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Datasheet

Kontron

COMe-cAL6

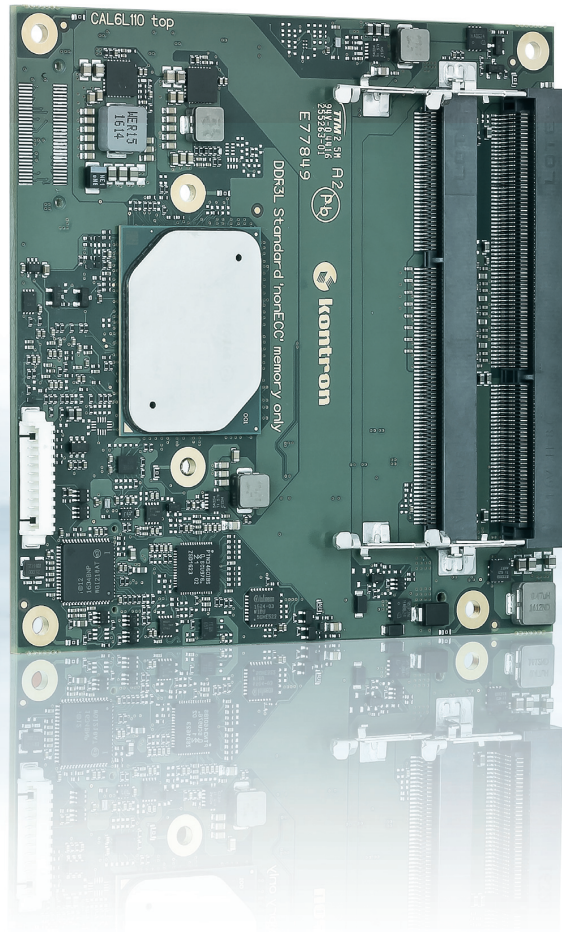
COM Express Compact Type 6 Module with

Intel® Atom® Apollo Lake E39xx, Pentium® and Celeron® Series Processor



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COMe-cAL6 (E2)



COM Express® COMPACT TYPE 6 WITH Intel® Atom™ E3900 Series, Pentium® AND Celeron® PROCESSORS

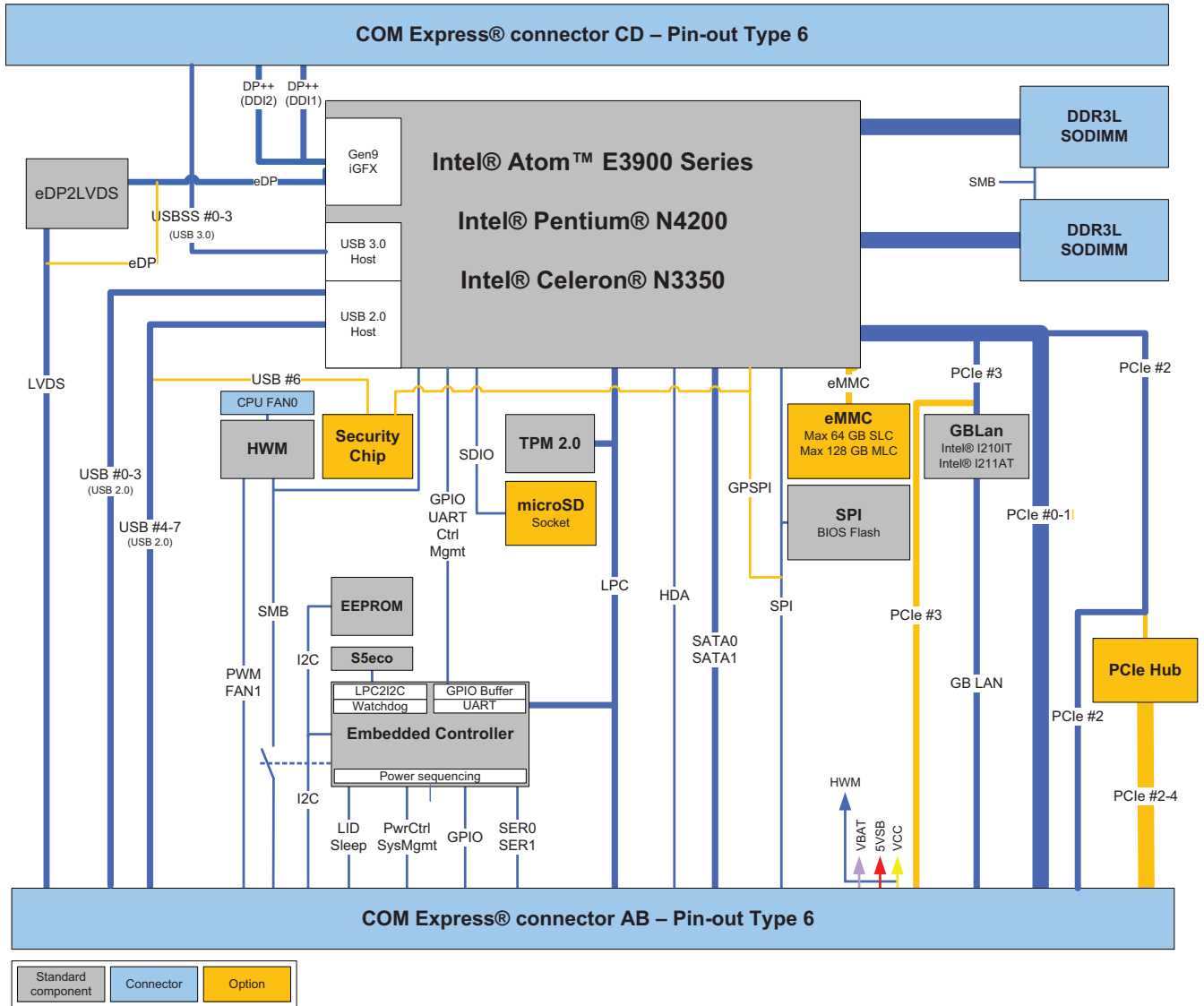
- ▶ Low-power – performance/watt optimized form factor solution
- ▶ Up to 8 GByte DDR3L 1600 / 1866 Memory (2x SODIMM socket)
- ▶ 4x USB 3.0/2.0, 4x USB 2.0, 2x SATA, eMMC Flash
- ▶ Industrial grade temperature
- ▶ Support of Kontron's Embedded Security Solution - APPROTECT (optional)

POSSIBILITIES START HERE



► TECHNICAL INFORMATION

COMPLIANCE	COM Express® compact, Pin-out Type 6			
DIMENSIONS (W X D)	95 x 95 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	2x SODIMM for DDR3L-1600/1866 (non ECC) up to 8 GByte			
GRAPHICS CONTROLLER	Intel HD Gfx Gen9: 1x LVDS/eDP (3840 x 2160 @ 60 Hz) 2x DP (++) on DDI1/DDI2 up to 4K			
ETHERNET CONTROLLER	Intel® I210IT / I211AT			
ETHERNET	10/100/1000 MBit Ethernet			
HARD DISK	2x SATA 6Gb/s, SDIO Interface (shared with GPIO)			
FLASH ONBOARD	32 GByte eMMC SLC on request: - up to 64 GByte eMMC SLC - up to 128 GByte eMMC MLC			
PCI EXPRESS® SUPPORT	default	LAN yes	PCIe switch no	PCIe config 3x PCIe x1
	on request	yes	yes	5x PCIe x1 or 1x PCIe x2 + 3x PCIe x1
	on request	no	no	2x PCIe x2 or 4x PCIe x1
PANEL SIGNAL	DDI 1/2: DP++, LVDS: Dual Channel up to 48-bit or eDP on request)			
USB	4x USB 3.0/2.0, 4x USB 2.0 (3x USB 2.0 w Security Chip)			
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	PCIe configurations w/ PCI hub and w/o LAN chip Security Chip (Support of Kontron APPROTECT) eMMC Flash configuration eDP instead of LVDS General Purpose SPI instead of Boot SPI AES-NI, USB client			
POWER MANAGEMENT	ACPI 5.0			
POWER SUPPLY	8.5 V – 20 V Wide Range, Single Supply Power			
SPECIAL FEATURES	POSCAP capacitors, Trusted Platform Module TPM 2.0, microSD card socket 4k Resolutions, GPIO/SDIO Switch, Industrial grade temperature			
OPERATING SYSTEM	Windows® 10, Enterprise, Windows 10 IoT, Linux, VxWorks 7.x			
TEMPERATURE	COMe-cAL6 - commercial temperature: 0 °C to +60 °C operating, -30 °C to +85 °C non-operating COMe-cAL6 E2 - industrial temperature: -40 °C to +85 °C operating, -40 °C to +85 °C non-operating			
SUPPORTED MODULES	COMe-cAL6 / COMe-cAL6 E2			



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