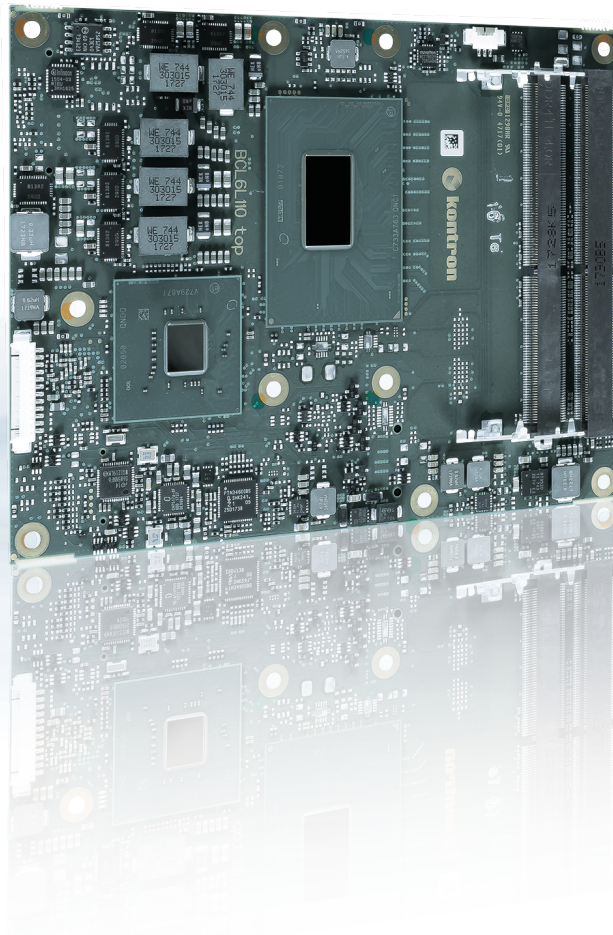


COMe-bCL6(R E2S)



COM Express® Basic Type 6 with 8th/9th Generation Intel® Core™ / Xeon® Processors

- ▶ Intel® 8th/9th Generation Core™ series / Xeon® E family with CM246/QM370 PCH
- ▶ Up to 128 GByte DDR4 non-ECC/ECC memory
- ▶ Optional NVMe SSD onboard
- ▶ Industrial grade versions

POSSIBILITIES START HERE

▶ TECHNICAL INFORMATION

| | |
|---------------------|--|
| COMPLIANCE | COM Express® basic, Pin-out Type 6 |
| DIMENSIONS (H X W) | 125 x 95 mm |
| CPU | Intel® 8th/9th Generation Core™ series / Xeon® E family For details see table (CPU variants) given below |
| CHIPSET | Intel® Mobile CM246/Intel® Mobile QM370 |
| MAIN MEMORY | Up to 4x DDR4-2666 SO-DIMM with up to 128 GByte (non-ECC/ECC) (3 rd /4 th socket on request) |
| GRAPHICS CONTROLLER | Intel® UHD Graphics P630 for Xeon® processor Intel® UHD Graphics 630 for Core™ processors Intel® UHD Graphics 610 for Celeron® processors |
| ETHERNET CONTROLLER | Intel® I219LM |
| ETHERNET | 10/100/1000 MBit Ethernet |
| STORAGE | 4x SATA 6Gb/s |
| FLASH ONBOARD | Up to 1 TByte NVMe SSD (on request) |
| PCI EXPRESS® | 8x PCIe x1, 1x PEG x16 |
| DISPLAY | DDI1: DP++, DDI2: DP++, DDI3: DP++, VGA: -, LVDS: Dual Channel 18/24bit |
| USB | 4x USB 3.1 (incl. USB 2.0) + 4x USB 2.0 |
| SERIAL | 2x serial interface (RX/TX only) |
| AUDIO | Intel® High Definition Audio |
| OTHER FEATURES | SPI, LPC, SMB, Fast I ² C, Staged Watchdog, RTC, support of Intel® Optane™ memory technology via PCIe |
| SPECIAL FEATURES | POSCAP capacitors, Trusted Platform Module TPM 2.0, 4k Resolutions, Flexible PEG lane configuration by Setup Option, Rapid shutdown (R E2S variants) |
| FEATURES ON REQUEST | vPRO (AMT/TXT/AES Support), eDP instead of LVDS, VGA, Intel® Mobile HM370 Chipset, 3 rd /4 th DDR4 SO-DIMM socket, NVMe SSD, Security Chip |
| POWER MANAGEMENT | ACPI 6.0 |
| POWER SUPPLY | 8.5 V – 20 V Wide Range, Single Supply Power |
| BIOS | AMI Aptio V |
| 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

| | 8th GENERATION | | | | | | | | |
|----------------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|
| CPU | E-2176M | i7-8850H | i5-8400H | i3-8100H | | | | | |
| CORES | 6 | 6 | 4 | 4 | | | | | |
| FREQUENCY BASE/TURBO | 2.7/4.4 GHz | 2.6/4.3 GHz | 2.5/4.2 GHz | 3.0/- GHz | | | | | |
| TDP | 45 W/35 W | 45 W/35 W | 45 W/35 W | 45 W/35 W | | | | | |
| CACHE | 12 MByte | 9 MByte | 8 MByte | 6 MByte | | | | | |
| | 9th GENERATION | | | | | | | | |
| CPU | E-2276ME | E-2276ML | E-2254ME | E-2254ML | i7-9850HE | i7-9850HL | i3-9100HL | G4930E | G4932E |
| CORES | 6 | 6 | 4 | 4 | 6 | 6 | 4 | 2 | 2 |
| FREQUENCY BASE/TURBO | 2.8/4.5 GHz | 2.0/4.2 GHz | 2.6/3.8 GHz | 1.7/3.5 GHz | 2.7/4.4 GHz | 1.9/4.1 GHz | 1.6/2.9 GHz | 2.4/- GHz | 1.9/- GHz |
| TDP | 45 W/35 W | 25 W | 45 W/35 W | 25 W | 45 W/35 W | 25 W | 25 W | 35 W | 25 W |
| CACHE | 12 MByte | 12 MByte | 8 MByte | 8 MByte | 9 MByte | 9 MByte | 6 MByte | 2 MByte | 2 MByte |

