

# OPERATIONAL DESCRIPTION

The EUT is designed as “repeater device”. It is designed by way of utilizing the DSSS technology to achieve the system operation.

## The General Information of the Device

<b>Operation Frequency</b>	2405.00-2480.00MHz, (Channel Number: 16, Channel Frequency=2405+5(K-1), K=1, 2, 3 .....16)
<b>Main Chipset</b>	STM32F103RET6
<b>OSC</b>	32.768KHz, 8MHz
<b>RF Output Power</b>	14.04dBm(Max)
<b>Channel Spacing</b>	5MHz
<b>Modulation</b>	OQPSK
<b>Number of channels</b>	16
<b>Hardware Version</b>	V1.0
<b>Software Version</b>	N/A
<b>Antenna Designation</b>	Integrated Antenna
<b>Antenna Gain</b>	1.0dBi (Max.)
<b>Power Supply</b>	DC3.6V by (1/2 AA lithium Battery)

The equipment under test (EUT) is a transmitter of 2.405-2.480GHz repeater device.

The STM32F103RET6 TXpath produces an OQPSK-modulated signal using the analog front end and digital baseband. The area and power efficient Tx architecture uses a two-point modulation scheme to modulate the RF signal generated by the synthesizer. The modulated RF signal is fed to the integrated PA and then out of the STM32F103RET6.