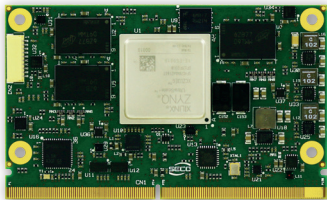




SM-B71 SMARC® Rel. 2.0 compliant module with the Xilinx® Zynq® Ultrascale+™ MPSoC

Flexible ARM + FPGA Heterogeneous Processing in a Standard Form Factor



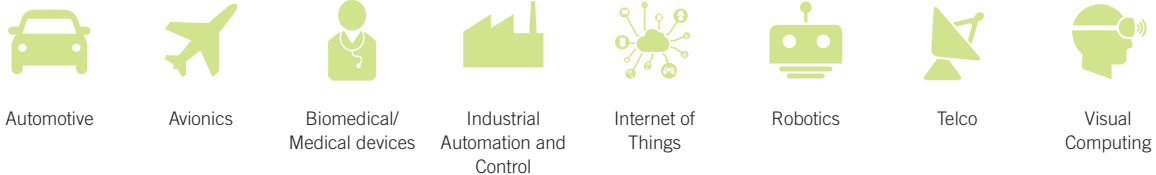
HIGHLIGHTS

CPU Xilinx® Zynq® Ultrascale+™ CG/EG/EV MPSoCs in C784 package	CONNECTIVITY PCI-e x4; 2x GbE; 2x CAN Bus; 2x SPI; 12x GPIOs
GRAPHICS Integrated ARM Mali-400 MP2 GPU	MEMORY Up to 8GB + 2GB DDR4 soldered down

Available in Industrial Temperature Range



MAIN FIELDS OF APPLICATION



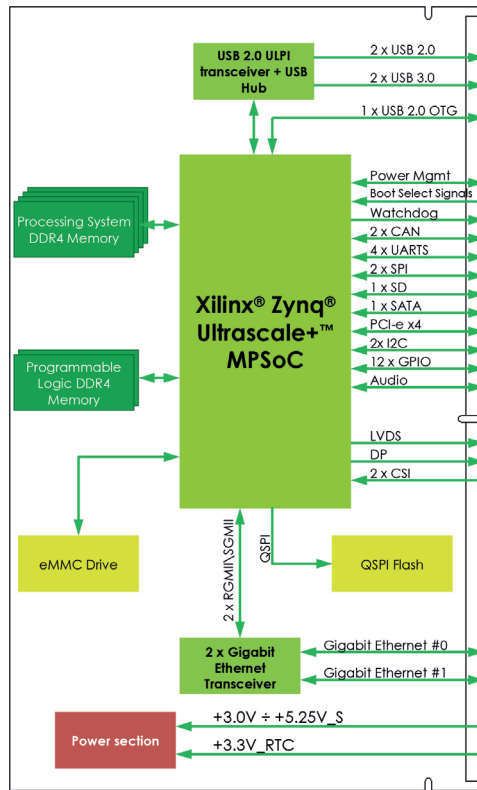
FEATURES

Processor	Xilinx® Zynq® Ultrascale+™ ZU2CG, ZU3CG, ZU4CG or ZU5CG MPSoCs: Dual-core ARM® Cortex®-A53 MPCore Application Processing Unit + Dual-core ARM® Cortex®-R5 Real-Time Processing Unit	Serial Ports	2 x UART Tx/Rx/RTS/CTS 2 x UART Tx/Rx 2 x CAN Bus
	Xilinx® Zynq® Ultrascale+™ ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU4EV or ZU5EV MPSoCs: Quad-core ARM® Cortex®-A53 MPCore Application Processing Unit + Dual-core ARM® Cortex®-R5 Real-Time Processing Unit	Other Interfaces	2x I2C Bus 2 x SPI interfaces 12 x GPIOs Boot select signals Power Management Signals
Memory	Soldered Down DDR4-2400 memory Up to 8GB for Processing System Unit + up to 2GB for Programmable Logic	Power Supply	+3/+5.25V _{DC} +3.3V _{RTC}
Graphics	Only on EG and EV MPSoCs: Integrated ARM Mali-400 MP2 Graphics Processing Unit Multicore 2D/3D acceleration at 667MHz OpenGL ES 1.1 / 2.0, OpenVG 1.0 / 1.1 On EV MPSoCs only, H.264/H.265 integrated video codec	Operating System	Linux Android
Video Interfaces	18- / 24-bit Dual Channel LVDS interface DP interface 2 x CSI interfaces	Operating Temperature*	0°C ÷ +60°C (Commercial version) -40°C ÷ +85°C (Industrial version)
Video Resolution	DP: Up to 4096 x 2160 LVDS: Dependent on the IP implemented in the programmable logic	Dimensions	50 x 82 mm (1.97" x 3.23")
Mass Storage	1 x external S-ATA Gen3 Channel SD interface QSPI Flash soldered-on-board Optional eMMC 4.51 drive soldered on-board	*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.	
Networking	Up to 2 x Gigabit Ethernet interfaces		
USB	1x USB 2.0 OTG 2x USB 2.0 Host 2x USB 3.0 Host		
PCI-e	PCI-e x4 interface		
Audio	Dependent on the IP implemented in the programmable logic		

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BLOCK DIAGRAM



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