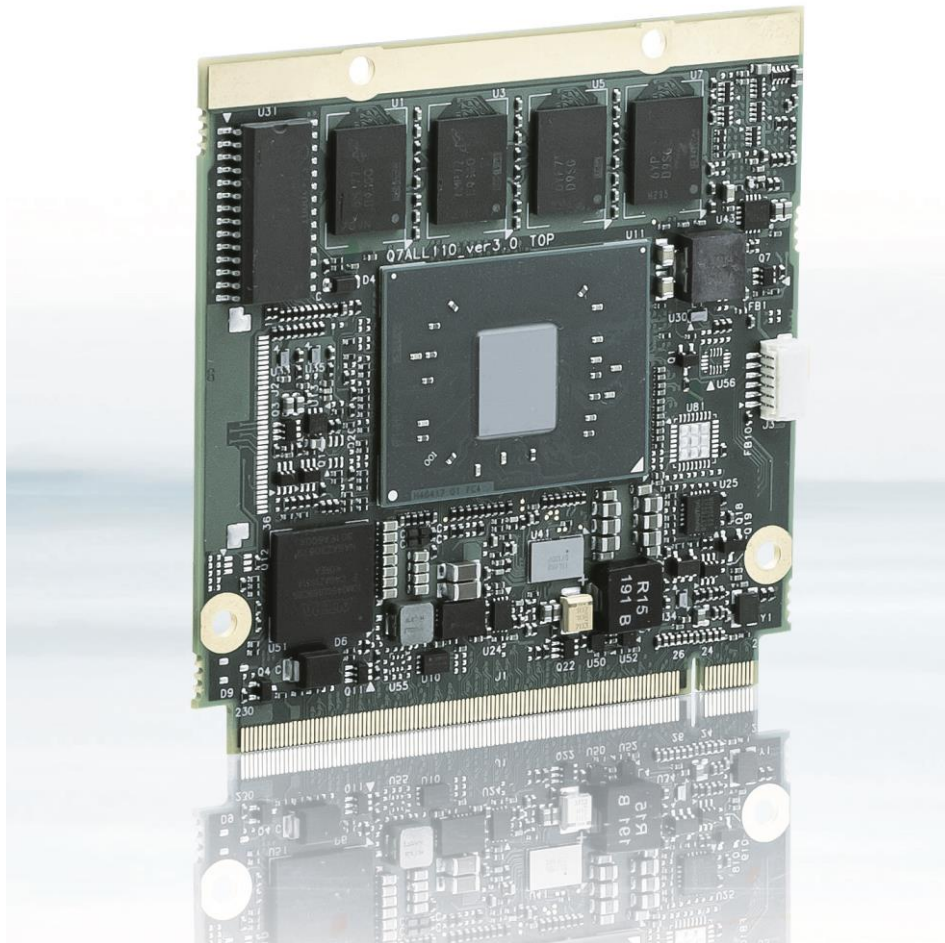


# Qseven-Q7AL

---



LATEST GENERATION Intel® Atom™, Pentium™ and Celeron™ PROCESSOR SERIES

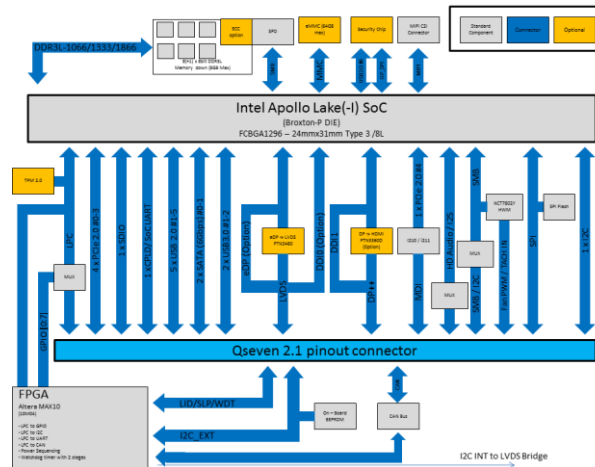
- ▶ Up to 8GB onboard DDR3L memory down (ECC / non ECC)
- ▶ Dual display support
- ▶ 2x USB 3.0, 4 x USB 2.0 (1x OTG), 2 x SATA, eMMC onboard
- ▶ Industrial grade temperature
- ▶ Support of Kontron's Embedded Security Solution (Approtect)

POSSIBILITIES START HERE



## TECHNICAL INFORMATION

COMPLIANCE	Qseven Specifications 2.1
DIMENSIONS (H X W X D)	Standard Size, 70 x 70 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 DDR3-1867 (-1600) memory down (ECC for Atom-versions)
GRAPHICS CONTROLLER	Intel HD Gfx Gen9
ETHERNET CONTROLLER	Intel® I210IT/ I211AT
ETHERNET	10 / 100 / 1000 MBit Ethernet
STORAGE	2 x SATA 6Gb/s
FLASH ONBOARD	Up to 32GB eMMC 5.0
PCI EXPRESS® SUPPORT	4 x PCIe 2.0
PANEL SIGNAL	1 x DP ++ (on request HDMI), 1 x LVDS dual channel (on request eDP + DP)
USB	2 x USB 3.0 (incl. USB 2.0), 4 x USB 2.0, alternatively USB #1 as OTG
SERIAL	1 x Serial Interface (RX, TX, RTS, CTS)
OTHERS	HD Audio and I2S, 1x I2C, 1x SPI, Camera Interface (2x MIPI CSI), 1x LPC (Muxed with GPIO [0:7]), 1 x CAN
SPECIAL FEATURES	Trusted Platform Module TPM 2.0 (On-request) Security Chip (Support of Kontron Aprotect, On-Request) Industrial Temperature Grade versions
FEATURES ON REQUEST	eMMC 5.0 Flash onboard (up to 64 GByte SLC, up to 128 GByte MLC) eDP + DP instead of LVDS, HDMI instead of DP
BIOS	AMI Aptio V
OPERATING SYSTEM	Windows® 10, Enterprise, Linux
POWER SUPPLY	5 V power supplies
TEMPERATURE	Qseven-Q7AL: Commercial temperature: 0 °C to +60 °C operating, -30 °C to +85 °C non-operating Qseven-Q7ALi E2: 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)



## CORPORATE OFFICES

### EUROPE, MIDDLE EAST

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

### NORTH AMERICA

9477 Waples Street  
San Diego, CA 92121  
USA  
Tel.: + 1 888 294 4558  
Fax: + 1 858 677 0898  
info@us.kontron.com

### ASIA PACIFIC & AFRICA

Plot 554 Lorong Perusahaan,  
Prai Free Trade Zone,  
Penang 13600,  
Malaysia  
Tel.: +604 377 7178  
Fax: +604 380 8182