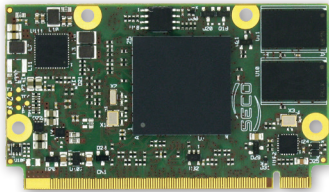




NEMBUS

µQseven® standard module with NXP i.MX 6 Processors

Small, flexible OTS module at proprietary costs



HIGHLIGHTS

CPU Single and Dual Core Lite (Arm Cortex™A9 Cores)	CONNECTIVITY FastEthernet; GPIOs
GRAPHICS 2D/3D dedicated graphics processors	MEMORY up to 1GB DDR3L on-board

Available in Industrial Temperature Range



MAIN FIELDS OF APPLICATION



HMI



PDA
Electronics



Wireless
Technologies

FEATURES

Processor	NXP i.MX 6 Family, based on Arm® CORTEX-A9 processors - i.MX6S Solo - Single core up to 1GHz - i.MX6DL Dual Lite - Dual core up to 1GHz per core	On the card edge connector, many pins can be used as General Purpose I / Os or to implement some(*) of the following extra functionalities: - Additional SD interface - Up to 4 UARTs - CAN interface - Watchdog(s) - I2C interfaces - PWM outputs - SPI interface - Additional Audio interface (**) not all the combinations are allowed simultaneously Power Management Signals
Max Cores	2	
Memory	Up to 1GB DDR3L on-board (up to 512MB with i.MX6S Solo) 32-bit I/F	
Graphics	Dedicated 2D Hardware accelerator Dedicated 3D Hardware accelerator, supports OpenGL® ES2.0 3D Supports 2 independent displays	
Video Interfaces	1 x LVDS Dual Channel or 2 x LVDS Single Channel 18 / 24 bit interface HDMI Interface	
Video Resolution	LVDS, resolution up to 1920x1200 HDMI, resolution up to 1080p	
Mass Storage	On-board eMMC drive, up to 8 GB SD / MMC / SDIO interface Internal SPI Flash for booting	
Networking	FastEthernet (10 / 100 Mbps) interface	
USB	1 x USB OTG interface 1 x USB 2.0 Host interface	
PCI-e	1 x PCI-e x1 lane (only PCI-e 1.1 and Gen2 are supported)	
Audio	I2S / AC'97 Audio interface	
Other Interfaces		
Power Supply		+5V _{DC} ± 5% Optional Low Power RTC
Operating System		Linux Yocto
Operating Temperature*		0°C ÷ +60 °C (Commercial temp.) -40°C ÷ +85°C (Industrial version)
Dimensions		40 x 70 mm (1.57" 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.

BLOCK DIAGRAM

