

EC19D, EC19W and EC32L 2.4GHz 802.11 b/g/n Wi-Fi Ready MCU Modules



The EC19D, EC19W and EC32L families of modules are the ultimate choice for product designers who want to integrate Wi-Fi into their network connected devices and appliances. The EC19D, EC19W and EC32L have the lowest power consumption, smallest footprint, and most comprehensive software libraries to make it easy to integrate and connect any device to the Internet of Things.



Resource	EC19D01	EC19W01	EC32L11	EC32L12	EC32L13	EC32L14	EC32L22	EC32L23	EC32L24	EC32L44
Processor	32bit	32bit	STM32F103RD ARM Cortex-M3 32bit	STM32F103RE ARM Cortex-M3 32bit	STM32F103RF ARM Cortex-M3 32bit	STM32F103RG ARM Cortex-M3 32bit	STM32F205RE ARM Cortex-M3 32bit	STM32F205RF ARM Cortex-M3 32bit	STM32F205RG ARM Cortex-M3 32bit	STM32F405RG ARM Cortex-M4 32bit
Clock Max	80MHz	80MHz	72MHz	72MHz	72MHz	72MHz	120MHz	120MHz	120MHz	168MHz
Flash for user apps		500KB	100KB	100KB	150KB	400KB	100KB	150KB	400KB	400KB
RAM for user apps	140KB	140KB	25KB	25KB	30KB	30KB	90KB	95KB	95KB	160KB
GPIOs	6x	6x	25x	25x	25x	25x	25x	25x	25x	25x
USART1	4Mbps	4Mbps	4.5Mbps	4.5Mbps	4.5Mbps	4.5Mbps	7.5Mbps	7.5Mbps	7.5Mbps	10.5Mbps
USART2			2.25Mbps	2.25Mbps	2.25Mbps	2.25Mbps	3.25Mbps	3.25Mbps	3.25Mbps	5.25Mbps
USART3			2.25Mbps	2.25Mbps	2.25Mbps	2.25Mbps	3.25Mbps	3.25Mbps	3.25Mbps	5.25Mbps
UART4							3.25Mbps	3.25Mbps	3.25Mbps	5.25Mbps
UART6							7.5Mbps	7.5Mbps	7.5Mbps	10.5Mbps
I2C			2x	2x	2x	2x	2x	2x	2x	2x
I2S			2x	2x	2x	2x	2x	2x	2x	2x
SPI	2x20Mbps	2x20Mbps	3x18Mbps	3x18Mbps	3x18Mbps	3x18Mbps	3x42Mbps	3x42Mbps	3x42Mbps	3x42Mbps
SDIO	1x	1x								
12b ADC			3x	3x	3x	3x	3x	3x	3x	3x
12b DAC			2x	2x	2x	2x	2x	2x	2x	2x
Temp Sensor			1x	1x	1x	1x	1x	1x	1x	1x
USB 1.1			1x	1x	1x	1x	1x	1x	1x	1x
CAN2.0A/B			1x	1x	1x	1x	2x	2x	2x	2x
JTAG	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
RNG							1x	1x	1x	1x
Serial2Wi-Fi	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes
Wi-Fi Direct	Yes	Yes								
OTA FW	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes
WPS w/PIN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WPA/WPA2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SSL/HTTPS	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Standby	10uA	10uA	2-4uA	2-4uA	2-4uA	2-4uA	2-4uA	2-4uA	2-4uA	3-5uA
Connected Idle ⁽¹⁾	2.3-2.6mA	2.3-2.6mA	2.3-2.6mA	2.3-2.6mA	2.3-2.6mA	2.3-2.6mA	2.3-2.6mA	2.3-2.6mA	2.3-2.6mA	2.3-2.6mA
TX/RX (TCP)	12/13 Mbps	12/13 Mbps	10/16 Mbps	10/16 Mbps	10/16 Mbps	10/16 Mbps	18 Mbps	18 Mbps	18 Mbps	22 Mbps
Dimensions	8x8x1.5mm	14x16x2.8mm	34x22x4mm	34x22x4mm	34x22x4mm	34x22x4mm	34x22x4mm	34x22x4mm	34x22x4mm	34x22x4mm

(1) DTIM:5

Module Selection Chart

Resource	EC19D01	EC19W01	EC32L11	EC32L12	EC32L13	EC32L14	EC32L22	EC32L23	EC32L24	EC32L44
ProbMe Config	Yes	Yes								
SPI2WiFi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DLNA Concurrent DMR/DMS	DMR	DMR	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Wi-Fi Client Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wi-Fi AP Mode	Yes	Yes	Yes (Open)	Yes (Open)	Yes	Yes	Yes	Yes	Yes	Yes
Wi-Fi AdHoc	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TCP/UDP Sockets	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DHCP Client/ Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cloud Svcs Support	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Antenna		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
US, FCC		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Europe, EC		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Canada, IC		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Japan, TELEC		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RoHS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes