

SMC-600

SMARC 2.2 Short Size Module with  
Qualcomm® Dragonwing™ QCS6490 SoC



Feature

- **Powerful CPU & GPU:** 8x Kryo 670 CPU (1.9 - 2.7 GHz) paired with Adreno 643 GPU for smooth processing and graphics rendering.
- **Large Memory & Storage:** 8 GB RAM and 128 GB internal storage for seamless multitasking and sufficient space for apps and media.
- **Advanced Connectivity Options:** Includes HDMI 2.0b (4K@60Hz), Wi-Fi 6 (802.11ax), Bluetooth® 5.2, and multiple USB (3.0 & 2.0), LAN, and PCIe interfaces for versatile connectivity.
- **Enhanced Camera & Display Support:** Dual CSI camera interfaces and MIPI DSI x1 support for high-quality imaging and display output.
- **Durable & Reliable Design:** IP40 ingress protection, operating temperature range from -20°C to 70°C, and humidity tolerance of up to 95% RH, ideal for rugged environments.

Specification

|                       |                       |                                                       |
|-----------------------|-----------------------|-------------------------------------------------------|
| System                | CPU                   | Qualcomm® Dragonwing™ QCS6490                         |
|                       | GPU                   | Qualcomm® Adreno™ 643L                                |
|                       | AI                    | 12 INT8 TOPS                                          |
|                       | RAM & Storage         | 8GB LPDDR5x, 128GB UFS                                |
|                       | OS                    | Android 14, Yocto Linux, Ubuntu                       |
| Interfaces            | Display               | 1 x HDMI 4K@30fps, 1 x MIPI-DSI                       |
|                       | Camera                | 3 x MIPI-CSI (on-Board); 2 x MIPI-CSI (Golden Finger) |
|                       | USB                   | 2x USB 3.0 Host, 2 x USB 2.0 Host                     |
|                       | Ethernet              | 2 x 10/100/1000Mbps Ethernet                          |
|                       | Serial Port           | 2 x 4-Wire UART, 2 x 2-Wire UART                      |
|                       | CAN Bus               | 2 x CAN FD and 2.0B                                   |
|                       | SDIO                  | 1 x SDIO                                              |
|                       | PCIe                  | 3 x PCIe Gen3 1-Lane                                  |
|                       | I2C                   | 5 x I2C, 2x I2S, 2x SPland 14x GPIOs                  |
| Wireless Connectivity | Wi-Fi                 | Wi-Fi 6 (optional)                                    |
|                       | Bluetooth             | Bluetooth v5.3 (optional)                             |
| Mechanical            | Form Factor           | SMARC Short Size Compatible                           |
|                       | Dimension             | 82mm x 50mm                                           |
| Environmental         | Operating Temperature | -20°C to +85°C                                        |
|                       | Storage Temperature   | -40°C to +85°C                                        |

### Block Diagram

