

System Architecture

Processor Specifications:

ST Microelectronics STM32L151ZDT6 Low-Power ARM Processor.

Key Features:

- 32 MHz @ 238 uA/MHz
- 382 KB ECC Flash
- 48 KB ECC SRAM
- 12 KB ECC EEPROM
- LQFP144

Operating System:

ChibiOS/RT 2.4.3 RTOS

Key Features:

- 1.2-5.5 KiB Kernel Size
- preemptive scheduling, round-robin for like priorities
- 128 priority levels
- mutexes, semaphores, events, message queues
- thread-safe heap
- hardware abstraction layer with STM32L1 support