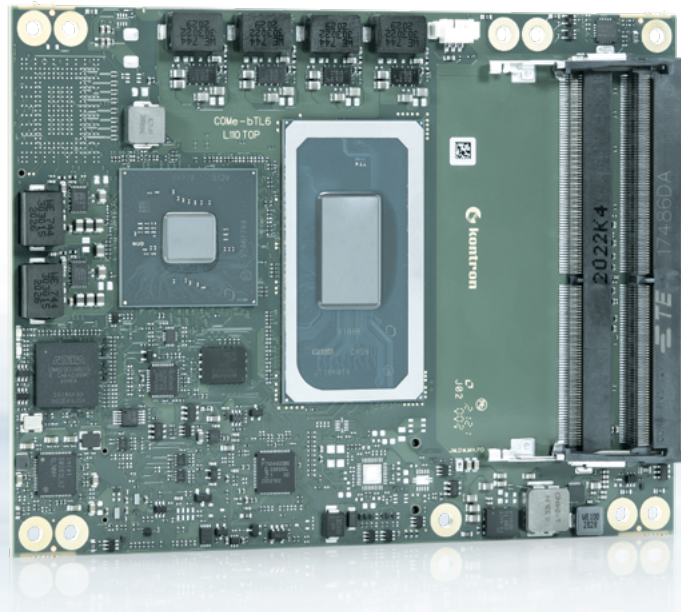


# COMe-bTL6 (E2)

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## COM Express® Basic Type 6 with 11th Generation Intel® Core™ / Xeon® Processors

- ▶ New microarchitecture with up to 8 cores
- ▶ Intel® XeGraphics with 4 Independent Displays (up to 8K)
- ▶ Up to 96 GByte DDR4 - 3200 MHz memory support
- ▶ Up to 2.5Gb Ethernet with TSN supported
- ▶ up to 1 TByte NVMe SSD onboard

POSSIBILITIES START HERE

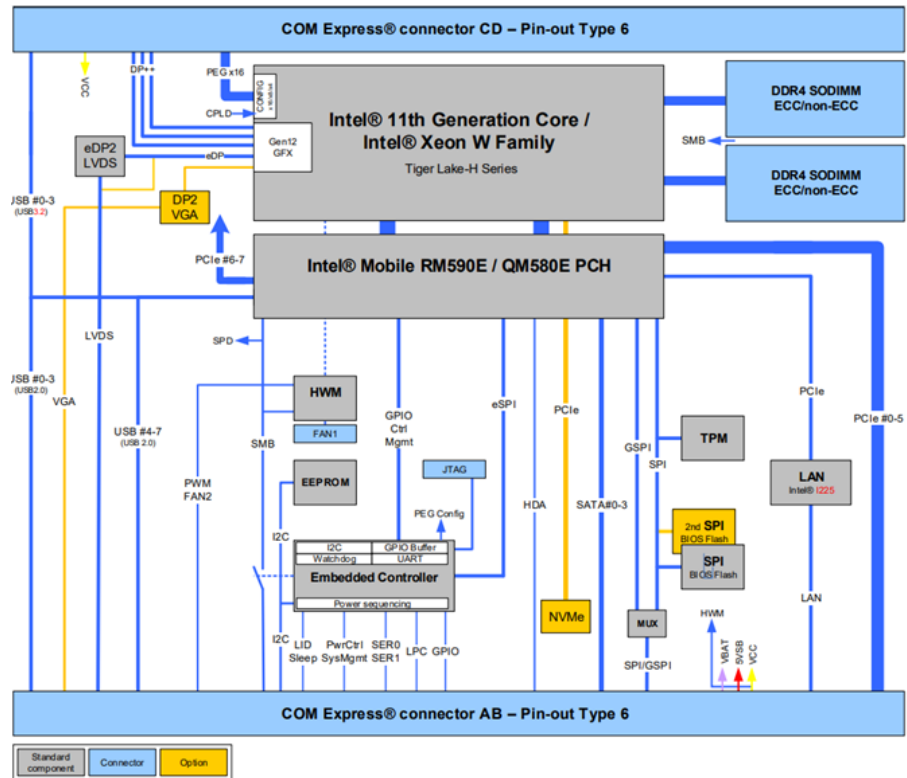
## ▶ TECHNICAL INFORMATION

COMPLIANCE	COM Express® basic, Pin-out Type 6
DIMENSIONS (H x W)	125 x 95 mm
CPU	Intel® 11th Generation Core™ / Xeon® family For details see table (CPU variants) given below
CHIPSET	HM570E, QM580E and RM590E
MAIN MEMORY	2x DDR4 SODIMM dual channel up to 64 GByte ECC or non ECC (optional 3rd SODIMM socket for 96 GByte)
GRAPHICS CONTROLLER	Intel® Iris®Xe Graphics on i7/i5 processors Intel® xxx Graphics on i3/Xeon® processors
ETHERNET CONTROLLER	Intel® I225LM/I225IT
ETHERNET	Up to 2.5Gb Ethernet with TSN & WOL support (depending on SKU)
STORAGE	4x SATA 6Gb/s
FLASH ONBOARD	Up to 1 TByte NVMe SSD (on request)
PCI EXPRESS®	8x PCIe 3.0 (BGT/s), Default configuration 8x1, optional 1x4 + 4x1, 2x4 etc. 1x16 PCIe 4.0 on PEG Lanes #0-3
DISPLAY	DDI1: DP++, DDI2: DP++, DDI3: DP++, VGA: -, LVDS: Dual Channel 18/24bit
USB	4x USB 3.2; 8x USB 2.0
SERIAL	2x serial interface (RX/TX only)
AUDIO	High Definition Audio interface
OTHER FEATURES	(G)SPI, LPC, SMB, Fast I <sup>2</sup> C, Staged Watchdog, RTC, support of Intel® Optane™ memory technology via PCIe
SPECIAL FEATURES	Trusted Platform Module TPM 2.0
FEATURES ON REQUEST	vPRO (AMT/TXT/AES Support), eDP instead of LVDS, up to 3x PCIe x1 additional w/o Ethernet & SATA, NVMe SSD, Fail Save via 2nd SPI Flash
POWER MANAGEMENT	ACPI 6.0
POWER SUPPLY	8.5 V – 20 V Wide Range, Single Supply Power
BIOS	AMI UEFI
OPERATING SYSTEM	Windows® 10, Linux, VxWorks
TEMPERATURE	Commercial temperature: 0 °C to +60 °C operating, -30 °C to +85 °C non-operating Extended temperature: -25 °C to +75 °C operating, -30 °C to +85 °C non-operating Industrial temperature: -40 °C to +85 °C operating, -40 °C to +85 °C non-operating
HUMIDITY	93 % relative Humidity at 40 °C, non-condensing (according to IEC 60068-2-78)

## ▶ CPU VARIANTS

	11th GENERATION									
CPU	W-11865MLE	i7-11850HE	W-11555MLE	i5-11500HE	i3-11100HE	W-11555MLE	6600HE	W-11865MRE	W-11555MRE	W-11155MRE
CORES	8	8	6	6	4	2	2	8	6	4
FREQUENCY BASE/TURBO	1.5/ 4.0 GHz	2.6/ 4.2 GHz	1.9/ 4.0 GHz	2.6/ 4.1 GHz	2.4/ 4.0 GHz	1.8/ 3.1 GHz	2.6 GHz	2.6/ 4.2 GHz	2.6/ 4.1 GHz	2.4/ 4.4 GHz
TDP	25 W	45/35 W	25 W	45/35 W	45/35 W	25 W	35 W	45/35 W	45/35 W	45/35 W
CACHE	24 MByte	24 MByte	12 MByte	12 Mbyte	8 Mbyte	8 MByte	8 Mbyte	24 MByte	12 Mbyte	8 Mbyte
TCC/TSN	no	no	no	no	no	no	no	yes	yes	yes
TEMPERATURE	commercial	commercial	commercial	commercial	commercial	commercial	commercial	industrial	industrial	industrial

## BLOCK DIAGRAM



## VARIANTS

PART NO.	CPU	PCH	SO-DIMM	FLASH	OP. TEMPERATURE
38038-0000-45-8	W-11865MLE	RM590E	ECC	-	0 °C - 60 °C
38038-0000-47-7	i7-11850HE	QM580E	ECC	-	0 °C - 60 °C
38038-0000-44-6	W-11555MLE	RM590E	ECC	-	0 °C - 60 °C
38038-0000-46-5	i5-11500HE	QM580E	ECC	-	0 °C - 60 °C
38038-0000-44-4	i3-11100HE	RM590E	ECC	-	0 °C - 60 °C
38038-0000-44-3	i3-11100HE	QM580E	ECC	-	0 °C - 60 °C
38038-0000-31-4	W-11155MLE	RM590E	ECC	-	0 °C - 60 °C
38038-0000-26-2	6600HE	HM570E	ECC	-	0 °C - 60 °C
38039-0000-47-8	W-11865MRE	RM590E	non-ECC	-	-40 °C - 85 °C
38039-0000-46-6	W-11555MRE	RM590E	non-ECC	-	-40 °C - 85 °C
38039-0000-44-4	W-11555MRE	RM590E	non-ECC	-	-40 °C - 85 °C
38039-0010-47-0	W-11555MRE	RM590E	non-ECC	1 TByte	-40 °C - 85 °C

## ► CARRIER

ARTICLE	PART NO.	DESCRIPTION
COMe EVAL CARRIER2 T6	38116-0000-00-5	COM Express® Evaluation Carrier Type 6
COMe REF.CARRIER-I T6 TMI	38115-0000-00-0	COM Express® Reference Carrier Type 6 for industrial temperature

## ► COOLING

ARTICLE	PART NO.	DESCRIPTION
HSP COMe-bTL6 CU-CORE THREADED	38030-0000-99-0	Heatspreader for COMe-bTL6, Cu-core, threaded mounting holes
HSP COMe-bTL6 CU-CORE THROUGH	38030-0000-99-1	Heatspreader for COMe-bTL6, Cu-core, through mounting holes
COMe ACTIVE UNI COOLER (W/O HSP)	36099-0000-99-0	COM Express® Universal Active Cooler for Heatspreader Mounting (87x78x14.3 mm) (for CPU's <20 W)
HSK COMe-BASIC PASSIVE (W/O HSP) COME PASSIVE UNI COOLER (W/O HSP)	36099-0000-99-1	COM Express® Universal Passive Cooler for Heatspreader Mounting (87x78x14.3 mm) (for CPU's <10 W)

## ► MEMORY

PART NO.	MIN. SPEC.	SIZE	ECC	OP. TEMPERATURE
97020-3232-BTL6	DDR4-3200	32 GByte	no	0 °C to +60 °C
97020-1632-BTL6	DDR4-3200	16 GByte	no	0 °C to +60 °C
97020-0832-BTL6	DDR4-3200	8 GByte	no	0 °C to +60 °C
97020-0432-BTL6	DDR4-3200	4 GByte	no	0 °C to +60 °C
97021-3232-BTL6	DDR4-3200	32 GByte	no	-40 °C to +85 °C
97021-1632-BTL6	DDR4-3200	16 GByte	no	-40 °C to +85 °C
97021-0832-BTL6	DDR4-3200	8 GByte	no	-40 °C to +85 °C
97021-0432-BTL6	DDR4-3200	4 GByte	no	-40 °C to +85 °C
97030-3232-BTL6	DDR4-3200	32 GByte	yes	0 °C to +60 °C
97030-1621-BTL6	DDR4-3200	16 GByte	yes	0 °C to +60 °C
97030-0832-BTL6	DDR4-3200	8 GByte	yes	0 °C to +60 °C
97030-0432-BTL6	DDR4-3200	4 GByte	yes	0 °C to +60 °C
97031-3232-BTL6	DDR4-3200	32 GByte	yes	-40 °C to +85 °C
97031-1632-BTL6	DDR4-3200	16 GByte	yes	-40 °C to +85 °C
97031-0832-BTL6	DDR4-3200	8 GByte	yes	-40 °C to +85 °C
97031-0432-BTL6	DDR4-3200	4 GByte	yes	-40 °C to +85 °C

## ► GLOBAL HEADQUARTERS

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