

SOM i.MX8M

Datasheet

NXP i.MX8M based System on Module | Rev. 1.1



Embedded Edge Computing

SolidRun Ltd.

7 Hamada st.,
Yokne'am Illit, 2495900, Israel

Overview

SolidRun's [i.MX8M](#) based System on Module (SOM) harnesses NXP's powerful i.MX8M in a flexible & compact SOM including a memory subsystem, power management subsystem, networking and system interconnectivity. The i.MX8 SOM will allow developers and OEMs to simplify the production cycle and reduce time-to-market drastically.

SOM i.MX8M Highlighted Features

- ✦ Based on NXP's i.MX8M dual/quad-core Arm Cortex A53 processor, Cortex M4 general purpose processor
- ✦ 4K UltraHD, full HDR, 20 audio channels
- ✦ Up to 4GB LPDDR4 3200
- ✦ Tiny footprint (47mm x 30mm)



System Specifications

SOM i.MX8M	
Processor	NXP i.MX8M Dual/Quad core Arm Cortex A53 (Up to 1.5Ghz) Arm Cortex M4 general purpose processor
Memory and Storage	Up to 4GB LPDDR4 eMMC PCIe SSD
Connectivity & Interfaces	10/100/1000Mbps 802.11 ac/a/b/g/n (optional) BT 5.0 (optional) 2 x USB 3.0 Up to 2 PCIe 2.0
Digital Audio Serial Interfaces	20 channels 32bits @384khz DSD512 SPDIF TX&RX HDMI ARC Dolby
OS	Linux kernel
Power	5V (3.3V IO)
Temperature Range	Commercial, Industrial
Dimensions (WxL)	47mm X 30mm

Available SKUs for SOM i.MX8M

SKU	Description
SRMX8DUWB1D01GE008V20C0	i.MX8M Dual 8GB eMMC 1GB RAM Com. Temp Inc. WiFi/BT R2.0
SRMX8DUW00D01GE008V20C0	i.MX8M Dual 8GB eMMC 1GB RAM Com. Temp R2.0
SRMX8QDWB1D02GE008V20C0	i.MX8M Quad 8GB eMMC 2GB RAM Com. Temp Inc. WiFi/BT R2.0
SRMX8QDWB1D03GE008V20C0	i.MX8M Quad 8GB eMMC 3GB RAM Inc. WiFi/BT R2.0
SRMX8QDW00D03GE008V20C0	i.MX8M Quad 8GB eMMC 3GB RAM Com. Temp R2.0
SRMX8QDW00D02GE008V20C0	i.MX8M Quad 8GB eMMC 2GB RAM Com. Temp R2.0
SRMX8DUWB1D01GE008V20I0	i.MX8M Dual 8GB eMMC 1GB RAM Ind. Temp Inc. WiFi/BT R2.0
SRMX8DUW00D01GE008V20I0	i.MX8M Dual 8GB eMMC 1GB RAM Ind. Temp R2.0
SRMX8QDWB1D02GE008V20I0	i.MX8M Quad 8GB eMMC 2GB RAM Ind. Temp Inc. WiFi/BT R2.0
SRMX8QDWB1D03GE008V20I0	i.MX8M Quad 8GB eMMC 3GB RAM Ind. Temp Inc. WiFi/BT R2.0
SRMX8QDW00D03GE008V20I0	i.MX8M Quad 8GB eMMC 3GB RAM Ind. Temp R2.0
SRMX8QDW00D02GE008V20I0	i.MX8M Quad 8GB eMMC 2GB RAM Ind. Temp R2.0

Support

For technical support please visit:

Our Developer Resources – <https://developer.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-som/>