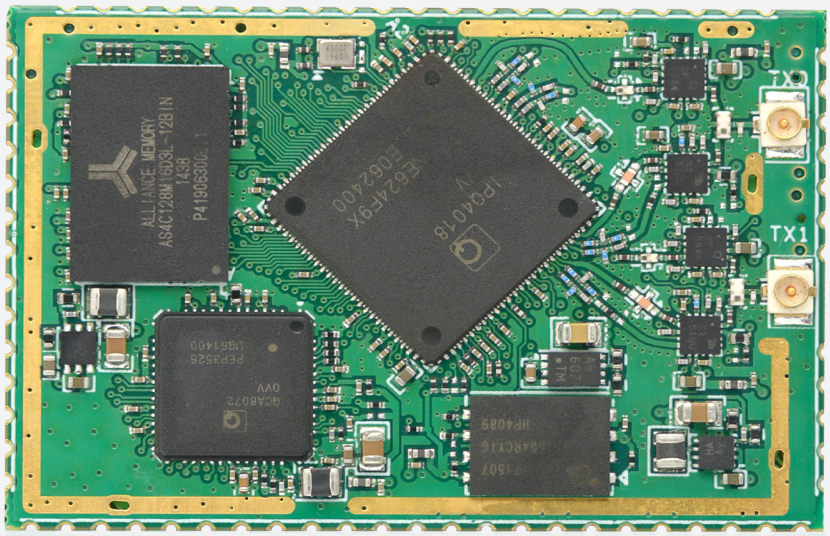
Jalapeno | Product brief



Jalapeno is a very powerful quad-core CPU based module with dual band concurrent radio supporting 802.11ac Wave 2 technology

Jalapeno is based on an IPQ4018 SoC from Qualcomm, which is extremely powerful quad core 700MHz CPU Cortex A7 CPU with NEON (high-performance media engine), ideal for routers, gateways and access points. It is a surface mountable, dual-sided, Wi-Fi enabled Linux module.

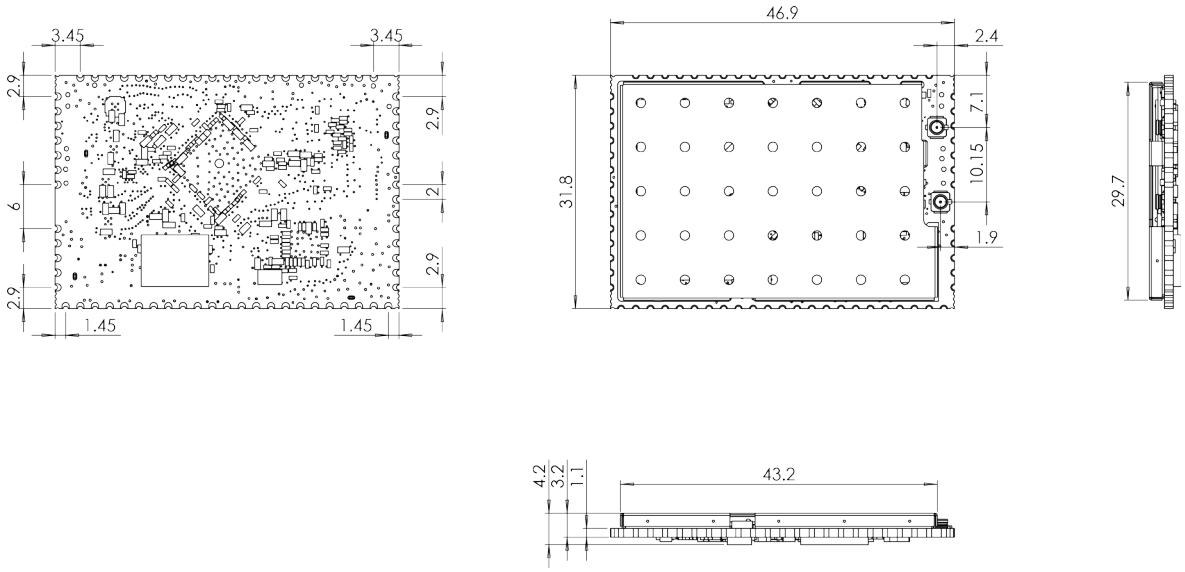
It comes with a high-power (23 dBm per chain) dual-band concurrent radio supporting 802.11ac Wave2 technology (2x2 MiMo) reaching 1.167 Gbps data rate. USB 3.0, USB 2.0, I2S, UART, GPIO are the interfaces available on the module together with two Gigabit Ethernet ports. SoC has hardware NAT engine and high-end security features like crypto engine, secure boot and others.

OpenWRT linux distribution source code is available on GitHub https://github.com/8devices and is supported by our growing community on http://www.8devices.com/community forum.

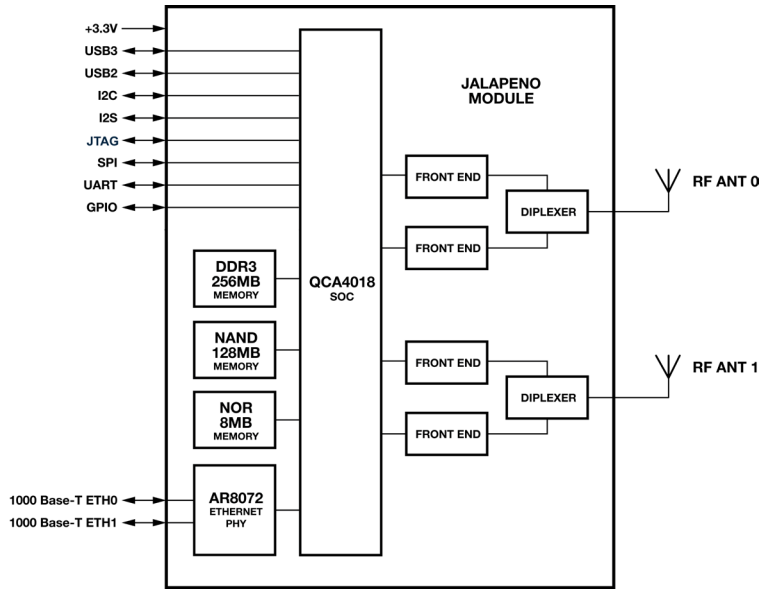
Quick specs

- 802.11 a/b/g/n/ac Wave 2, 2.4 and 5 GHz, 2x2 MIMO, 300 and 867 Mbps data rate, 23 dBm per chain output power
- U.FL connectors for external antenna
- 128 MB NAND and 8 MB NOR FLASH, 256 MB DDR3 RAM
- Linux friendly , OpenWRT flash image and source code are available for download on www.8devices.com/wiki_jalapeno
- CPU – IPQ 4018 (700 MHz quad core Cortex A7)
- 23 dBm per chain output power dual-band concurrent radio with dedicated Tensilica CPU and 802.11ac Wave 2 support
- 32 by 47 mm size
- Surface mountable, dual-side design
- Available interfaces - USB 2.0, USB 3.0, I2S, UART, GPIO, JTAG and 2 x 1000 Base-T Ethernet ports

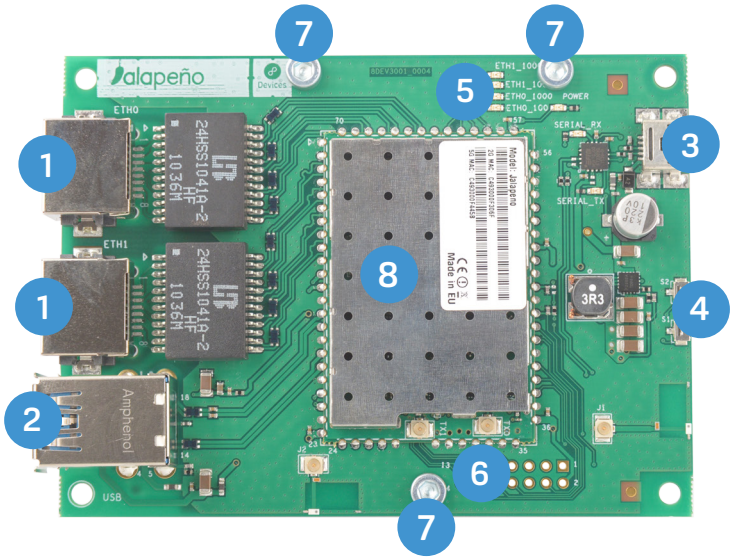
Module dimensions



Block diagram



Development kit



1 - 2 x 1000 Base-T Ethernet ports

2 - 2 x USB Type-A sockets (2.0 and 3.0)

3 -Mini USB Type-A socket (console + power)

4 - Buttons (reset and user - GPIO connected)

5 - External LEDs

6 - 2.45 mm pitch prototyping are holes

7 - Heatsink mounting screws

8 - Jalapeno module

Module pinout