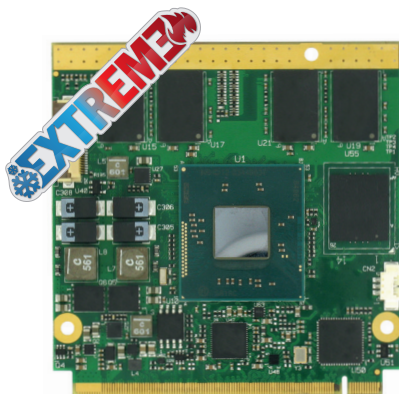




Q7-A36

Qseven® standard module with the Intel® Atom™ E3800 and Celeron® families (formerly Bay Trail) SoC, with eMMC and Camera Interface

Mobile-oriented with eMMC and Camera Interface



HIGHLIGHTS

- eMMC drive on-board
- Available in Industrial temperature range
- Low power solution
- Camera Interface
- Integrated 64-bit memory controller



Windows 8.1

Windows 10

Windows IoT



Windows Embedded Standard 8



Linux

yocto PROJECT

MAIN FIELDS OF APPLICATION



HMI



Industrial Automation and Control



Portable Devices



In-vehicle infotainment systems

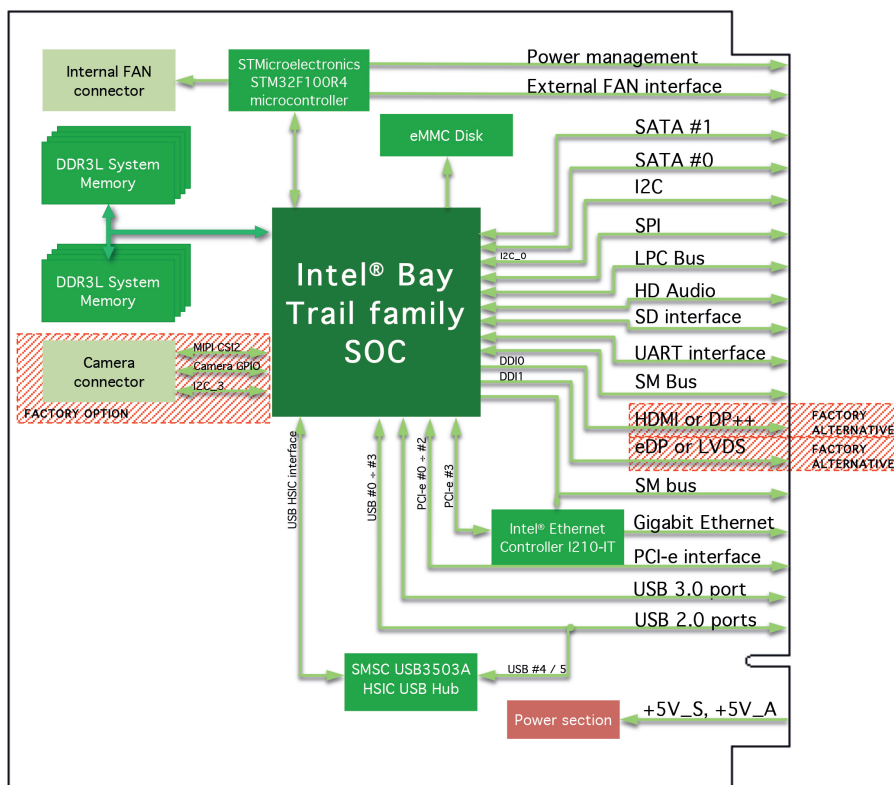
FEATURES

Processor	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® Atom™ E3805, Dual Core @1.33GHz, 1MB Cache, 3W 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	PCI-e	3 x PCI-e x1 lanes
Max Cores	4	Audio	HD Audio interface
Max Thread	4	Serial Ports	1 x Serial port (TTL interface)
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	Other Interfaces	I2C Bus LPC Bus SM Bus Thermal / FAN management SPI interface Power Management Signals
Graphics	Integrated Intel® HD Graphics 4000 series controller (not for E3805) Dual independent display support HW decoding of H.264, MPEG2, MVC, VC1, VP8, MJPEG formats HW encoding of H.264, MPEG2 and MVC formats	Power Supply	+5V _{DC} ± 5%
Video Interfaces	HDMI or Multimode Display Port interface Embedded Display Port or 18 / 24 bit dual channel LVDS interface Optional Camera interface	Operating System	Microsoft® Windows 7 (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 Standard 8 (32 / 64 bit) Microsoft® Windows Embedded Compact 7 Linux (32 / 64 bit) Yocto
Video Resolution	HDMI: Up to 1920x1080p@60Hz Display Port, eDP: Up to 2560x1600@60Hz Optional LVDS interface: Up to 1920x1200@60Hz	Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
Mass Storage	2 x external SATA channels SD interface Optional eMMC Drive soldered on-board	Dimensions	70 x 70 mm (2.76" x 2.76")
Networking	Gigabit Ethernet interface	*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.	
USB	1 x USB 3.0 Host port 6 x USB 2.0 Host ports (one shared with USB 3.0 interface)		

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BLOCK DIAGRAM



ORDERING INFORMATION

PN*	DESCRIPTION
QA36-2600-2100-C0	Q7 w / Bay Trail-D J1900 @2.00 GHz QC - RAM DDR3L 4GB - LVDS - HDMI - Com. Temp
QA36-A530-0000-I0	Q7 w / Bay Trail-I E3805 @1.33 GHz SC - RAM DDR3L 4GB - eMMC 16GB - Ind. Temp
QA36-3120-2100-I0	Q7 w / Bay Trail-I E3815 @1.46 GHz SC - RAM DDR3L 1GB - eMMC 8GB - LVDS - HDMI - Ind. Temp
QA36-3310-2100-C0	Q7 w / Bay Trail-I E3815 @1.46 GHz SC - RAM DDR3L 2GB - eMMC 4GB - LVDS - HDMI - Com. Temp
QA36-3310-2100-I0	Q7 w / Bay Trail-I E3815 @1.46 GHz SC - RAM DDR3L 2GB - eMMC 4GB - LVDS - HDMI - Ind. Temp
QA36-5430-2100-I0	Q7 w / Bay Trail-I E3826 @1.46 GHz DC - RAM DDR3L 2GB - eMMC 16GB - LVDS - HDMI - Ind. Temp
QA36-5630-2100-I0	Q7 w / Bay Trail-I E3826 @1.46 GHz DC - RAM DDR3L 4GB - eMMC 16GB - LVDS - HDMI - Ind. Temp
QA36-6400-2100-I0	Q7 w / Bay Trail-I E3827 @1.75 GHz DC - RAM DDR3L 2GB - LVDS - HDMI - Ind. Temp
QA36-7420-2100-C0	Q7 w / Bay Trail-I E3845 @1.91 GHz QC - RAM DDR3L 2GB - eMMC 8GB - LVDS - HDMI - Com. Temp
QA36-7420-2100-I0	Q7 w / Bay Trail-I E3845 @1.91 GHz QC - RAM DDR3L 2GB - eMMC 8GB - LVDS - HDMI - Ind. Temp
QA36-7620-2100-C0	Q7 w / Bay Trail-I E3845 @1.91 GHz QC - RAM DDR3L 4GB - eMMC 8GB - LVDS - HDMI - Com. Temp
QA36-7630-2100-C0	Q7 w / Bay Trail-I E3845 @1.91 GHz QC - RAM DDR3L 4GB - eMMC 16GB - LVDS - HDMI - Com. Temp
QA36-8330-2100-C0	Q7 w / Bay Trail-M N2807 @1.58 GHz DC - RAM DDR3L 2GB - eMMC 16GB - LVDS - HDMI - Com. Temp
QA36-8340-2100-C0	Q7 w / Bay Trail-M N2807 @1.58 GHz DC - RAM DDR3L 2GB - eMMC 32GB - LVDS - HDMI - Com. Temp

*Additional configurations may be available. Please inquire for more information.

ACCESSORIES

PN	DESCRIPTION
QA42-0000-1111-I0	Carrier Board for Qseven® rel. 2.0 Compliant modules on 3.5" Form factor - DisplayPort - 2nd Ethernet Port - LVDS - Debug Port
QA42-0000-2111-I0	Carrier Board for Qseven® rel. 2.0 Compliant modules on 3.5" Form factor - HDMI - 2nd Ethernet Port - LVDS - Debug Port
QA42-0000-1121-I0	Carrier Board for Qseven® rel. 2.0 Compliant modules on 3.5" Form factor - DisplayPort - 2nd Ethernet Port - eDP - Debug Port
QA42-0000-2121-I0	Carrier Board for Qseven® rel. 2.0 Compliant modules on 3.5" Form factor - HDMI - 2nd Ethernet Port - eDP - Debug Port
QA30-Q7XDK-0000	Qseven® Cross Platform Development Kit 2.0
QA42-Q7XSK-1000	Q7 - Cross Platform Starter Kit 2.0 - DP++ - eDP
QA42-Q7XSK-1100	Q7 - Cross Platform Starter Kit 2.0 - DP++ - LVDS, 7" touch display included
QA42-Q7XSK-2000	Q7 - Cross Platform Starter Kit 2.0 - HDMI - eDP
QA42-Q7XSK-2100	Q7 - Cross Platform Starter Kit 2.0 - HDMI - LVDS, 7" touch display included
QA36-DISS-1-PK	Q7-974 & Q7-A36 Heat Spreader (PASSIVE)
QA36-DISS-2-PK	Q7-974 and Q7-A36 Heat Sink (PASSIVE)
QA36-DISS-3-PK	Q7-974 & Q7-A36 Heat Sink (ACTIVE)



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