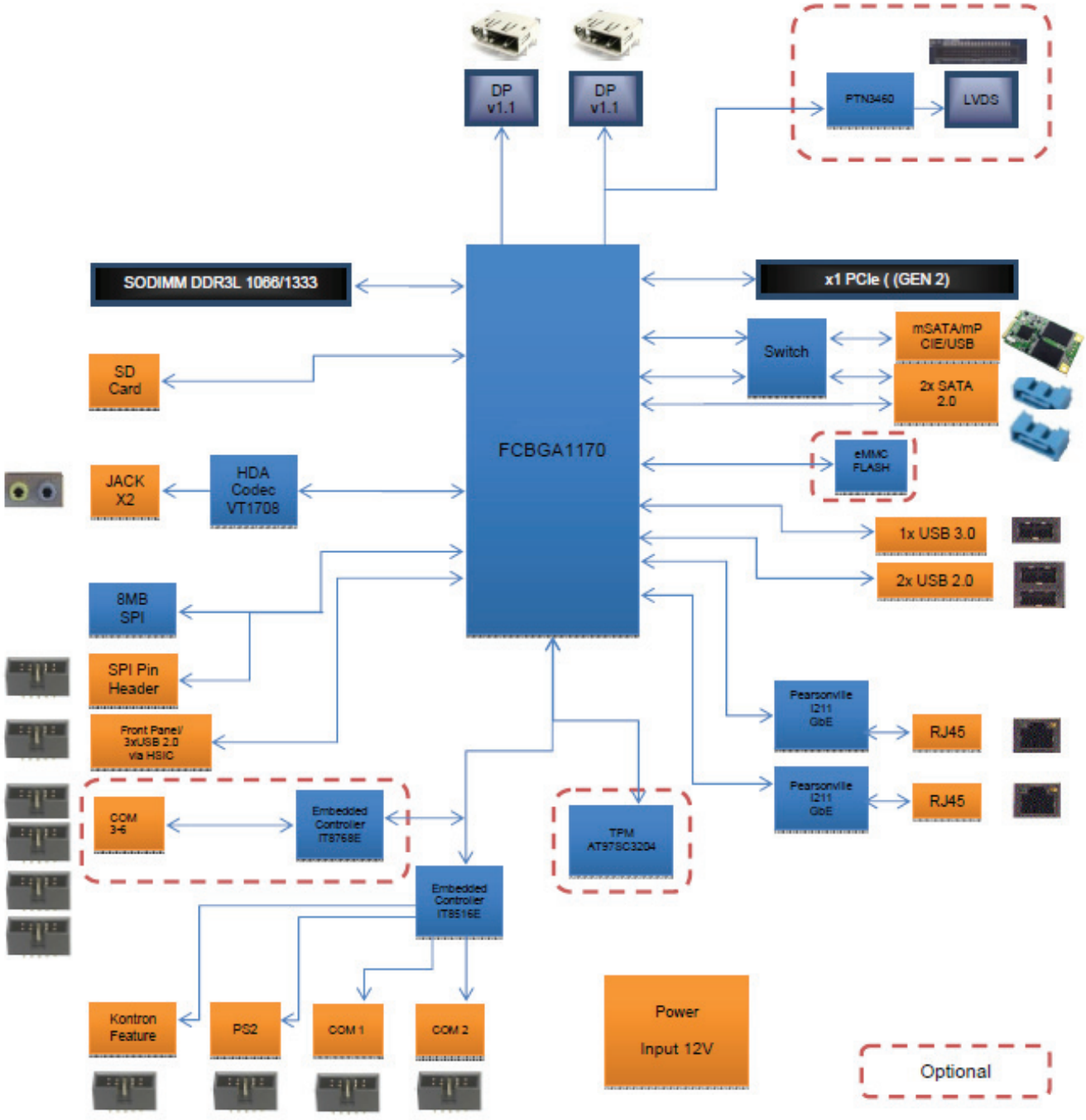
- Intel® Atom™ E38xx SoC (1, 2 or 4 cores), TDP: 5-10 W
- SO-DIMM Socket DDR3L-1333 Memory (up to 8 GByte)
- Intel® Gen7 graphics, OpenGL 3.0, OpenCL 1.2, DX11, H.264, MPEG2, MCV, VC-1, VP8
- LVDS 24 Bit dual channel and Display Port 1.1a
- 10/100/1000 MBit RJ45 Ethernet LAN, SATA, mSATA or mPCIe

POSSIBILITIES START HERE kontron

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 PCIex1 slot	1x PCIex1 slot	1x PCIex1 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, mITX-E38 QC 1.91 GHz (E3845)
MITX-E38 DC 1.46 GHZ (E3826)	810591-4500	Board, mITX-E38 DC 1.46 GHz (E3826)
MITX-E38 SC 1.46 GHZ (E3815)	810592-4500	Board, mITX-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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