

# MicroSom i.MX6 Dual

[imx6](#), [dual](#), [microsom](#), [C1000DM-D1024-GE-W](#)

The MicroSOM i2eX offers a fully-featured dual-core implementation of Freescale i.MX6 Dual system on chip (SoC) together with 1GB of RAM and expanded chip power management and physical headers.






Note that there is a difference in physical hardware support and implementation between the dual-core “Dual Lite” implemented on the [MicroSOM i2](#), which is a separate product, and “Dual” which is incorporated in this offering.

**Note:** commercial organizations can order custom MicroSOMs in volume from Solid-Run that include additional combinations of capabilities not on the public market to enable custom products. Examples that may drive custom needs include CAN support, or custom headers for interfaces not otherwise supported.

## Hardware Specification

Description/Model	MicroSom i.MX6 Dual
<b>Core</b>	
<b>Processor Core</b>	Dual core ARM A9
<b>Processor Speed</b>	1GHz (up to 1.2GHz)
<b>Floating Point</b>	VFPv3
<b>SIMD</b>	NEON
<b>Graphics Processing Unit</b>	Vivante GC2000
<b>HW Video Dec/Enc</b>	Multi- Format
<b>Memory</b>	64 bit, 1GB DDR3 @1066Mbps
<b>Connectivity</b>	
<b>Wired Network</b>	10/100/1000 <sup>1</sup> Mbps
<b>Wireless Network</b>	Optional <sup>2</sup>
<b>Bluetooth</b>	Optional <sup>2</sup>
<b>I/O Expansion (IC-Connector on Carrier)</b>	
<b>Display Max Resolution</b>	HDMI: 1080p LCD: WUXGA(1920 x 1200)
<b>Display Interfaces</b>	LVDS, HDMI 1.4, DSI, Parallel
<b>Dual Display Support</b>	✓
<b>Supported External Storage</b>	NOR-Flash, eMMC, mSATA,SD-microSD, PCIe SSD
<b>SD/MMC</b>	3
<b>USB 2.0 Host</b>	1
<b>USB OTG</b>	1

<b>Description/Model</b>	<b>MicroSom i.MX6 Dual</b>
<b>Serial Ports</b>	3
<b>Digital Audio Serial Interface</b>	1
<b>Camera Interface Port</b>	4 Lane CSI
<b>CAN Bus</b>	 <sup>4</sup>
<b>S-ATA</b>	Gen II, 3Gbps
<b>PCI-Express 2.0</b>	x1
<b>Second Ethernet</b>	Via PCIe or USB NIC
<b>I2C</b>	3
<b>SPI</b>	3
<b>PWM</b>	4
<b>GPIO</b>	75
<b>JTAG</b>	Test Point Header
<b>S/PDIF Input</b>	
<b>S/PDIF Output</b>	
<b>RTC</b>	On Carrier
<b>Mechanical and Electronic Specifications</b>	
<b>Temperature Range</b>	Commercial Extended Industrial
<b>Main Voltage</b>	5V
<b>IO Voltage</b>	3.3V
<b>SoM Interface</b>	Hirose DF40 connectors 1.5mm up to 4.0mm mating height
<b>Dimensions (W x L)</b>	47mm x 30mm

<sup>1</sup> 1000Mbps link is limited to 470Mbps actual bandwidth due to internal chip bus limitation

<sup>2</sup> Wifi: 802.11 b/g/n - 2.4 Ghz / Bluetooth: V 4.0 (BCM4330)

<sup>4</sup> Supported by MicroSom Rev. v1.4 and upper

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