



The Carambola3 is a System on Module (SoM) based on the Qualcomm QCA4531 chipset. It is pin-to-pin compatible with the Carambola2 module, meaning that it has the same physical dimensions and pinout as the Carambola2. This allows for easy integration of the Carambola3 into existing systems that use the Carambola2 module. It is a compact and powerful module that integrates a variety of features, including Wi-Fi as well as a range of other interfaces and peripherals. The module is designed for use in a wide range of embedded applications, including Internet of Things (IoT) devices, industrial automation systems, and smart home devices. The QCA4531 chipset provides high performance and low power consumption. The Carambola3 SoM is designed to be easily integrated into a wide range of platforms and products, reducing development time and costs.

Quick specs

- 802.11b/g/n, 2.4GHz, 150 Mbps data rate, 21 dBm per chain output power;
- U.FI connector or external pin for external antenna;
- 32 MB Flash, 128MB DDR2 300MHz RAM;
- CPU: QCA-4531, 650 MHz clock speed;
- Same pinout and form factor as Carambola2;
- Size: 28 by 38 mm;
- Available interfaces – USB 2.0 host port, 115200 Kbps serial port, 2x 100 Mbps Ethernet, 11x GPIOs;
- Low power consumption, up to 2W.

Difference between the original Carambola2

- 250 MHz faster CPU;
- 16 MB larger flash;
- Four GPIO less than Carambola2;
- 64 MB larger RAM;
- 100MHz faster RAM controller.