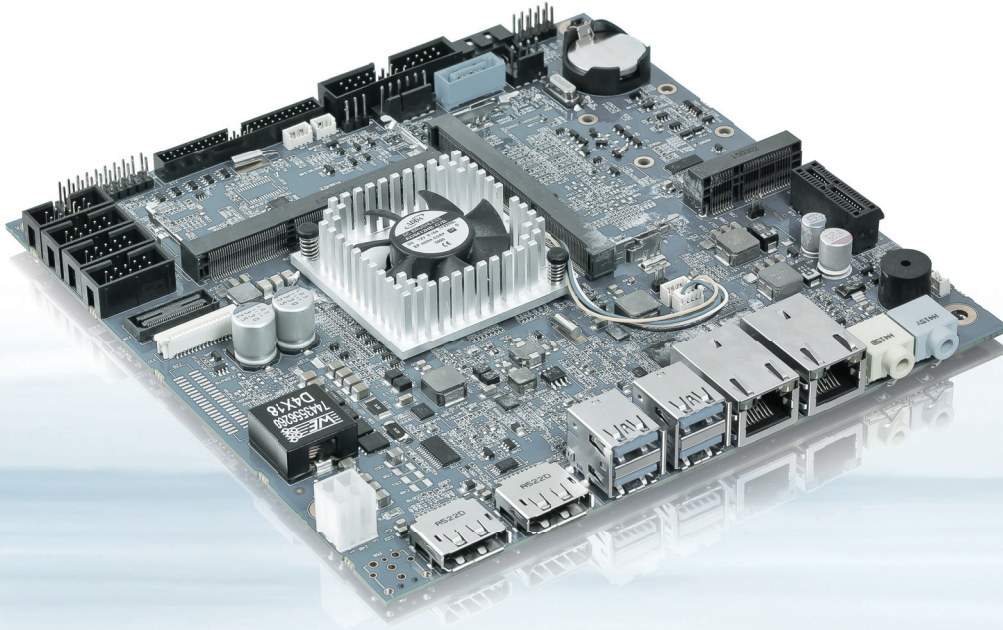


# mITX-BW

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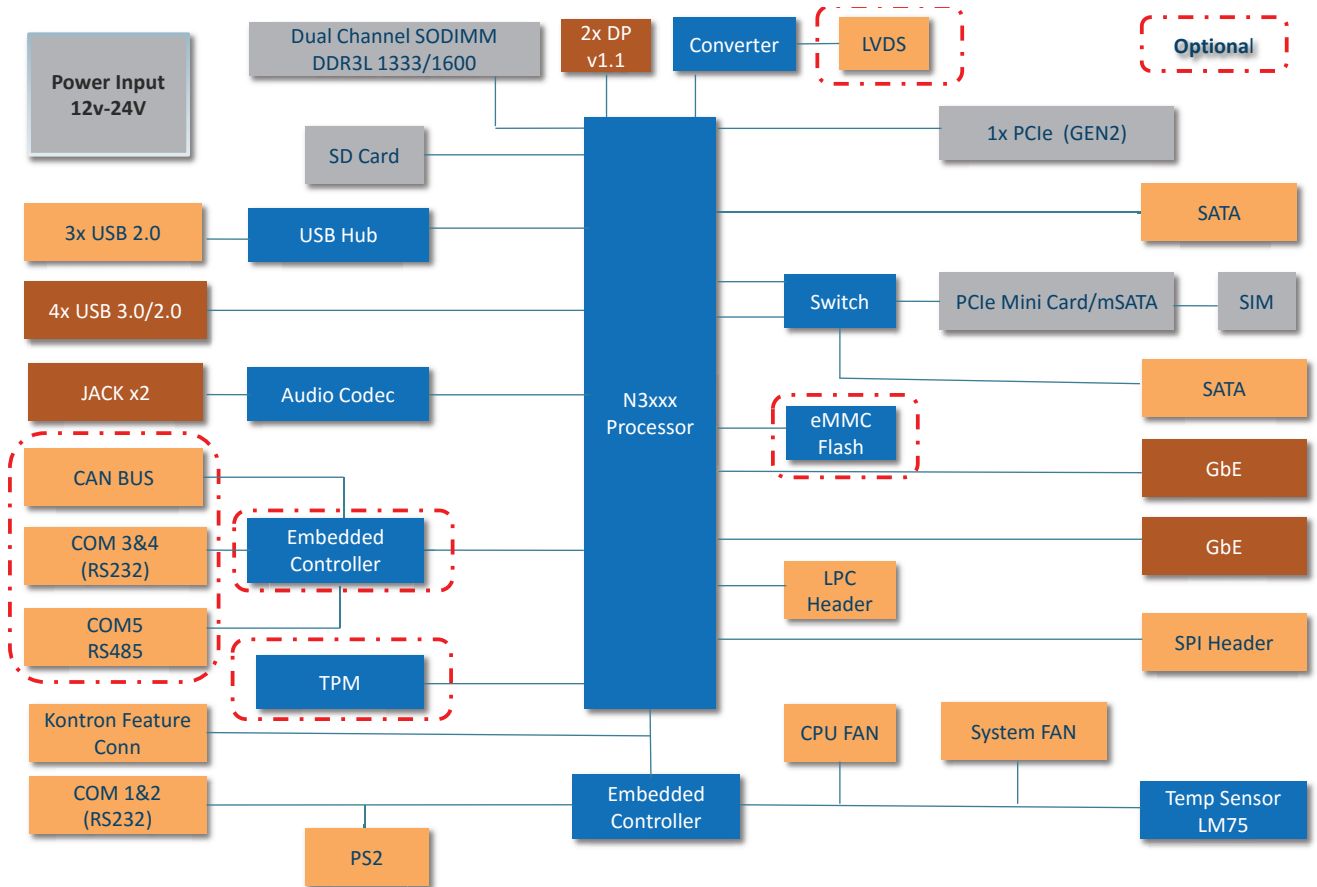
## mITX BOARD WITH Intel® Celeron® N3xxx SYSTEM ON CHIP (SOC) IN 14nm TECHNOLOGY

- ▶ Intel® Celeron® N3xxx SoC (2 or 4 cores), TDP: 4-12 W
- ▶ SO-DIMM Socket DDR3L-1600 Memory (up to 8 GByte)
- ▶ Intel® Gen7 graphics, OpenGL 4.2, OpenCL 1.2, DX12, H.265/264, MPEG2,...
- ▶ LVDS 24 Bit dual channel and Display Port 1.1a
- ▶ 2 SATA 3.0 (up to 6 GB/s), 1 SATA multiplex with mSATA/mPCIe in mPCIe connector

# mITX-BW

## 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-BW	miTX-N3700	miTX-N3150	miTX-N3050
<b>SOC</b>	N3700 SKU (4core), 1.6 GHz, max. 6 W TDP	N3150 SKU (4core), 1.6 GHz, max. 6 W TDP	N3050 SKU (2core), 1.6 GHz, max. 6 W TDP
<b>MEMORY</b>	2x 8 GByte SODIMM slot supporting DDR3L-1600	2x 8 GByte SODIMM slot supporting DDR3L-1600	2x 8 GByte SODIMM slot supporting DDR3L-1600
<b>GRAPHICS INTERFACE</b>	2x independent graphic outputs (2x Display Port 1.1a) 400 MHz, 16 Execution Units	2x independent graphic outputs (2x Display Port 1.1a) 320 MHz, 12 EU	2x independent graphic outputs (2x Display Port 1.1a) 320 MHz, 12 EU
<b>SPECIAL</b>	SIM card holder	SIM card holder	SIM card holder
<b>ONBOARD FLASH</b>	uSD	uSD	uSD
<b>SATA PORTS</b>	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)
<b>MPCIIE / MSATA SLOT</b>	1x mPCIe / mSATA slot	1x mPCIe / mSATA slot	1x mPCIe / mSATA slot
<b>SERIAL PORTS</b>	4x RS232, 1x RS485	4x RS232, 1x RS485	4x RS232, 1x RS485
<b>LAN PORTS</b>	2x GBE	2x GBE	2x GBE
<b>USB PORTS</b>	4x USB 3.0	4x USB 3.0	4x USB 3.0
<b>AUDIO</b>	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)
<b>PCIe SLOTS</b>	1x PCIe x1 slot	1x PCIe x1 slot	1x PCIe x1 slot
<b>TPM</b>	Yes	Yes	Yes
<b>I/O FEATURES</b>	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
<b>POWER SUPPLY</b>	Single supply 12/24 V DC, Internal and external connector	Single supply 12/24 V DC, Internal and external connector	Single supply 12/24 V DC, Internal and external connector
<b>MTBF</b>	tbd	tbd	tbd
<b>SAFETY</b>	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
<b>COOLING SOLUTIONS</b>	Passive and active cooling solutions	Passive and active cooling solutions	Passive and active cooling solutions
<b>OPERATING TEMPERATURE</b>	0 °C to 60 °C	0 °C to 60 °C	0 °C to 60 °C
<b>REGULATORY</b>	Comply with Emission: EN55022, Immunity EN55022. RoHS	Comply with Emission: EN55022, Immunity EN55022. RoHS	Comply with Emission: EN55022, Immunity EN55022. RoHS
<b>DIMENSIONS</b>	Thin Mini-ITX, 170 x 170 mm	Thin Mini-ITX, 170 x 170 mm	Thin Mini-ITX, 170 x 170 mm
<b>OPERATING SYSTEMS</b>	Win7, Win8.1, WES7, Linux	Win7, Win8.1, WES7, Linux	Win7, Win8.1, WES7, Linux

## ▶ ORDERING INFORMATION

ARTICLE	PART NO.*	DESCRIPTION**
MITX-BW QC 1.6 GHZ (N3700)	810620-4500	N3700 QC 1,6 GHz IA mPCIe, 4x USB, µSD, 4x RS485, CAN
MITX-BW QC 1.6 GHZ (N3150)	810621-4500	N3150 QC 1,6 GHz IA mPCIe, 4x USB, µSD, 4x RS485, CAN
MITX-BW QC 1.6 GHZ (N3050)	810622-4500	N3050 DC 1,6 GHz IA mPCIe, 4x USB, µSD, 4x RS485, CAN

RECOMMENDED MEMORY MODULES	NEW SKU 04/16*	OLD SKU	SKU NAME**
	1060-2520	1055-9939	DDR3L-1600 SODIMM 2 GByte
	1060-2522	1055-9941	DDR3L-1600 SODIMM 4 GByte
	1060-2524	1055-9942	DDR3L-1600 SODIMM 8 GByte
	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

## ▶ CORPORATE OFFICES

### EUROPE, MIDDLE EAST & AFRICA

Lise-Meitner-Str. 3-5  
86156 Augsburg  
Germany  
Tel.: + 49 821 4086 0  
Fax: + 49 821 4086 111  
info@kontron.com

### NORTH AMERICA

14118 Stowe Drive  
Poway, CA 92064-7147  
USA  
Tel.: + 1 888 294 4558  
Fax: + 1 858 677 0898  
info@us.kontron.com

### ASIA PACIFIC

1-2F, 10 Building, No. 8 Liangshuihe 2nd Street,  
Economical & Technological Development Zone,  
Beijing, 100176, P.R.China  
Tel.: +86 10 63751188  
Fax: +86 10 83682438  
info@kontron.cn