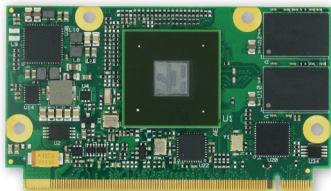




## LIBERTAS

µQseven® standard module with NXP i.MX 6 Processor

Optimal balance of performance and size



### HIGHLIGHTS

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

**CONNECTIVITY**  
4x USB 2.0; 2x Serial ports; CAN Bus

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

**MEMORY**  
up to 2GB DDR3L on-board

Available in Industrial Temperature Range



### MAIN FIELDS OF APPLICATION



Automation



Biomedical/  
Medical  
devices



HMI



PDA  
Electronics



Wireless  
Technologies

### FEATURES

<b>Processor</b>	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.MX6Q</b> Quad - Quad core up to 1GHz per core	<b>Other Interfaces</b>	I2C Bus SM Bus Power Management Signals
<b>Max Cores</b>	4	<b>Power Supply</b>	+5V <sub>DC</sub> ± 5%
<b>Memory</b>	Up to 2GB DDR3L on-board (up to 1GB with i.MX6S)	<b>Operating System</b>	Linux Yocto
<b>Graphics</b>	Dedicated 2D Hardware accelerator Dedicated 3D Hardware accelerator, supports OpenGL® ES2.0 3D Dedicated Vector Graphics accelerator supports OpenVG™ (only i.MX6D and i.MX6Q) Supports up to 3 independent displays with i.MX6D and i.MX6Q Supports 2 independent displays with i.MX6DL and i.MX6S	<b>Operating Temperature*</b>	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
<b>Video Interfaces</b>	1 x LVDS Dual Channel or 2 x LVDS Single Channel 18 / 24 bit interface HDMI Interface 1.4	<b>Dimensions</b>	40 x 70 mm (1.57" x 2.76")
<b>Video Resolution</b>	LVDS up to 1920x1200 HDMI up to 1080p	*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.	
<b>Mass Storage</b>	Up to 8 GB eMMC drive soldered on-board SD / MMC / SDIO interface 1 x External SATA Channel (only available with i.MX6D and i.MX6Q)		
<b>Networking</b>	Gigabit Ethernet interface		
<b>USB</b>	1 x USB OTG interface 4 x USB 2.0 Host interfaces		
<b>PCI-e</b>	1 x PCI-e x1 lane (only PCI-e 1.1 and Gen2 are supported)		
<b>Audio</b>	I2S / AC'97 Audio interface		
<b>Serial Ports</b>	2 x Serial ports (TTL interface) CAN port interface		

## BLOCK DIAGRAM

