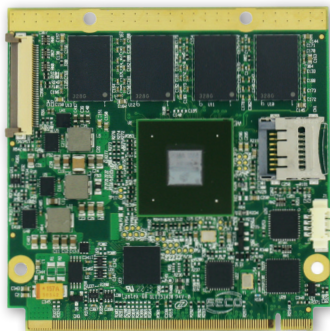




## Q7-928

Qseven® standard module with NXP i.MX 6 Processor

### Optimal balance of performance and power



#### HIGHLIGHTS



**CPU**  
Single-, Dual- and Quad- Core (ARM® Cortex® -A9 Cores)



**CONNECTIVITY**  
2x serial ports; CAN port



**GRAPHICS**  
2D/3D dedicated graphics processors



**MEMORY**  
up to 4GB DDR3L on-board

Available in Industrial Temperature Range



DEVELOPMENT SAMPLING PRODUCTION

#### MAIN FIELDS OF APPLICATION



Automotive



Avionics



Digital  
Signage -  
Infotainment



Energy



Industrial  
Automation  
and Control



Robotics



Surveillance

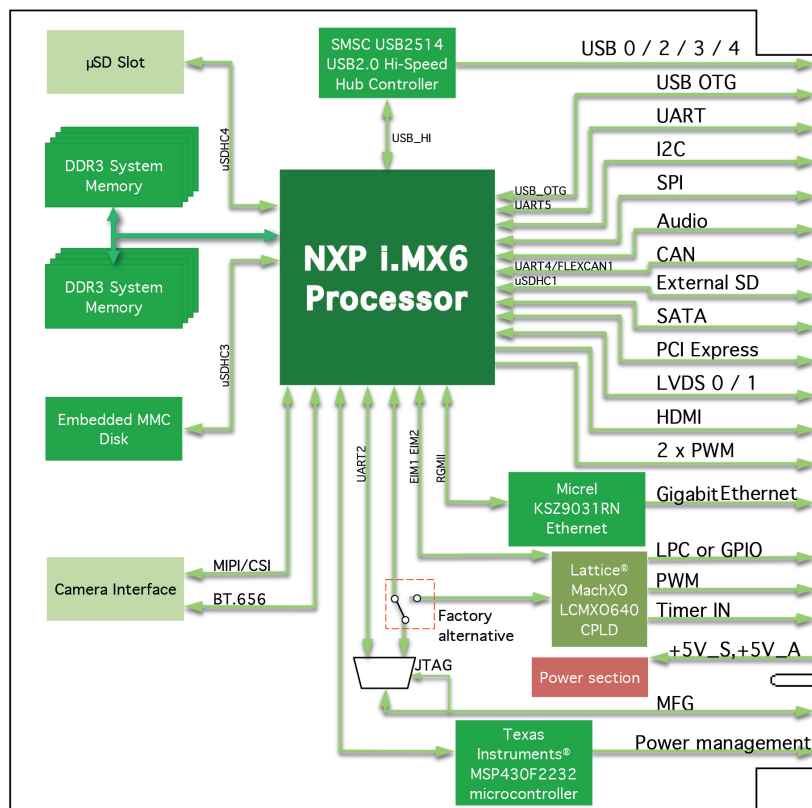


Transportation

#### FEATURES

|                  |   |  |  |
|------------------|---|--|--|
| Processor        | NXP i.MX 6 Family, based on ARM® CORTEX-A9 processors<br>- <b>i.MX6S</b> Solo - Single core up to 1GHz<br>- <b>i.MX6DL</b> Dual Lite - Dual core up to 1GHz per core<br>- <b>i.MX6D</b> Dual - Dual core up to 1GHz per core<br>- <b>i.MX6DP</b> DualPlus - Dual core up to 1GHz per core<br>- <b>i.MX6Q</b> Quad - Quad core up to 1GHz per core                                 | Audio  | AC'97 Audio interface<br>I2S   |
| Max Cores        | 4   | Serial Ports   | 2 x Serial ports (TTL interface)<br>CAN port interface                 |
| Memory           | Up to 4GB DDR3L on-board (up to 2GB with i.MX6S)  | Other Interfaces   | I2C Bus<br>LPC Bus<br>SM Bus<br>Power Management Signals               |
| Graphics         | Dedicated 2D Hardware accelerator<br>Dedicated 3D Hardware accelerator, supports OpenGL® ES 2.0 3D<br>Dedicated Vector Graphics accelerator supports OpenVG™<br>(only i.MX6D, i.MX6DP and i.MX6Q)<br>Enhanced 2D and 3D graphics with i.MX6DP<br>Supports up to 3 independent displays with i.MX6D, i.MX6DP and i.MX6Q<br>Supports 2 independent displays with i.MX6DL and i.MX6S | Power Supply   | +5V <sub>DC</sub> ± 5%   |
| Video Interfaces | 1 x LVDS Dual Channel or 2 x LVDS Single Channel 18 / 24 bit interface<br>HDMI Interface 1.4<br>Video Input Port / Camera Connector   | Operating System   | Linux<br>Yocto<br>Microsoft® Windows Embedded Compact 7                |
| Video Resolution | LVDS, up to 1920x1200<br>HDMI, up to 1080p  | Operating Temperature*   | 0°C ÷ +60°C (Commercial version)<br>-40°C ÷ +85°C (Industrial version) |
| Mass Storage     | On-board eMMC drive, up to 32 GB<br>SD / MMC / SDIO interface<br>1 x µSD Card Slot on-board<br>1 x External SATA Channel (only available with i.MX6D and i.MX6Q)  | 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 OTG interface<br>4 x USB 2.0 Host interfaces  |  |  |
| PCI-e            | 1 x PCI-e x1 lane (only PCI-e 1.1 and Gen2 are supported)   |  |  |

## BLOCK DIAGRAM



# Mouser Electronics

Authorized Distributor

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