

# MicroSom i.MX6 Solo

[imx6](#), [solo](#), [microsom](#), [C1000S-D512-FE](#)







The MicroSOM i1 offers a single-core implementation of Freescale i.MX6 Solo system on chip (SoC) together with 512MB of RAM and basic chip power management and physical headers.

**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 Solo                         |
|--|---|
| <b>Core</b>                                    |   |
| <b>Processor Core</b>                          | Single 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 GC880                               |
| <b>HW Video Dec/Enc</b>                        | Multi- Format                               |
| <b>Memory</b>                                  | 32 bit, 512MB DDR3 @ 800Mbps                |
| <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>Serial Ports</b>                            | 3   |

|   |  |
|---|--|
| <b>Description/Model</b>                        | <b>MicroSom i.MX6 Solo</b>   |
| <b>Digital Audio Serial Interface</b>           | 1  |
| <b>Camera Interface Port</b>                    | 2 Lane CSI   |
| <b>CAN Bus</b>                                  |  <sup>4</sup> |
| <b>S-ATA</b>                                    |               |
| <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

From:  
<https://wiki.solid-run.com/> - **Wiki | SolidRun**

Permanent link:  
<https://wiki.solid-run.com/doku.php?id=products:imx6:microsom:solo>

Last update: **2015/11/12 03:30**

