

# Q7-928

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

# Optimal balance of performance and power



Single-, Dual- and Quad- Core (ARM® Cortex® -A9

CONNECTIVITY 2x serial ports; CAN port



2D/3D dedicated graphics processors



**MEMORY** 

up to 4GB DDR3L on-board











(I) Available in Industrial Temperature Range



















Automotive

Avionics

Digital Signage -

Energy

Industrial Automation and Control

Robotics

Surveillance

Transportation

NXP i.MX 6 Family, based on ARM® CORTEX-A9 processors - **i.MX6S** Solo - Single core up to 1GHz Processor

- i.MX6DL Dual Lite - Dual core up to 1GHz per core - i.MX6D Dual - Dual core up to 1GHz per core - i.MX6DP DualPlus - Dual core up to 1GHz per core

- i.MX6Q Quad - Quad core up to 1GHz per core

Max Cores



Graphics

Video

PCI-e

Interfaces

1

Up to 4GB DDR3L on-board (up to 2GB with i.MX6S)

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

Supports 2 independent displays with i.MX6DL and i.MX6S

1 x PCI-e x1 lane (only PCI-e 1.1 and Gen2 are supported)

1 x LVDS Dual Channel or 2 x LVDS Single Channel 18 / 24 bit interface HDMI Interface 1.4

Video Input Port / Camera Connector LVDS, up to 1920x1200 Video

Resolution HDMI, up to 1080p On-board eMMC drive, up to 32 GB SD / MMC / SDIO interface Mass Storage 1 x μSD Card Slot on-board

1 x External SATA Channel (only available with i.MX6D and i.MX6Q) ♣ Networking Gigabit Ethernet interface 1 x USB OTG interface •**⇔** USB 4 x USB 2.0 Host interfaces

11.11	Audio	AC'97 Audio interface I2S
<u></u> 0	Serial Ports	2 x Serial ports (TTL interface) CAN port interface
	Other Interfaces	I2C Bus LPC Bus SM Bus Power Management Signals
	Power Supply	+5V <sub>DC</sub> ± 5%
os	Operating System	Linux Yocto Microsoft <sup>®</sup> Windows Embedded Compact 7
1	Operating Temperature*	$0^{\circ}\text{C} \div +60^{\circ}\text{C}$ (Commercial version) - $40^{\circ}\text{C} \div +85^{\circ}\text{C}$ (Industrial version)
L	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 applicationspecific cooling solutions for the final system to keep the heatspreader temperature

# Q7-928

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

### BLOCK DIAGRAM



