

SMARC



Model Number	SMA-IMX8MP	SMA-3588	SMA-3568	SMA-X8I	SMA-IMX6 E1
Processor	Quad Cortex®-A53 Processors	RockChip RK3588J Quad-core Cortex-A76 and Quad-core Cortex-A55	Rock Chip RK3568 Quad-core Cortex-A55	NXP i.MX 8M Mini	NXP i.MX 6 Dual NXP i.MX 6 Quad Core
System Memory	2GB/ 4GB LPDDR4	2GB/ 4GB/ 8GB LPDDR4	2GB/ 4GB/ 8GB LPDDR4	2GB DDR4 (Default)	1GB/ 2GB DDR3
Storage	16GB/ 32GB eMMC	16GB eMMC	16GB eMMC	eMMC 16GB	eMMC 8GB
Internal I/O Connector	2 x CAN/CAN FD 1 x EDP 1 x HDMI 1 x LVDS 2 x MIPI CSI 1 x MIPI DSI 1 x PCIe 3.0 4 x UART 1 x USB (Type C) 2 x USB 3.0 3 x uSDHC 6 x I ² C 3 x SPI	1 x CAN 14 x GPIO 4 x I ² C 1 x I ² S 1 x SDIO 2 x SPI 6 x UART 1 x Wifi 802.11 a/b/g/n/ac 1 x HDMI 1 x MIPI CSI 1 x MIPI DSI/LVDS 2 x Giga Ethernet 1 x PCIe 2.1 1 x PCIe 3.0 1 x USB 3.0 Type A 1 x USB 3.0 Type A OTG 2 x USB 2.0 Type B	1 x CAN 14 x GPIO 4 x I ² C 1 x I ² S 1 x SDIO 2 x SPI 6 x UART 1 x Wifi 802.11 a/b/g/n/ac 1 x HDMI 1 x MIPI CSI 1 x MIPI DSI/LVDS 2 x Giga Ethernet 1 x PCIe 2.1 1 x PCIe 3.0 1 x USB 3.0 Type A 1 x USB 3.0 Type A OTG 2 x USB 2.0 Type B	1 x Giga LAN Controller 8 x GPIO 3 x I ² C 1 x I ² S 1 x LVDS (Default) 1 x PCIe 1 x MIPI CSI (Option) 1 x MIPI DSI (Option) 1 x SPI 1 x UART 4 x USB 2.0 1 x USB 2.0 OTG	2 x CAN 12 x GPIO 3 x I ² C 1 x JTAG 1 x MLB150 3 x PCIe (Option) 2 x RX/TX (Ser1/3) 1 x SATA eMMC 1 x SDIO 1 x SPDIF 2 x SPI 2 x UART (Ser0/2) 2 x USB 2.0 Port (One OTG) 1 x WDT
Power Requirement	5V	5V	5V	5V	3V ~ 5.25V
Operating Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Dimension (L x W)	50 x 82 mm	82 x 50 mm	82 x 50 mm	82 x 50 mm	82 x 50 mm
Weight	0.06 kg	0.06 kg	0.06 kg	0.06 kg	0.06 kg
Certification	CE, FCC, Class B	CE, FCC, Class B	CE, FCC, Class B	CE, FCC Class B	CE, FCC Class B
Software Support	Android 11	Linux Debian, Andriod	Linux Debian 11, Andriod 11	Yocto 2.5, Android 10.0	Android 4.4, Yocto 2.1

Open Standard Module



Model Number	OSM-3568	OSM-IMX8MM	OSM-IMX93
Chipset	Rockchip RK3568J	NXP iMX8M Mini	NXP i.MX93
Processor	Quad-core Cortex-A55	NXP iMX8M Mini Quad-core Cortex-A53	Dual-Core ARM Cortex-A55 + ARM Cotex-M33
Software Support	Debian11	Yocto (Kirkstone) 4.0	Yocto (Kirkstone) 4.0
System Memory	2GB	4GB	2GB
Storage	16GB eMMC	16GB eMMC	16GB eMMC (Optional 8G/ 32G)
I/O	1 x HDMI Out 2 x SDIO (1 x TF Card, 1 x WIFI&BT) 2 x USB3.0 (1 x USB Host, 1 x USB OTG) 2 x USB Host 1 x MIPI-CSI 1 x MIPI-DSI 1 x PCIe 1 x IR 2 x CAN 1 x SPI 1 x Edp 2 x UART 1 x DC in (USB Type-c) 2 x RJ45 10/100/1000M	2 x SDIO 4 x UART 4 x I ² C 3 x SAI 2 x SPI 3 x PWM 1 x JTAG 29 x GPIO 1 x PCIe 1 x MIPI-CSI 1 x RGMII	1 x MIPI-CSI 1 x MIPI-DSI USB 2.0 2 x Gigabit Ethernet Controller 1 x SD 1 x CAN 2 x SPI 2 x PWM 3 x SAI 24 x GPIO
Power Requirement	5V/ 2A	5V/ 3A	5V/ 3A
Operating Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Dimensions	45 x 45 mm (Size-L)	45 x 45 mm (Size-L)	30 x 30mm (Size-S)
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B