

# BLE 5.0 / MESH SoC

Chipset	BX2416	BX2417	BX2418
Flash	256kB (2Mb)	256kB (2Mb)	256kB (2Mb)
MCU	32bit MCU	32bit MCU	32bit MCU
MCU Clock	32MHz ( Major ) Up to 48MHz	32MHz ( Major ) Up to 96MHz	32MHz ( Major ) Up to 96MHz
SRAM	64kB	208kB	208kB
ROM	128kB	128kB	128kB
LDO	1V_8 : Output 1.8V , 40mA	3V_1: Output 3.3V , 25mA 3V_2: Output 3.3V , 50mA 1V_8: Output 1.8V , 40mA	3V_1: Output 3.3V , 25mA 3V_2: Output 3.3V , 50mA 1V_8: Output 1.8V , 40mA
Package	SOP16 ( 9.9 mm x 3.9 mm )	QFN32 ( 4 mm x 4 mm )	QFN40 ( 5 mm x 5 mm )
GPIO	8	11	14
Debug	SWD	SWD	SWD
ADC ( ENOB = 10 )	Internal * 1	Ext. *1   Int. *1	Ext. *2   Int. *1
IIC	2	2	2
SPI	\	1	1
QSPI ( For Flash )	Internal * 1	Internal * 1	Internal * 1
PWM	5	5	5
UART	2	2	2
AES-128	Yes	Yes	Yes
Opt. Temp.	-25°C~+105°C	-25°C~+85°C	-25°C~+85°C
Data Rate	1M / 2M bps	1M / 2M bps	1M / 2M bps
TX PWR	+5 / 0 / -20 dBm	+8 / +2 / 0 dBm -2 / -10 / -20 / -30 dBm	+8 / +2 / 0 dBm -2 / -10 / -20 / -30 dBm
RX Sen.	-90dBm @1Mbps -86dBm @2Mbps	-93dBm @1Mbps -90dBm @2Mbps	-93dBm @1Mbps -90dBm @2Mbps
DC Character.	VDD: 2.3V ~ 3.6V ( Recommend : 3.3V )	VDD:2.3V ~ 5V ( Recommend : 4.3V )	VDD:2.3V ~ 5V ( Recommend : 4.3V )
	VDD:3.3V TX:30mA ( Base on +5dBm )	VDD:4.3V TX:4.4mA VDD:3.3V TX:5.6mA ( Base on DCDC_on 1.2V_-2dBm )	VDD:4.3V TX:4.4mA VDD:3.3V TX:5.6mA ( Base on DCDC_on 1.2V_-2dBm )
	VDD:3.3V RX:17mA ( Base on +5dBm )	VDD:4.3V RX:4.3mA VDD:3.3V RX:5.5mA	VDD:4.3V RX:4.3mA VDD:3.3V RX:5.5mA
	Average Current : 150uA (1.28S)	Average Current : 20uA (1.28S)	Average Current : 20uA (1.28S)
Application	Smart Lighting / Others	Pass-through / Remote controller / Others	Industrial control / Smart Home / Medical care

