

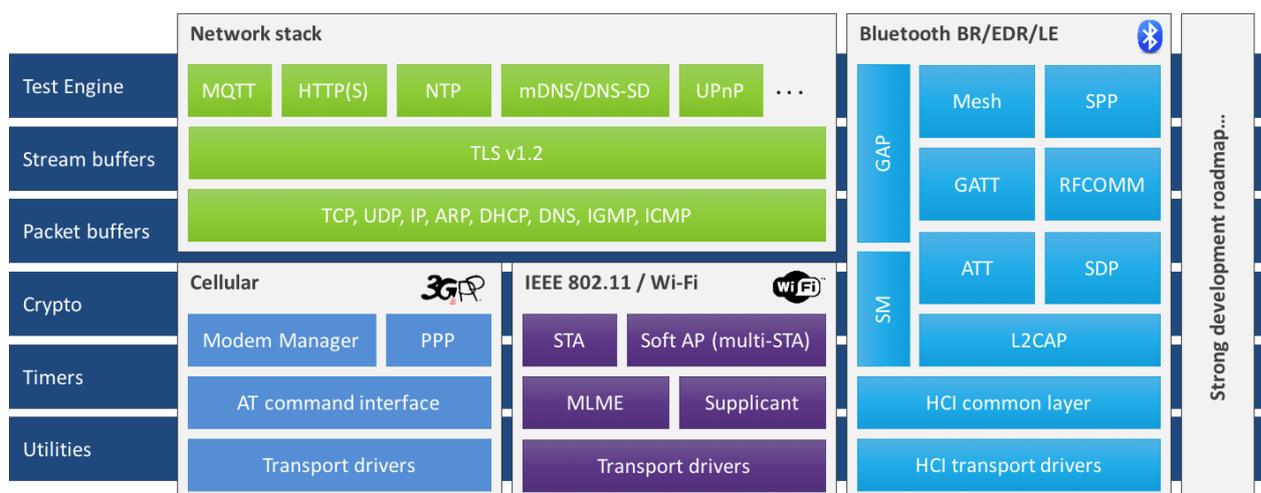
Embedded connectivity that just works

About ubiquiOS™

ubiquiOS™ is a compact and secure embedded software platform that enables low-cost and low-power wireless connectivity (Wi-Fi, Bluetooth/Bluetooth Smart, cellular, LoRa, SIGFOX, etc.) on embedded processor cores such as ARM Cortex-M, MIPS, and x86/IA-32 designed for the IoT market.

The software requires minimal RAM and Flash utilizing microcontrollers without sacrificing functionality or security. It provides a complete connectivity solution from device driver to application layer, and has powerful APIs that give fast time-to-market.

ubiquiOS has broad support for wireless technologies, microcontrollers, operating systems, and cloud platforms, enabling developers to have the widest range of choices when building their products.



Interoperable



Compact



Easy to use



Low power



Secure



Interoperable - The code is designed from the ground up and built on open standards/protocols optimized for IoT. We thoroughly test compatibility across a range of MCU's (ARM, MIPS, x86), multiple radio technologies from leading vendors, bare metal / RTOS environments and leading cloud solutions. Check with our partners or UbiquiOS for the most recent compatibility list.

Compact - ubiquiOS is optimized for the smallest MCUs, such as ARM Cortex-M0 cores, and can be run on bare metal or in a RTOS as a task. A complete Wi-Fi solution using a SoftMAC transceiver, TCP/IP, TLS and MQTT can be as small as 16 kB of RAM and 60 kB of Flash.

Easy to Use - ubiquiOS provides powerful APIs for common system functionalities such as memory management, device configuration and provisioning, network protocol implementations, and others. In addition, it has easy interfacing to secure RESTful APIs, or message brokers (e.g., MQTT) for cloud integration.

Low Power –The solution supports tick-less modes of operation, and uses processor and transceiver low power and deep sleep modes to minimize energy usage.

Secure – ubiquiOS implements industry-standard protocols and ciphers such as TLS v1.2 with OCSP, AES, ECC, RC4, SHA-1, SHA-256, SHA-512, MD5 cryptographic hashes, Diffie-Hellman and RSA key management and client authentication by embedded certificate.

