

The description of the EUT

The EUT including CPU, RF module, camera battery, LCD, etc. The EUT supports GSM, WCDMA, LTE, also supports IEEE802.11a/b/g/n/ac, Bluetooth dual mode, The EUT can use battery to supply the power. Through LDO it produces 5V, 3.3V for each module.

For BT

Operation Frequency:	2402MHz to 2480MHz
Modulation Type:	GFSK, pi/4DQPSK, 8DPSK
Number of Channels:	79
Channel Spacing:	1MHz
Spectrum Spread Technology:	Frequency Hopping Spread Spectrum(FHSS)
Antenna Type:	PIFA Antenna
Antenna Gain:	0.95dBi

For BLE

Operation Frequency:	2402MHz to 2480MHz
Data rate:	1M
Modulation Type:	GFSK
Number of Channels:	40
Channel Spacing:	2MHz
Antenna Type:	PIFA Antenna
Antenna Gain:	0.95dBi

For 2.4G WIFI

Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz;802.11n(HT40): 2422MHz to 2452MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK);802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Number of Channels:	802.11b/g/n(HT20):11;802.11n(HT40):7
Channel Spacing:	5MHz
Antenna Type:	PIFA Antenna
Antenna Gain:	0.95dBi

For 5G WIFI

Operation Frequency/Number of channels (20MHz):	5180-5240MHz (4 Channels); U-NII-2A: 5260-5320MHz (4 Channels); U-NII-2C: 5500-5700MHz (11 Channels); U-NII-3: 5745-5825MHz (5 Channels)
Operation Frequency/Number of channels/(40MHz):	5190-5230MHz (2 Channels); U-NII-2A: 5270-5310MHz (2 Channels); U-NII-2C: 5510-5670MHz (5 Channels); U-NII-3: 5755-5795MHz (2 Channels)
Operation Frequency/Number of channels (80MHz):	5210MHz (1 Channel); U-NII-2A: 5290MHz (1 Channels); U-NII-2C: 5530-5610MHz (2 Channels); U-NII-3: 5775MHz (1 Channel)
Modulation Type:	OFDM (64QAM, 16QAM, QPSK, BPSK); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Channel Spacing:	802.11a/n/ac 20: 20MHz; 802.11n/ac 40: 40MHz; 802.11ac 80: 80MHz
DFS Function:	Slave without Radar detection
TPC Function:	Without TPC function
Antenna Type:	PIFA Antenna
Antenna Gain:	U-NII-1:4.85dBi, U-NII-2A:5.89dBi, U-NII-2C:4.24dBi, U-NII-3: 6.28dBi

For NFC

Operation Frequency:	13.56MHz
Modulation Type:	ASK
Antenna Type:	Loop Antenna

For GSM:

Support Network:	GPRS, EGPRS
Operation Frequency Band:	GSM850/PCS1900
Modulation Type:	GMSK for GPRS/EGPRS;
GPRS Class:	12
EGPRS Class:	12
Antenna Type:	PIFA Antenna
Antenna Gain:	GSM850:-4.43dBi; PCS1900:2.67dBi

For WCDMA

Support Network:	RMC, HSDPA, HSUPA
Operation Frequency Band:	UMTS FDD Band II/V
Modulation Type:	QPSK for WCDMA
Supported Channel Bandwidth:	5MHz for WCDMA
UMTS Power Class:	Level 3
Antenna Type:	PIFA Antenna
Antenna Gain:	WCDMA B2:2.67dBi;B5:-4.43dBi

For LTE

LTE Operation Frequency Band:	LTE B2/5/7/38
Modulation Type:	QPSK, 16QAM
LTE Power Class:	Level 3
Antenna Type:	PIFA Antenna
Antenna Gain:	LTE B2:2.67dBi; LTE B5:-4.43dBi; LTE B7:0.56dBi; LTE B38:0.8dBi

Remark: Although the hardware support a lot of WWAN bands, only GSM850,1900,WCDMA B2/5,LTE B2/5/7/38 are opened in the US market, other bands are disabled by software.