



Features

- Carrier Board for RM-N8M and RM-N8MMI series SMARC™ 2.1 CPU Module
- Rich peripheral I/O support
- Complete system available for evaluation
- Wide-range operating temperature (-40°C~85°C)

Specifications

Form Factor	Carrier Board Compliant with SMARC™ 2.1
Edge I/O	1x 19V~24V DC-in jack 2x RJ45 Gigabit LAN (one for RM-N8 only) 2x USB 3.0 1x OTG Micro USB 2.0 2x HDMI TX (one for RM-N8 only) 1x HDMI RX (for RM-N8 only) 1x Headphone & Mic 1x COM (RS232/422/485 by switch) 2x SD slot (one for RM-N8 only)
Internal I/O	1x 19V~24V DC-in header 1x 12V Fan header 4x CAN bus 2.0b (three for RM-N8 only) 3x 18/24-bit Dual-channel LVDS (two for RM-N8 only) 4x LCD backlight 2x MIPI-CSI2 (one for RM-N8/RM-N8M only) 2x MIPI-DSI (one for RM-N8 only) 2x USB 3.0 12x GPIOs 2x RS232 (RX/TX only) 2x I2C 2x SATA III and power (one for RM-N8 only) 1x I ² S 1x QSPI 1x Full-size Mini PCI-E 1x SIM socket 1x M.2 E-Key (2230) 1x Speaker out (R/L) 1x RTC battery 1x 4-wire UART
Jumpers, Switches & Buttons	1x Boot select switch 1x I/O and display select switch 1x Power button 1x Reset button 1x LID button 1x Sleep button 4x Backlight power (3V3/5V/12V) jumper 3x LCD power 3V3/5V jumper
Dimensions	170mm x 170mm (6.7" x 6.7")
Environment	Humidity: 0 % to 90 % RH at 60° C (non-condensing) Shock: Non-Operating: 1G, 15 mins (x-, y-, z-axis) Vibration: Non-operating: 3 Hz to 500 Hz, 15 mins
Operating Temperature	-40°C ~ +85°C (-40°F ~ 185°F)

OS Support	Depends on CPU Module
Certification	CE/FCC Class-B

Ordering Information

RP-103-SMC	Carrier Board for SMARC™ 2.1 Modules, 19V~24V DC-in jack, 1x RJ45 LAN, 1x OTG Micro USB2.0, 1x Headphone & Mic, 1x 12V Fan header, 1x CAN bus 2.0b, 1x Full-size mini PCI-E, 1x LCD backlight, 4x USB 3.0, 12x GPIOs, 2x RS232 (RX/TX only), 1x I ² C, 1x I ² S(Audio), 1x SIM socket, 1x M.2 E-Key (2230), 1x Speaker out (R/L), 1x RTC battery, 18/24-bit Dual-Channel LVDS, 1x HDMI 2.0 1x COM (RS232/422/485) or 4-Wire UART, 1x QSPI, 1x MIPI-CSI, 1x MIPI-DSI, 1x SATA III and power
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Dimensions

