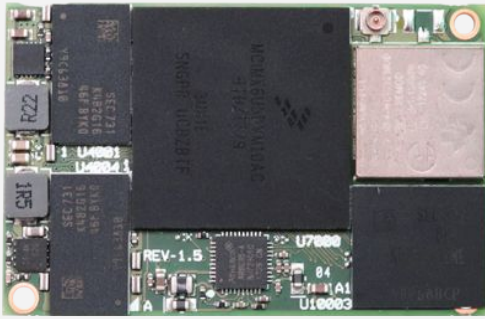


# i.MX6 SOM

Up to 4 x Arm Cortex-A9 cores

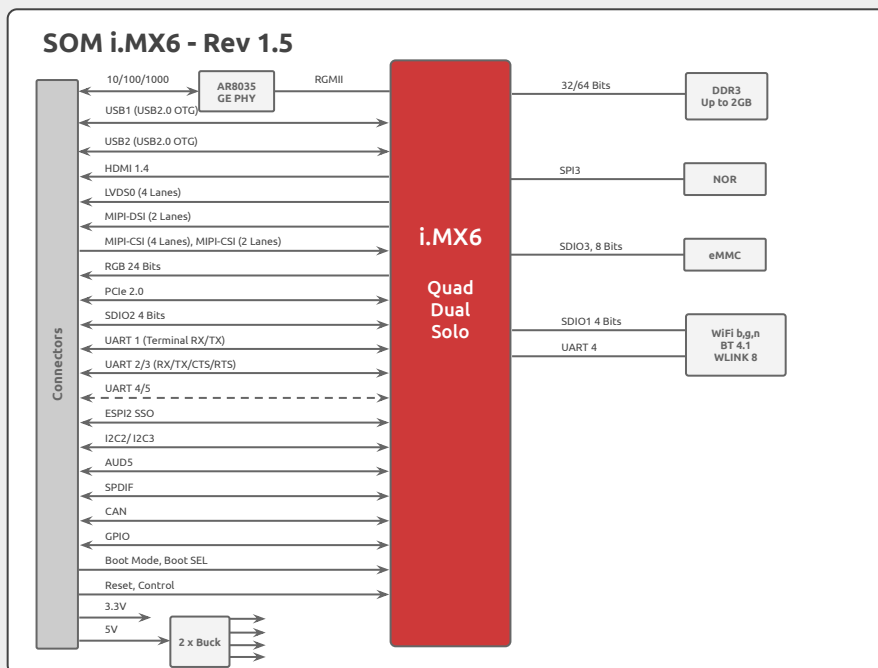
## NXP i.MX 6 Processor System on Module



- Single to Quad-core 32-bit processors up to 1GHz
- Onboard Wifi 802.11 a/b/g/n with Bluetooth 4.2 and eMMC
- Robust and deployment proved with broad software support



|                                |                          | i.MX6 Quad   | i.MX6 Dual   | i.MX6 Dual Lite  | i.MX6 Solo   |
|--------------------------------|--------------------------|--|--|--|--|
| CPU Details                    | CPU Name                 | NXP i.MX6 Quad   | NXP i.MX6 Dual   | NXP i.MX6 Dual Lite  | NXP i.MX6 Solo   |
|                                | CPU Type                 | 4 x Cortex A9  | 2 x Cortex A9  | 2 x Cortex A9  | 1 x Cortex A9  |
|                                | CPU Speed                | 1GHz Commercial<br>800MHz Industrial   | 1GHz Commercial<br>800MHz Industrial   | 1GHz Commercial<br>800MHz Industrial   | 1GHz Commercial<br>800MHz Industrial   |
|                                | Floating Point           | VFPv3  | VFPv3  | VFPv3  | VFPv3  |
|                                | SIMD                     | NEON   | NEON   | NEON   | NEON   |
| RAM                            | Memory & Storage         | 2GB DDR3   | 1GB DDR3   | 1GB DDR3   | 512MB DDR3   |
|                                | Internal Storage         | 8GB eMMC   | 8GB eMMC   | 8GB eMMC   | 8GB eMMC   |
|                                | External Storage Support | NOR-Flash<br>SD<br>PCIe-SSD  | NOR-Flash<br>SD<br>PCIe-SSD  | NOR-Flash<br>SD<br>PCIe-SSD  | NOR-Flash<br>SD<br>PCIe-SSD  |
| Networking                     | Ethernet                 | 10/100/1000 Mbps   | 10/100/1000 Mbps   | 10/100/1000 Mbps   | 10/100/1000 Mbps   |
|                                | Wireless                 | 802.11 a/b/g/n + BT 4.2  | 802.11 a/b/g/n + BT 4.2  | 802.11 a/b/g/n + BT 4.2  | 802.11 a/b/g/n + BT 4.2  |
| Multimedia                     | GPU                      | Vivante GC2000   | Vivante GC2000   | Vivante GC880  | Vivante GC880  |
|                                | 3D GPU Support           | OpenGL ES 1.1/2.0<br>OpenCL 1.1E   | OpenGL ES 1.1/2.0<br>OpenCL 1.1E   | OpenGL ES 1.1/2.0  | OpenGL ES 1.1/2.0  |
|                                | Video Decoder            | 1080p30  | 1080p30  | 1080p30  | 1080p30  |
|                                | Video Encoder            | 1080p30  | 1080p30  | 1080p30  | 1080p30  |
|                                | Display Interfaces       | HDMI 1.4, LVDS, DSI, Parallel  | HDMI 1.4, LVDS, DSI, Parallel  | HDMI 1.4, LVDS, DSI, Parallel  | HDMI 1.4, LVDS, DSI, Parallel  |
|                                | Camera Interface         | 2 Lane CSI   | 2 Lane CSI   | 2 Lane CSI   | 2 Lane CSI   |
|                                | S/PDIF Input / Output    | 1  | 1  | 1  | 1  |
| Digital Audio Serial Interface | 1                        | 1  | 1  | 1  |  |
| Connectivity                   | USB 2.0                  | 1 x Host, 1 x OTG  | 1 x Host, 1 x OTG  | 1 x Host, 1 x OTG  | 1 x Host, 1 x OTG  |
|                                | PCIe                     | 1 (Gen 2.0)  | 1 (Gen 2.0)  | 1 (Gen 2.0)  | 1 (Gen 2.0)  |
|                                | I2C                      | 3  | 3  | 3  | 3  |
|                                | SPI                      | 3  | 3  | 3  | 3  |
|                                | UART                     | 3  | 3  | 3  | 3  |
|                                | GPIO                     | 75   | 75   | 75   | 75   |
|                                | PWM                      | 4  | 4  | 4  | 4  |
|                                | SATA                     | 1 (Gen 2.0)  | 1 (Gen 2.0)  | -  | -  |
|                                | CAN                      | 1  | 1  | 1  | 1  |
|                                | SD/MMC                   | 3  | 3  | 3  | 3  |
| JTAG                           | Test point header        | Test point header  | Test point header  | Test point header  |  |
| OS Support                     | Embedded Linux           | Linux  | Linux  | Linux  | Linux  |
| Physical                       | Size                     | 47 x 30 mm   | 47 x 30 mm   | 47 x 30 mm   | 47 x 30 mm   |
|                                | Interface                | 3 x Hirose DF40 connectors   | 3 x Hirose DF40 connectors   | 3 x Hirose DF40 connectors   | 3 x Hirose DF40 connectors   |
| Power                          | Main Voltage             | 5V   | 5V   | 5V   | 5V   |
|                                | I/O Voltage              | 3.3V   | 3.3V   | 3.3V   | 3.3V   |
| Environment                    | Temperature              | Commercial: 0°C to 70°C<br>Industrial: -40°C to 85°C<br>Industrial Extended:<br>-40°C to 105°C | Commercial: 0°C to 70°C<br>Industrial: -40°C to 85°C<br>Industrial Extended:<br>-40°C to 105°C | Commercial: 0°C to 70°C<br>Industrial: -40°C to 85°C<br>Industrial Extended:<br>-40°C to 105°C | Commercial: 0°C to 70°C<br>Industrial: -40°C to 85°C<br>Industrial Extended:<br>-40°C to 105°C |
|                                | Humidity                 | Humidity (non-condensing): 10% – 90%   | Humidity (non-condensing): 10% – 90%   | Humidity (non-condensing): 10% – 90%   | Humidity (non-condensing): 10% – 90%   |



## Ordering Information

### Available on Shop

| SKU                                     | Description   |
|---|---|
| <a href="#">SRMX6SOW00D512E008V15C0</a> | SOM i.MX6 Solo   No WiFi/BT   512MB RAM   8GB eMMC   Com.Temp   R1.5   Unfused      |
| <a href="#">SRMX6SOWT1D512E008V15C0</a> | SOM i.MX6 Solo   Inc. WiFi/BT   512MB RAM   8GB eMMC   Com.Temp   R1.5   Unfused    |
| <a href="#">SRMX6DLW00D01GE008V15C0</a> | SOM i.MX6 Dual-lite   No WiFi/BT   1GB RAM   8GB eMMC   Com.Temp   R1.5   Unfused   |
| <a href="#">SRMX6DLWT1D01GE008V15C0</a> | SOM i.MX6 Dual-lite   Inc. WiFi/BT   1GB RAM   8GB eMMC   Com.Temp   R1.5   Unfused |
| <a href="#">SRMX6DUWT1D01GE008V15A0</a> | SOM i.MX6 Dual   Inc. WiFi/BT   1GB RAM   8GB eMMC   Auto. Temp   R1.5   Unfused    |
| <a href="#">SRMX6DUW00D01GE008V15C0</a> | SOM i.MX6 Dual   No WiFi/BT   1GB RAM   8GB eMMC   Com.Temp   R1.5   Unfused        |
| <a href="#">SRMX6DUWT1D01GE008V15C0</a> | SOM i.MX6 Dual   Inc. WiFi/BT   1GB RAM   8GB eMMC   Com.Temp   R1.5   Unfused      |
| <a href="#">SRMX6QDWT1D02GE008V15I0</a> | SOM i.MX6 Quad   Inc. WiFi/BT   2GB RAM   8GB eMMC   Ind. Temp   R1.5   Unfused     |
| <a href="#">SRMX6QDW00D02GE008V15C0</a> | SOM i.MX6 Quad No WiFi/BT   2GB RAM   8GB eMMC   Com.Temp   R1.5   Unfused          |
| <a href="#">SRMX6QDWT1D02GE008V15C0</a> | SOM i.MX6 Quad   Inc. WiFi/BT   2GB RAM   8GB eMMC   Com.Temp   R1.5   Unfused      |

- To choose your ideal configuration see our [Product Configurator Tool](#)

### Accessories:

| SKU                      | Description             |
|--------------------------|-------------------------|
| <a href="#">HS00010K</a> | i.MX6 Heatsink          |
| <a href="#">AN00001</a>  | UFL WiFi antenna 2.4Ghz |

## Kits

| SKU                                      | Description   |
|--|---|
| <a href="#">MSMX6ODW00D02GE008E00CH</a>  | HummingBoard Edge Windows 10 IoT Core   No WiFi/BT   2GB RAM   8GB eMMC   Com.Temp   R00   Inc. Heatsink      |
| <a href="#">SRMX6SOW00D512GE008G00CH</a> | SOM i.MX6 Solo   HummingBoard Gate   No WiFi/BT   512MB RAM   8GB eMMC   Com. Temp   R00   Inc. Heatsink      |
| <a href="#">SRMX6SOWT1D512GE008G00CH</a> | SOM i.MX6 Solo   HummingBoard Gate   Inc. WiFi/BT   512MB RAM   8GB eMMC   Com. Temp   R00   Inc. Heatsink    |
| <a href="#">SRMX6DLW00D01GE008G00CE</a>  | SOM i.MX6 Dual-Lite   HummingBoard Gate   No WiFi/BT   1GB RAM   8GB eMMC   Com. Temp   R00   Inc. Enclosure  |
| <a href="#">SRMX6ODW00D02GE008G00CH</a>  | SOM i.MX6 Quad   HummingBoard Gate   No WiFi/BT   2GB RAM   8GB eMMC   Com. Temp   R00   Inc. Heatsink        |
| <a href="#">SRMX6ODW00D02GE008G00CE</a>  | SOM i.MX6 Quad   HummingBoard Gate   No WiFi/BT   2GB RAM   8GB eMMC   Com. Temp   R00   Inc. Enclosure       |
| <a href="#">SRMX6DLW00D01GE008E00CE</a>  | SOM i.MX6 Dual-Lite   HummingBoard Edge   No WiFi/BT   1GB RAM   8GB eMMC   Com. Temp   R00   Inc. Enclosure  |
| <a href="#">SRMX6ODWT1D02GE008E00CH</a>  | SOM i.MX6 Quad   HummingBoard Edge   Inc. WiFi/BT   2GB RAM   8GB eMMC   Com. Temp   R00   Inc. Heatsink      |
| <a href="#">SRMX6ODWT1D02GE008E00IH</a>  | SOM i.MX6 Quad   HummingBoard Edge   Inc. WiFi/BT   2GB RAM   8GB eMMC   Ind. Temp   R00   Inc. Heatsink      |
| <a href="#">SRMX6ODWT1D02GE008E00CE</a>  | SOM i.MX6 Quad   HummingBoard Edge   Inc. WiFi/BT   2GB RAM   8GB eMMC   Com. Temp   R00   Inc. Enclosure     |
| <a href="#">SRMX6ODWT1D02GE008E00IE</a>  | SOM i.MX6 Quad   HummingBoard Edge   Inc. WiFi/BT   2GB RAM   8GB eMMC   Ind. Temp   R00   Inc. Enclosure     |
| <a href="#">SRMX6DLWT1D01GE008C00IE</a>  | SOM i.MX6 Quad   HummingBoard CBI   Inc. WiFi/BT   1GB RAM   8GB eMMC   Ind. Temp   R00   Inc. Enclosure      |
| <a href="#">SRMX6ODWT1D02GE008C00IE</a>  | SOM i.MX6 Dual-Lite   HummingBoard CBI   Inc. WiFi/BT   2GB RAM   8GB eMMC   Ind. Temp   R00   Inc. Enclosure |
| <a href="#">SRMX6ODWT1D02GE008X00CE</a>  | SOM i.MX6 Quad   CuBox-i   Inc. WiFi/BT   2GB RAM   8GB eMMC   Com. Temp   R00   Inc. Enclosure               |

For more information about the i.MX6 SOM Software/Hardware visit our:

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