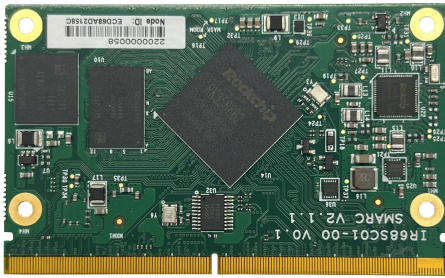


JSOM-R68C

Rockchip RK3568J SMARC Module

JWIPC's JSOM-R68C is an Arm-based SMARC 2.1.1 Computer-on-Module powered by industrial tier Rockchip RK3568J SoC, which includes 4x Arm Cortex-A55 cores, 1 TOPS NPU and Arm Mali-G52 3D graphics engine. It supports HDMI, eDP, MIPI-DSI or single channel LVDS display and provides rich I/O resources such as 1x GbE, 2x CAN, 2 x PCIe, 4x USB, 4x UART. Designed for -40~85°C industrial operating temperature, JSOM-R68C is ideal for entry level edge AI applications such as automated guided vehicles (AGVs), medical monitors & anaesthetic machines, financial & banking kiosks, security systems, etc.

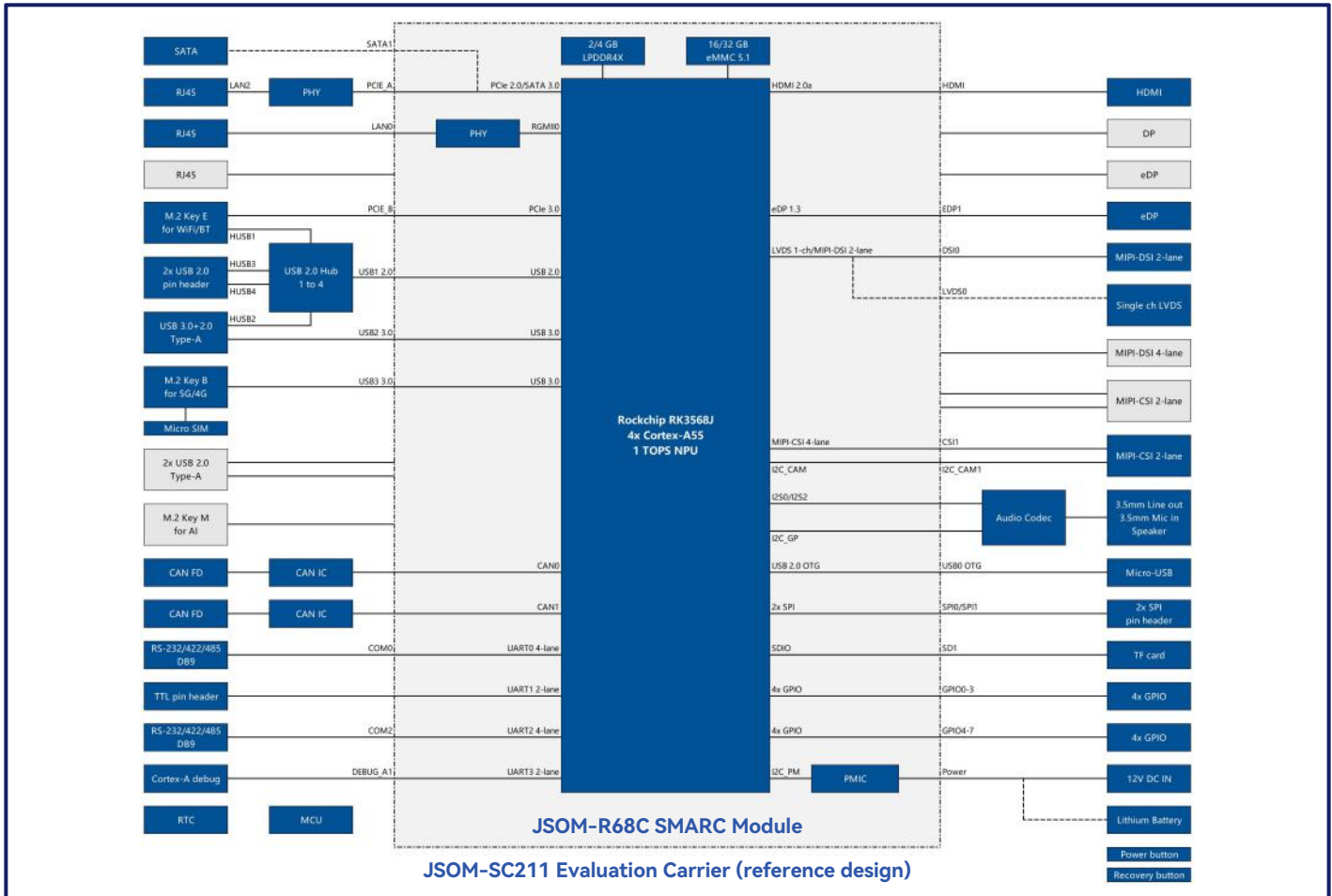


- Arm-based SMARC 2.1.1 Computer-on-Module
- Industrial tier Rockchip RK3568J SoC up to 1.8 GHz
- 4x Cortex-A55 + 1 TOPS NPU + Mali-G52 3D GPU
- On-board 2/4GB LPDDR4X + 16/32GB eMMC 5.1
- Display: 1x HDMI, 1x eDP, 1x LVDS or MIPI-DSI
- I/O: 1x GbE, 2x CAN, 2x PCIe, 4x USB, 4x UART
- DC 5V, supports 3.6~5.25V Lithium battery operation
- Supports -40~85°C operating temperature

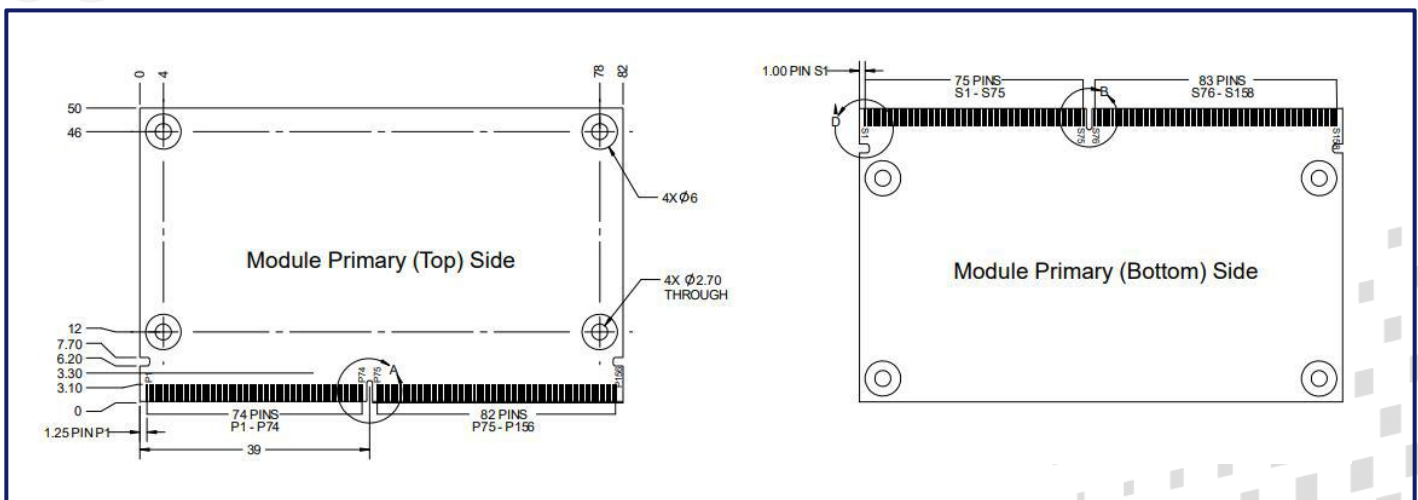
Specifications

CPU	Rockchip RK3568J, Quad core Cortex-A55 processors up to 1.8 GHz, 64-bit Arm® v8.2-A architecture
NPU	1 TOPS Neural Network performance
GPU	Arm Mali-G52 1-Core-2EE, supports OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0 FP
H/W Video Codec	Decoder: H.265, H.264, VP9 up to 4K60; Encoder: H.265, H264 up to 1080p60
Memory	On-board 4GB LPDDR4X (2GB optional)
Flash Memory	On-board 16GB eMMC 5.1 for OS (32GB optional)
Ethernet	1x 10/100/1000 Mbps
Display	1x HDMI 2.0a up to 3840x2160 30Hz 1x eDP 1.3 1x Single channel LVDS or 2-lane MIPI-DSI
Camera Input	1x 4-lane MIPI-CSI; 8M ISP with HDR support
Audio	2x I2S
PCIe	1x PCIe 3.0 x1, 1x PCIe 2.0 x1 (combo with SATA)
USB	1x USB 2.0 OTG, 2x USB 3.0, 1x USB 2.0
UART	2x 4-wire UART, 2x 2-wire UART
CAN	2
SATA	1 (combo with PCIe 2.0)
SDIO	1
SPI	2
I2C	5
GPIO	14
Form Factor	SMARC 2.1.1 MXM 314 pin, 82mm x 50mm
Power Supply	DC 5V, supports 3.6~5.25V Lithium battery operation
Operating System	Debian 10, Android 11
Boot Options	eMMC
Operating Conditions	-40~85°C, 10%~90% RH non-condensing
Storage Conditions	-40~85°C, 5%~90% RH non-condensing

Block Diagram



Dimensions



Order Information

Part No.	SoC	Memory	Flash	LAN	Display	I2S	PCIe	USB	UART	CAN	SPI	I2C	GPIO	Operating Temperature
JSOM-R68C-AQH00	RK3568J Quad core	4GB	16GB	1x 1000M	1x HDMI, 1x eDP 1x LVDS/MIPI-DSI	2	1x PCIe 3.0 x1 1x PCIe 2.0 x1	4	4	2	2	5	14	-40~85°C
JSOM-R68C-BQM00	RK3568B2 Quad core	2GB	16GB	1x 1000M		2		4	4	2	2	5	14	0~60°C