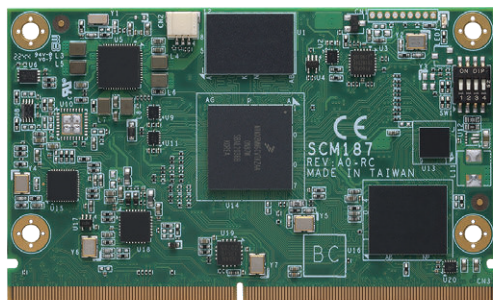
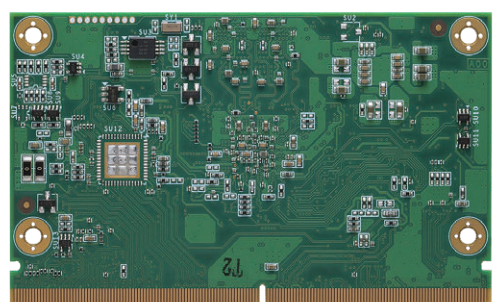


# SCM187 NEW

RISC Embedded SMARC v2.1 SoM with i.MX 8M Mini Quad Core 1.6 GHz SoC, 4GB RAM and 8GB eMMC



▲ Top view



▲ Rear view

## Features

- SMARC 2.1 (82 x 50 mm)
- NXP i.MX 8M Mini Quad A53 Core Processor
- Dual CANBus 2.0B
- Dual-channel 24-bit LVDS
- HDMI up to FHD Resolution (option)
- 10/100/1000 Mbps Ethernet
- USB 2.0
- MIPI-CSI
- Audio
- Yocto 4.0

## Specifications

### Core System

CPU	NXP i.MX 8M Mini 1.6GHz SoC with Quad A53
System Memory	LPDDR4 4GB
Operating System	Yocto 4.0, Linux Kernel 5.15.32
Storage	1 x SDIO3.0 interface 1 x 8GB eMMC
RTC	Battery on the baseboard is required
Power Requirement	+5V ± 5%

### I/O

Graphics	1 x Dual-channel 24-bit LVDS or 1 x HDMI up to FHD Resolution (option)
Ethernet	1 x 10/100/1000 Mbps Ethernet
USB	3 x USB 2.0
COM	2 x UART TX/RX/RTS/CTS 2 x UART TX/RX (for debug console)
I <sup>2</sup> C	3 x I <sup>2</sup> C interface
QSPI	1 x QSPI
SPI	1 x SPI
CANBus	2 x CANBus
GPIO	14 x GPIO
OS Flash	1 x OS Flash
Audio	1 x I <sup>2</sup> S
Camera Input	1 x MIPI-CSI 4-lane
Security	1 x TPM 2.0 (option, none in default)
Storage	1 x SDIO3.0 interface
PCIe	1 x PCIe Gen2 x1
Debug Header	1 x Debug Header

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### Mechanical and Environmental

Dimensions	82 x 50 mm (3.23" x 1.97")
Board Thickness	1.2 mm ± 0.1 mm
Operating Temperature	-40°C to +85°C (-40°F to +185°F)

## Ordering Information

### Standard

SCM187-4R8E-I	SMARC 2.1, NXP i.MX 8M Mini SoC Quad A53 with 4GB RAM, 8GB eMMC, LVDS, LAN, and USB ports (Heatsink Excluded)
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### Optional

SCM187-4R8EI-184EVK	Evaluation Kit Boards, SMARC Module SCM187 with Baseboard SCB184 (Heatsink Excluded)
SCM187-HS-H	Heatsink, Passive Cooling Solution for SMARC Module SCM187 (-40°C to +85°C)