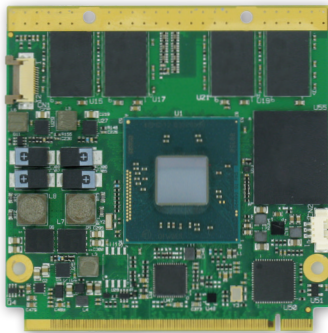




AVIOR

Qseven® Rel. 2.0 Compliant Module with Intel® Atom™ E3800 and Celeron® families (formerly Bay Trail) Processors

x86 performance on a low-power module



HIGHLIGHTS

CPU
Intel® Atom™ E3800 and Celeron® families of System-on-Chip

CONNECTIVITY
6x USB 2.0; 1x USB 3.0; 3x PCI-e x1

GRAPHICS
Integrated Intel® HD Graphics controller

MEMORY
up to 8GB Dual-Channel DDR3L 1333MHz

Available in Industrial Temperature Range



MAIN FIELDS OF APPLICATION



Biomedical/
Medical devices



HMI



Industrial
Automation and
Control



Measuring
Instruments

FEATURES

	Intel® Atom™ E3845 , Quad Core @1.91GHz, 2MB Cache, 10W TDP Intel® Atom™ E3827 , Dual Core @1.75GHz, 1MB Cache, 8W TDP Intel® Atom™ E3826 , Dual Core @1.46GHz, 1MB Cache, 7W TDP Intel® Atom™ E3825 , Dual Core @1.33GHz, 1MB Cache, 6W TDP Intel® Atom™ E3815 , Single Core @1.46GHz, 512KB Cache, 5W TDP Intel® Celeron® J1900 , Quad Core @2.0GHz, 2MB Cache, 10W TDP Intel® Celeron® N2930 , Quad Core @1.83GHz, 2MB Cache, 7.5W TDP Intel® Celeron® N2807 , Dual Core @1.58GHz, 1MB Cache, 4.3W TDP	
	Processor	
	Max Cores	4
	Max Thread	4
	Memory	Soldered on-board DDR3L memory E3845, E3827, J1900, N2930: up to 8GB Dual-Channel DDR3L @ 1333MHz E3826: up to 8GB Dual-Channel DDR3L @ 1066MHz N2807: up to 4GB Single-Channel DDR3L @ 1333MHz E3825, E3815: up to 4GB Single-Channel DDR3L @ 1066MHz
	Graphics	Integrated Intel® HD Graphics 4000 series controller Dual independent display support HW decoding of H.264, MPEG2, MVC, VC1, VP8, MJPEG formats HW encoding of H.264, MPEG2 and MVC formats
	Video Interfaces	HDMI or Multimode Display Port interface Embedded Display Port or 18 / 24 bit dual channel LVDS interface Additional VGA interface (optional external adapter is required)
	Video Resolution	HDMI: Up to 1920x1080p@60Hz Display Port, eDP, CRT: Up to 2560x1600@60Hz Optional LVDS interface: Up to 1920x1200@60Hz
	Mass Storage	Up to 2 x external SATA channels SD interface Optional SATA Flash Drive soldered on-board
	Networking	Gigabit Ethernet interface
	USB	1 x USB 3.0 Host port 6 x USB 2.0 Host ports (one shared with USB 3.0 interface)
	PCI-e	3 x PCI-e x1 lanes
	Audio	HD Audio interface
	Serial Ports	1 x Serial port (TTL interface)
	Other Interfaces	I2C Bus LPC Bus SM Bus Thermal / FAN management SPI interface Power Management Signals
	Power Supply	+5Vdc ± 5%
	Operating System	Microsoft® Windows 7 (32 / 64 bit) Microsoft® Windows 8 (32/64 bit) Microsoft® Windows 8.1 (32/64 bit) Microsoft® Windows 10 (32/64 bit) Microsoft® Windows 10 IoT Microsoft® Windows Embedded Standard 7 (32/64 bit) Microsoft® Windows Embedded Compact 7 Linux (32/64 bit) Yocto
	Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
	Dimensions	70 x 70 mm (2.76" x 2.76")

*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.

BLOCK DIAGRAM

