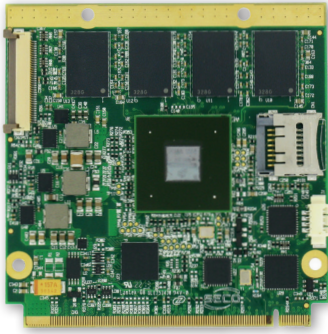




## Q7-928

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

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## Qseven® standard module with NXP i.MX 6 Processor

### BLOCK DIAGRAM

