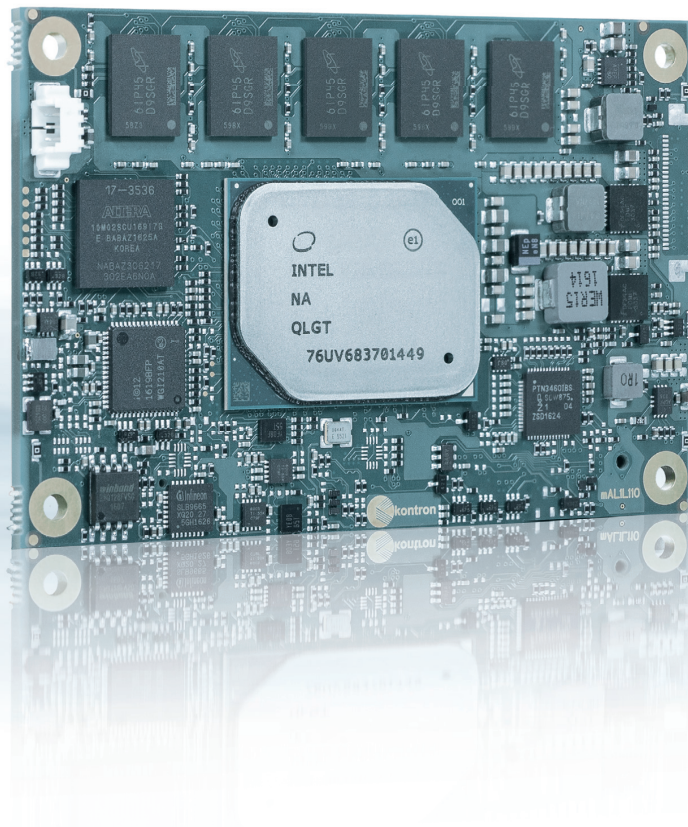


COMe-mAL10 (E2)

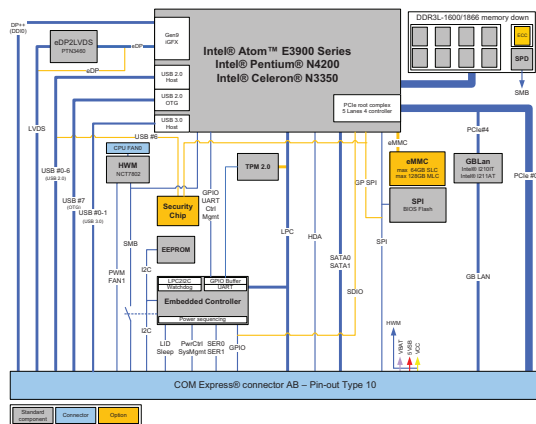


COM Express® MINI TYPE 10 WITH Intel® Atom™ E3900, Atom™ E3900 SERIES, Pentium® AND Celeron® PROCESSORS

- ▶ low-Power – Performance / Watt optimized small form factor solution
- ▶ up to 8 GByte DDR3L memory down (ECC / non ECC)
- ▶ 2x USB 3.0/2.0, 6x USB 2.0, USB client optional, 2x SATA, eMMC Flash
- ▶ industrial grade temperature
- ▶ support of Kontron's Embedded Security Solution (Approtect)

TECHNICAL INFORMATION

COMPLIANCE	COM Express® mini, Pin-out Type 10	
DIMENSIONS (H X W X D)	84 x 55 mm	
CPU	Intel® Atom™ x7-E3950, 4C, 1.6 / 2.0 GHz, 12 W TDP Intel® Atom™ x5-E3940, 4C, 1.6 / 1.8 GHz, 9.5 W TDP Intel® Atom™ x5-E3930, 2C, 1.3 / 1.8 GHz, 6.5 W TDP	Intel® Pentium® N4200, 4C, 1.1 / 2.5 GHz, 6 W TDP Intel® Celeron® N3350, 2C, 1.1 / 2.4 GHz, 6 W TDP
CHIPSET	-	
MAIN MEMORY	Up to 8 GByte DDR3-1866 (-1600) memory down (ECC for Atom-versions)	
GRAPHICS CONTROLLER	Intel HD Gfx Gen9: LVDS/eDP, 1x DP++, up to 4K	
ETHERNET CONTROLLER	Intel® I210IT/I211AT	
ETHERNET	10/100/1000 Mbit Ethernet	
HARD DISK	2x SATA 6 Gb/s, SDIO Interface (shared with GPIO)	
FLASH ONBOARD	32 GByte eMMC	
PCI EXPRESS® SUPPORT	PCIe lane configurations: 3 x1 / 2 x1 + 1 x2 / 2 x2	
PANEL SIGNAL	DDI: DP++, LVDS: Single Channel 18/24 bit or eDP	
USB	2x USB 3.0 (incl. USB 2.0) + 6x USB 2.0, Port 7 is dual role (Client/Host)	
SERIAL	2x serial interface (RX/TX only)	
AUDIO	Intel® High Definition Audio	
COMMON FEATURES	SPI, LPC, SMB, Fast I ² C, Staged Watchdog, RTC	
BIOS	AMI Aptio V	
HUMIDITY	93% relative Humidity at 40 °C, non-condensing (according to IEC 60068-2-78)	
FEATURES ON REQUEST	w/o onboard LAN: PCIe lane configuration 4 x1, MMC Flash onboard (up to 64 GByte SLC, up to 128 GByte MLC), eDP instead of LVDS, General Purpose SPI instead of Boot SPI, AES-NI, USB client, Security Chip (Support of Kontron APPROTECT),	
POWER MANAGEMENT	ACPI 4.0	
POWER SUPPLY	4.75 V – 20 V Wide Range, Single Supply Power	
SPECIAL FEATURES	POSCAP capacitors, Trusted Platform Module TPM 2.0, 4k Resolutions, GPIO/SDIO Switch, General Purpose SPI optional, Industrial Temperature Grade versions	
OPERATING SYSTEM	Windows® 10, Enterprise, Windows 10 IoT, Linux, VxWorks	
TEMPERATURE	COMe-mAL10: Commercial temperature: 0 °C to +60 °C operating, -30 °C to +85 °C non-operating COMe-mAL10 E2: Industrial temperature: -40 °C to +85 °C operating, -40 °C to +85 °C non-operating	
SUPPORTED MODULES	COMe-mAL10 / COMe-mAL10 E2	



GLOBAL HEADQUARTERS

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