



Final spec subjects to change  
without notice for reference only

## Main Features

- SMARC revision 2.1 small Form Factor
- Greater powers delivery capability
- System host board and add-on card
- DP++, HDMI, LVDS, HDA, CAN, 8bit GPIO, I2C
- M.2 E-Key for WIFI /BT expansion slot
- M.2 B-Key for LTE expansion slot
- M.2 B+ M Key Storage expansion slot
- 3 x GbE LAN and 2 x USB 3.0 interface

## Product Overview

SMARC carrier is an extremely short size carrier board ideal for low power IoT applications as users can take advantage of the integrated capabilities found on the SMARC 2.1 modules.  
SMARC supports an extended temperature range of -5°C to +60°C and offers a very small footprint; ideal for stationary applications.

## Specifications

### Form factor

PC104 Carrier board,  
dimension: 120 mm (L) x 100 mm (W)

### Power Requirement

- DC24V in
- Support both AT and ATX power supply mode

### Rear I/O

- 1 x DP1.2++ (resolution up to 4096 x2160 @60Hz)
- 1 x HDMI 1.4b (resolution up to 4096 x2160 @24Hz)
- Dual Channel 18/24bit LVDS (1920x1080 @60Hz).
- 1 x PWR Button + PWR LED, 1 x 1\*4 LED : HDD LED, LTE LED , Wifi LED , BAT LED.
- 1 x 8bit GPIO(4In/4Out) 1 x10 terminal block (1.00mm)
- 1 x 24V DC IN 1 x 3 terminal block (2.5mm)

### Internal I/O

- 2 x UART (TX/RX), 2 x CAN FD , 3 x GbE LAN , 2 x SPI bus ,2 x I2C ,1 x SATA 3.0

### Expansion Slot

- 1 x M.23042 & 3052 Key-B (Support PCIe x1, USB2.0, SATA 3.0) and Support LTE 5G module(Pcie))
- 1 x M.2 2280 Key-B (Support SATA 3.0, PCIe x1)
- 1 x M.2 2230 Key-E (Support PCIe, USB2.0 Interface, support Wifi/BT and NexCobot IO Card)

### Power Requirement

- DC24V in
- Support both AT and ATX power supply mode

### Environment

- Board level operating temperatures: -5°C to 60°C
- Storage temperatures: -40°C to 85°C

### Relative humidity

- 10% to 90% (operating, non-condensing)
- 10% to 90% (non-operating, non-condensing)

### Certifications

- Meet CE / FCC Class A

## Ordering Information

### Barebone

- SMB-100 (P/N: 10E00010000X0)  
(SMARC™ Short Size) Carrier board ,

### Optional Accessories

24V, 60W AC/DC power adapter w/o power cord, (P/N: 7400060054X00)

### Expansion Modules:

SMK2LAN, M.2 to dual GbE LAN ports (P/N:TBD)  
SMK4USB, M.2 to quad USB2.0 ports (P/N:TBD)  
SMK2COM, M.2 to dual COM ports (P/N:TBD)