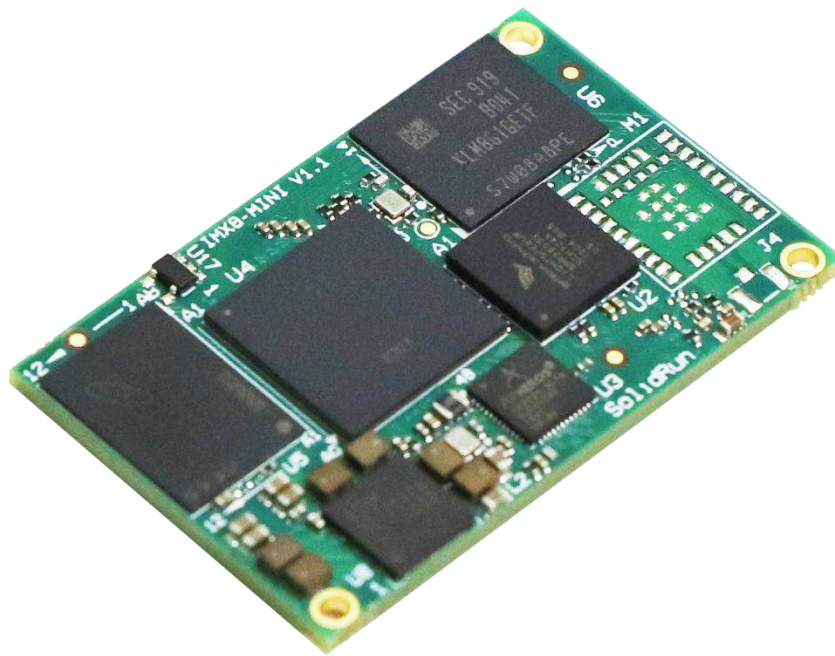


SOM i.MX8M Mini

Datasheet

NXP i.MX8M Mini based System-on-Module | Rev. 1.2



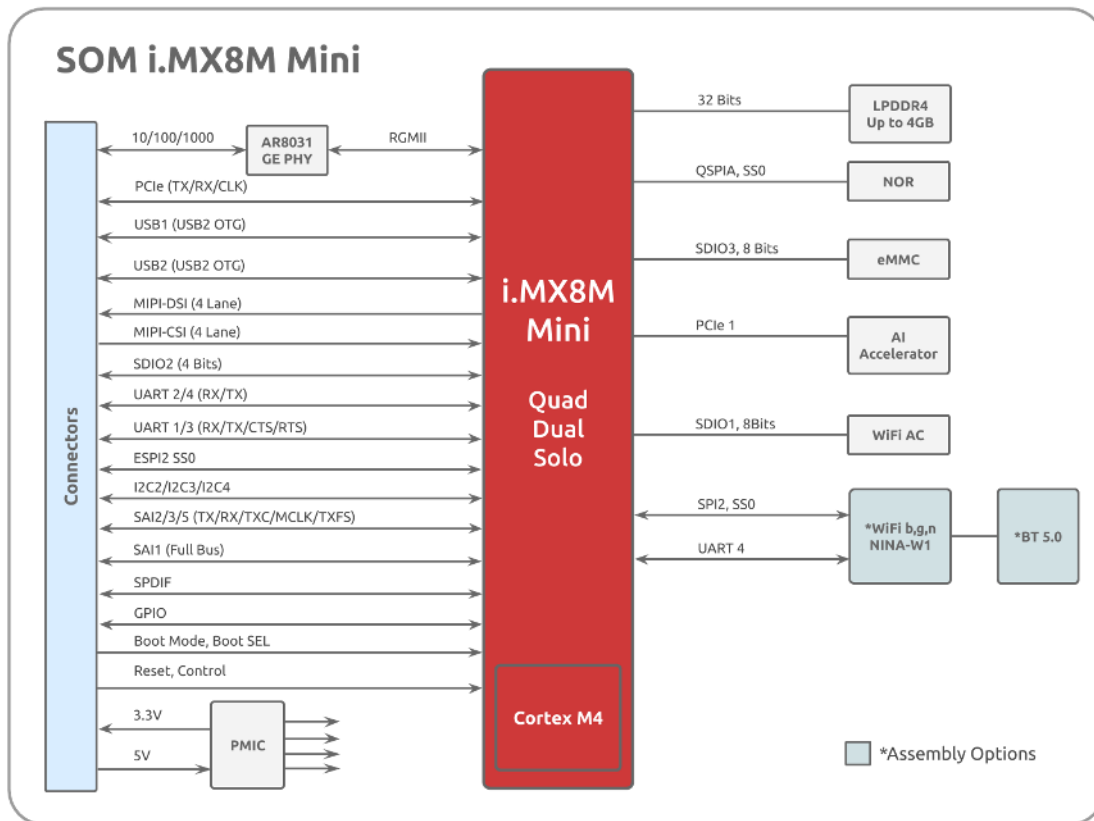
Overview

SolidRun's i.MX8M Mini SOMs harness NXP's Arm Cortex A53 single/dual/quad core 2Ghz (with single Cortex M4 general purpose processor), i.MX8M Mini SoC built with advanced 14LPC FinFET process technology.

This cutting-edge building block is tailor made for a wide range of IoT and industrial applications, featuring up to 4GB LPDDR4, 2 x USB 2.0, powerful network connectivity options including Bluetooth and optional WiFi, PCIe 2.0 and robust multimedia features including 20 audio channels (32bits), MIPI-DSI, and 1080p encoder and decoder.

SOM i.MX8M Mini Highlighted Features

- ✦ Based on NXP's i.MX8M Mini single to quad core Arm Cortex A53
- ✦ Scalable tiny footprint
- ✦ AI acceleration



System Specifications

i.MX8M Mini	
Processor	NXP i.MX8M Mini 1/2/4 core Arm Cortex A53 (Up to 1.8Ghz)
Memory and Storage	Up to 4GB LPDDR4 eMMC (optional) 1Gbit SPI memory 2 x SATA Gen III
Connectivity & Interfaces	2 x XFI/RXAUI/SGMII 1 x SGMII with built in phy 18 x PCIe Gen 4 (5 controllers) 2 x USB 3.0 I2C SPI bus UART
Security	Optional TMP 2.0
OS	Linux kernel 4.4x Android
Power	5V (3.3V IO Voltage)
Temperature Range	Commercial, Industrial
Dimensions (WxL)	47mm X 30mm
Form Factor	Hirose DF40 connectors 1.5mm up to 4.0mm mating height

Available SKUs for i.MX8M Mini

SKU	Description
SRMM8QDWB1D03GE008V11C0	SOM iMX8M Mini Quad Inc. WiFi/BT 3GB DDR 8GB eMMC Com. Temp R1.1
SRMM8QDW00D03GE008V11C0	SOM iMX8M Mini Quad No WiFi/BT 3GB DDR 8GB eMMC Com. Temp R1.1
SRMM8QDWB1D02GE008V11C0	SOM iMX8M Mini Quad Inc. WiFi/BT 2GB DDR 8GB eMMC Com. Temp R1.1
SRMM8QDW00D02GE008V11C0	SOM iMX8M Mini Quad No WiFi/BT 2GB DDR 8GB eMMC Com. Temp R1.1
SRMM8DUWB1D01GE008V11C0	SOM iMX8M Mini Dual Inc. WiFi/BT 1GB DDR 8GB eMMC Com. Temp R1.1
SRMM8DUW00D01GE008V11C0	SOM iMX8M Mini Dual No WiFi/BT 1GB DDR 8GB eMMC Com. Temp R1.1
SRMM8SOWB1D01GE008V11C0	SOM iMX8M Mini Solo Inc. WiFi/BT 1GB DDR 8GB eMMC Com. Temp R1.1
SRMM8SOW00D01GE008V11C0	SOM iMX8M Mini Solo No WiFi/BT 1GB DDR 8GB eMMC Com. Temp R1.1

Safety Notice

- a. 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.
- b. Power adapter must meet local safety standards and requirements based on product intended use.
- c. 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!

IMPORTANT NOTICE – Please Read Carefully

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Support

For technical support please visit:

Our Developer Resources – <http://developer.solid-run.com/>

Our Forums - <http://forum.solid-run.com/>

For direct support please contact us at: support@solid-run.com

Documentation

Additional documentation available at:

<https://developer.solid-run.com/products/i-mx8m-mini-som/>