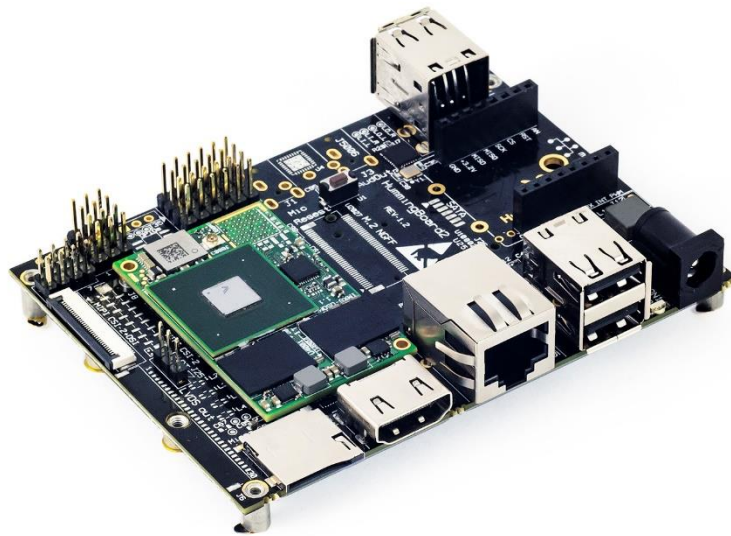


HummingBoard Gate

Datasheet

NXP i.MX6™ based SBC



Overview

HummingBoard Gate is the first SBC to include an integrated mikroBUS™ socket offering an easy hardware configuration to MikroElektronika's wide range of click boards™ add-on modules. The mikroBUS™ pinout and the click board ecosystem is especially suitable for developers who are working on multi-purpose, modular products.

HummingBoard Gate Highlighted Features

- ✿ Based on NXP's iMX6 Single to Quad Core
- ✿ Arm Cortex A9 processor (up to 1Ghz)
- ✿ Up to 2GB DDR3
- ✿ Featuring mikroBUS, perfect for quick demo / proof of concept
- ✿ Robust design

System Specifications

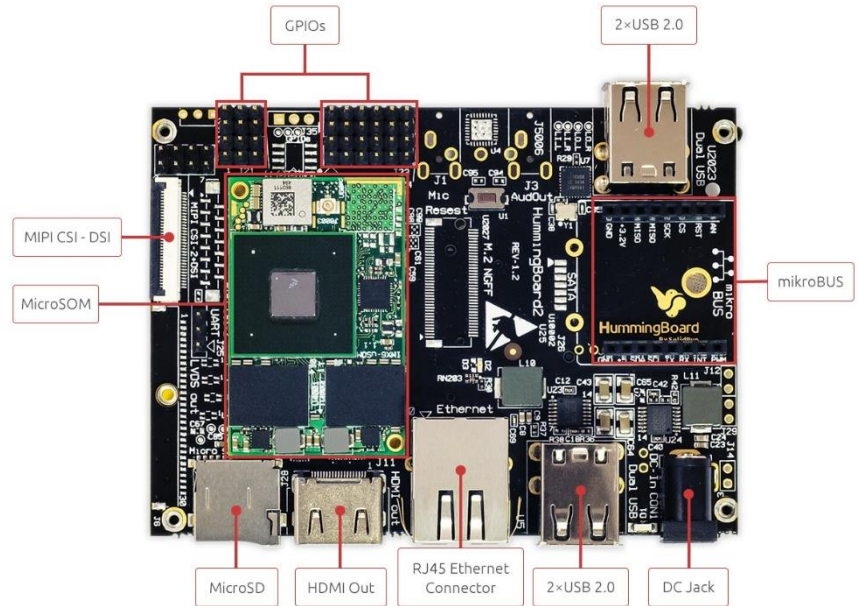
HummingBoard Gate															
SOM Model	SOM i.MX6 Solo to Quad Core														
Memory and Storage	Up to 2GB DDR3 MicroSD M.2 (2242)*														
Connectivity	1 x RJ-45** 4 x Host USB 2.0 mPCIe with SIM card holder														
Media	HDMI out MIPI-CSI-2 and MIPI-DSI Parallel camera														
I/O	1 x Reset button 36 pins GPIO header RTC with battery MikroBUS click interface														
Power	7V – 36V, 5.5mm in (twist & lock mechanism)														
Software	Linux														
Environment	<table border="0"> <tr> <td>Ambient temp. (commercial):</td> <td>0°C to 70°C</td> </tr> <tr> <td>Enclosed ambient temp. (commercial):</td> <td>0°C to 40°C</td> </tr> <tr> <td>CPU die temp. (commercial):</td> <td>0°C to 105°C</td> </tr> <tr> <td>Ambient temp. (industrial):</td> <td>-40°C to 85°C</td> </tr> <tr> <td>Enclosed Ambient temp. (industrial):</td> <td>-25°C to 65°C</td> </tr> <tr> <td>CPU die temp. (industrial):</td> <td>-40°C to 105°C</td> </tr> <tr> <td>Humidity (non-condensing):</td> <td>10% - 90%</td> </tr> </table>	Ambient temp. (commercial):	0°C to 70°C	Enclosed ambient temp. (commercial):	0°C to 40°C	CPU die temp. (commercial):	0°C to 105°C	Ambient temp. (industrial):	-40°C to 85°C	Enclosed Ambient temp. (industrial):	-25°C to 65°C	CPU die temp. (industrial):	-40°C to 105°C	Humidity (non-condensing):	10% - 90%
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Humidity (non-condensing):	10% - 90%														
Dimensions (WxL)	102mm x 69mm														
Enclosure	Optional metal enclosure														

(*) Supported with SOM i.MX6 Dual and above

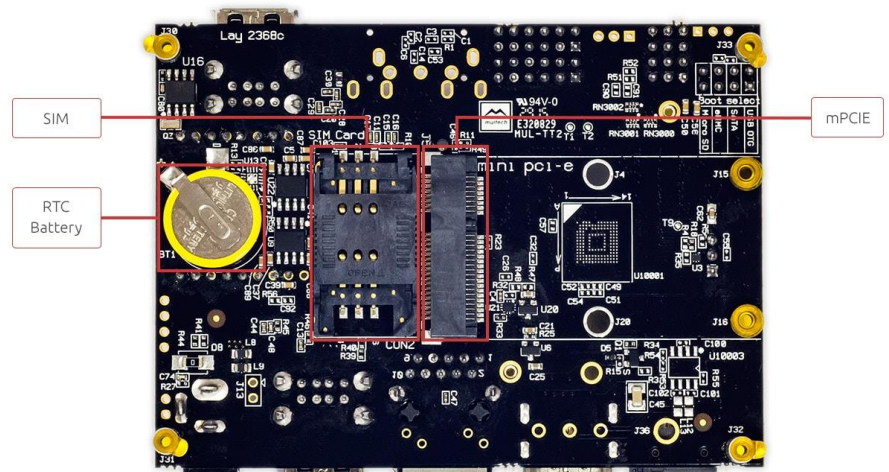
(**) Note that due to internal i.MX6 buses the 1000Mbps interface speed is limited to 470Mbps.

HummingBoard Gate Layout

Top View:



Bottom View:



Available SKUs for HummingBoard Gate

SKU	Description
SRMX6SOWT1D512E008G00CH	SOM iMX6 Solo HummingBoard Gate Inc. WiFi/BT 512MB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink
SRMX6SOW00D512E008G00CH	SOM iMX6 Solo HummingBoard Gate No WiFi/BT 512MB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink
SRMX6SOWT1D512E008G00CE	SOM iMX6 Solo HummingBoard Gate Inc. WiFi/BT 512MB DDR 8GB eMMC Com. Temp R00 Inc. Enclosure
SRMX6SOW00D512E008G00CE	SOM iMX6 Solo HummingBoard Gate No WiFi/BT 512MB DDR 8GB eMMC Com. Temp R00 Inc. Enclosure
SRMX6DLWT1D01GE008G00CH	SOM iMX6 Dual-lite HummingBoard Gate Inc. WiFi/BT 1GB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink
SRMX6DLW00D01GE008G00CH	SOM iMX6 Dual-lite HummingBoard Gate No WiFi/BT 1GB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink
SRMX6DLWT1D01GE008G00CE	SOM iMX6 Dual-lite HummingBoard Gate Inc. WiFi/BT 1GB DDR 8GB eMMC Com. Temp R00 Inc. Enclosure
SRMX6DLW00D01GE008G00CE	SOM iMX6 Dual-lite HummingBoard Gate No WiFi/BT 1GB DDR 8GB eMMC Com. Temp R00 Inc. Enclosure
SRMX6DUWT1D01GE008G00CH	SOM iMX6 Dual HummingBoard Gate Inc. WiFi/BT 1GB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink
SRMX6DUW00D01GE008G00CH	SOM iMX6 Dual HummingBoard Gate No WiFi/BT 1GB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink
SRMX6DUWT1D01GE008G00CE	SOM iMX6 Dual HummingBoard Gate Inc. WiFi/BT 1GB DDR 8GB eMMC Com. Temp R00 Inc. Enclosure
SRMX6DUW00D01GE008G00CE	SOM iMX6 Dual HummingBoard Gate No WiFi/BT 1GB DDR 8GB eMMC Com. Temp R00 Inc. Enclosure
SRMX6QDWT1D02GE008G00CH	SOM iMX6 Quad HummingBoard Gate Inc. WiFi/BT 2GB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink
SRMX6QDW00D02GE008G00CH	SOM iMX6 Quad HummingBoard Gate No WiFi/BT 2GB DDR 8GB eMMC Com. Temp R00 Inc. Heatsink
SRMX6QDWT1D02GE008G00CE	SOM iMX6 Quad HummingBoard Gate Inc. WiFi/BT 2GB DDR 8GB eMMC Com. Temp R00 Inc. Enclosure
SRMX6QDW00D02GE008G00CE	SOM iMX6 Quad HummingBoard Gate No WiFi/BT 2GB DDR 8GB eMMC Com. Temp R00 Inc. Enclosure

(*) Different configurations available for MOQ

Safety Notice

- This device is to be used with Certified Power adaptor with output rated 12VDC, 1.5A. Power adapter must meet Limited power source (LPS) requirements.
- Power adapter must meet local safety standards and requirements based on product intended use.
- Power adapter must meet Operating environment conditions as specified above.

Disposal

Follow local regulations regarding disposal of the product. Dispose of your product in accordance with local regulations. In some areas, the disposal of these items in household or business trash may be prohibited.

Help us protect the environment- recycle!

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Documentation

Additional documentation available at:

<https://developer.solid-run.com/products/hummingboard-gate-edge/>