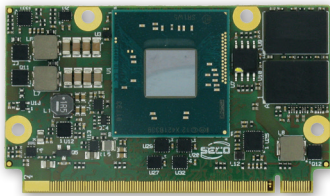# µQseven®

## µQ7-A76-J — µQseven® standard module with the Intel® Atom™ E3800 and Celeron® families (formerly Bay Trail)

## Smallest x86 standard module at proprietary costs

### HIGHLIGHTS

**CPU**
Intel® Atom™ E3800 and Celeron® families

**CONNECTIVITY**
4x USB 2.0; 1x USB 3.0; 3x PCI-e x1; LPC Bus

**GRAPHICS**
Integrated Intel® HD Graphics 4000 Series controller

**MEMORY**
up to 4GB Single Channel DDR3L memory

QSEVEN®

SGeT — STANDARDIZATION GROUP FOR EMBEDDED TECHNOLOGIES

intel partner Gold

Windows 7 | Windows 8.1 | Windows 10 | Windows IoT | Windows Embedded Standard 7 | Windows Embedded Compact 7 | Linux | yocto PROJECT

### MAIN FIELDS OF APPLICATION

Biomedical/ Medical devices | Industrial Automation and Control | Internet of Things | PDA Electronics | Robotics | Surveillance | Transportation

### FEATURES

| | | | |
|---|---|---|---|
| **Processor** | Intel® Celeron® **N2807**, Dual Core @1.58GHz, 1MB Cache, 4.3W TDP<br>Intel® Atom™ **E3815**, Single Core @1.46GHz, 512KB Cache, 5W TDP<br>Intel® Atom™ **E3825**, Dual Core @1.33GHz, 1MB Cache, 6W TDP | **Other Interfaces** | I2C Bus<br>LPC Bus<br>SM Bus<br>Thermal / FAN management<br>Power Management Signals |
| **Max Cores** | 2 | **Power Supply** | +5V$_{DC}$ ± 5% |
| **Max Thread** | 2 | | |
| **Memory** | Soldered on-board DDR3L memory<br>E3825, E3815: up to 4GB Single-Channel DDR3L @ 1066MHz<br>N2807: up to 4GB Single-Channel DDR3L @ 1333MHz | **Operating System** | Microsoft® Windows 7<br>Microsoft® Windows 8.1<br>Microsoft® Windows 10<br>Microsoft® Windows 10 IoT<br>Microsoft® Windows Embedded Standard 7<br>Microsoft® Windows Embedded Compact 7<br>Linux<br>Yocto |
| **Graphics** | Integrated Intel® HD Graphics 4000 series controller<br>Dual independent display support<br>HW decoding of H.264, MPEG2, MVC, VC1, VP8, MJPEG formats<br>HW encoding of H.264, MPEG2 and MVC formats | | |
| **Video Interfaces** | Multimode Display Port interface<br>18 / 24 bit dual channel LVDS interface | **Operating Temperature*** | 0°C ÷ +60°C |
| **Video Resolution** | DP++ (HDMI compatible): Up to 2560x1600@60Hz<br>LVDS interface: Up to 1920x1200@60Hz | **Dimensions** | 40 x 70 mm (1.57" x 2.76") |
| **Mass Storage** | 2 x external SATA channels<br>SD interface<br>Optional eMMC drive soldered on-board | | |
| **Networking** | Gigabit Ethernet interface | | |
| **USB** | 1 x USB 3.0 Host port<br>4 x USB 2.0 Host ports (one shared with USB 3.0 interface) | | |
| **PCI-e** | 3 x PCI-e x1 lanes Gen2 | | |
| **Audio** | HD Audio interface | | |
| **Serial Ports** | 1 x Serial port (TTL interface, Tx / Rx only) | | |

*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.

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## BLOCK DIAGRAM

050.21