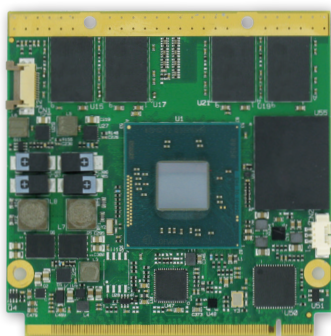




## SOM-Q7-BT

Qseven® Rel. 2.0 Compliant Module with Intel® Atom® E3800 and Celeron® families (Codename: 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



Medical



Industrial Automation

#### FEATURES

|                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  Processor        | Intel® Atom® <b>E3845</b> , Quad Core @1.91GHz, 2MB Cache, 10W TDP<br>Intel® Atom® <b>E3827</b> , Dual Core @1.75GHz, 1MB Cache, 8W TDP<br>Intel® Atom® <b>E3826</b> , Dual Core @1.46GHz, 1MB Cache, 7W TDP<br>Intel® Atom® <b>E3825</b> , Dual Core @1.33GHz, 1MB Cache, 6W TDP<br>Intel® Atom® <b>E3815</b> , Single Core @1.46GHz, 512KB Cache, 5W TDP<br>Intel® Celeron® <b>J1900</b> , Quad Core @2.0GHz, 2MB Cache, 10W TDP<br>Intel® Celeron® <b>N2930</b> , Quad Core @1.83GHz, 2MB Cache, 7.5W TDP<br>Intel® Celeron® <b>N2807</b> , Dual Core @1.58GHz, 1MB Cache, 4.3W TDP |  |
|  Max Cores        | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|  Max Thread       | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|  Memory           | Soldered on-board DDR3L memory<br>E3845, E3827, J1900, N2930: up to 8GB Dual-Channel DDR3L @ 1333MHz<br>E3826: up to 8GB Dual-Channel DDR3L @ 1066MHz<br>N2807: up to 4GB Single-Channel DDR3L @ 1333MHz<br>E3825, E3815: up to 4GB Single-Channel DDR3L @ 1066MHz                                                                                                                                                                                                                                                                                                                     |  |
|  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 | HDMI® or Multimode Display Port interface<br>Embedded Display Port or 18 / 24 bit dual channel LVDS interface<br>Additional VGA interface (optional external adapter is required)                                                                                                                                                                                                                                                                                                                                                                                                      |  |
|  Video Resolution | HDMI®: Up to 1920x1080p@60Hz<br>Display Port, eDP, CRT: Up to 2560x1600@60Hz<br>Optional LVDS interface: Up to 1920x1200@60Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|  Mass Storage     | Up to 2 x external SATA channels<br>SD interface<br>Optional SATA Flash Drive soldered on-board                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|  Networking       | Gigabit Ethernet interface                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |

|                                                                                                            |                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  USB                    | 1 x USB 3.0 Host port<br>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<br>LPC Bus<br>SM Bus<br>Thermal / FAN management<br>SPI interface<br>Power Management Signals                                                                                                                                                                                                       |
|  Power Supply           | +5V <sub>DC</sub> ± 5%                                                                                                                                                                                                                                                                                      |
|  Operating System       | Microsoft® Windows 7 (32 / 64 bit)<br>Microsoft® Windows 8 (32/64 bit)<br>Microsoft® Windows 8.1 (32/64 bit)<br>Microsoft® Windows 10 (32/64 bit)<br>Microsoft® Windows 10 IoT<br>Microsoft® Windows Embedded Standard 7 (32/64 bit)<br>Microsoft® Windows Embedded Compact 7<br>Linux (32/64 bit)<br>Yocto |
|  Operating Temperature* | 0°C ÷ +60°C (Commercial version)<br>-40°C ÷ +85°C (Industrial version)                                                                                                                                                                                                                                      |
|  Dimensions             | 70 x 70 mm (2.76" x 2.76")                                                                                                                                                                                                                                                                                  |

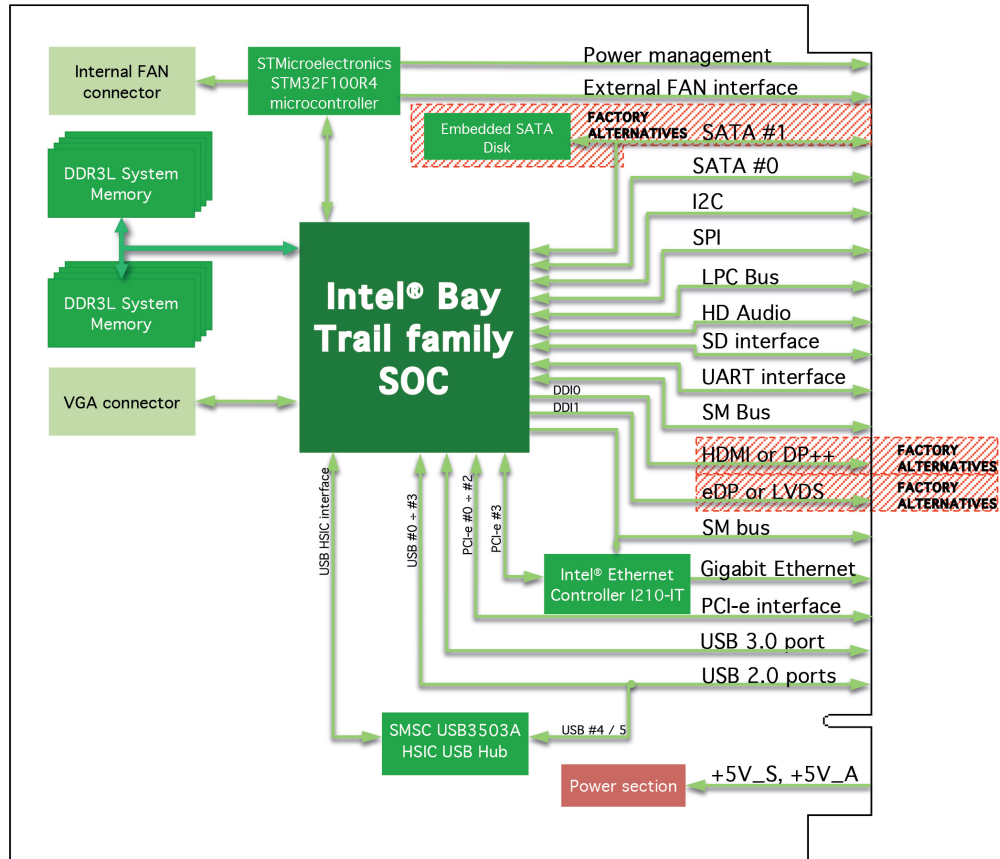
\*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the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

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## BLOCK DIAGRAM



# Streamline and expedite your edge computing implementations

## EDGEHOG OS

A flexible operating system that adapts to your needs, thanks to the customization tool and Docker support. Reliability and security are built-in through a dual-partition system and native integration with Exein's robust AI-based protection.

## DATA ORCHESTRATION

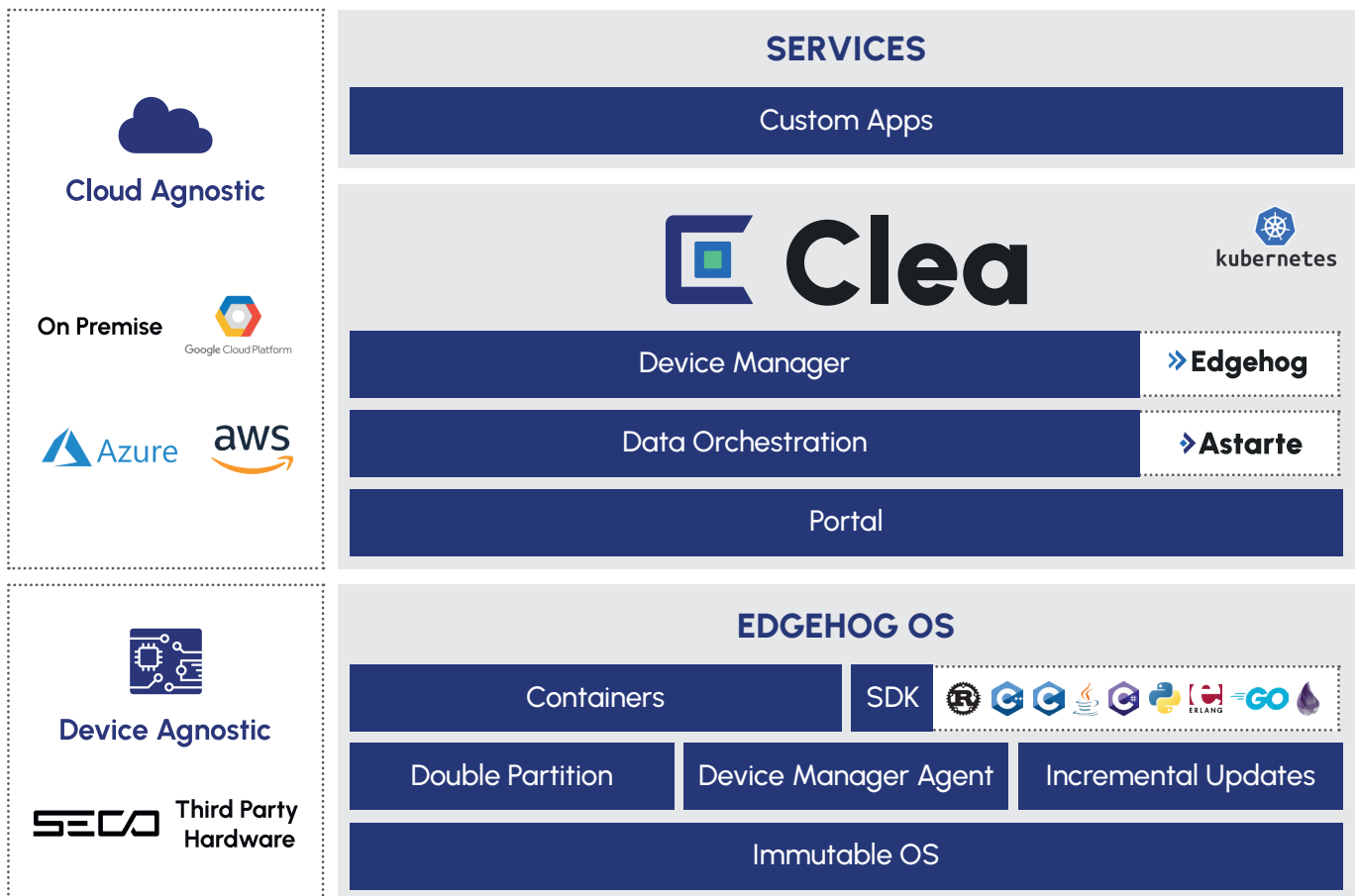
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

## DEVICE MANAGER

Update, configure, and manage remote devices. Optimize time and costs to maximize operational efficiency and security without the need for costly field interventions.

## PORTAL

Analyze data from remote devices, customize the user experience with applications tailored to user needs, and manage user rights, company access, and tenant privileges.



Scan to know more about our solution

EDGEHOG OS



CLEA DOCS

