## LSD4RF-25410N15\_Operational Description



2.4G Module is designed based on TI Transceiver CC2500 and CC2590.

The input and output buffer are both 64 Bytes with FIFO. The 3.3V DC power supply of the module is from the main board directly. And the main chip CC2500 contains several on-chip linear voltage regulators, which generate the supply voltage needed by low-voltage modules. There's no external power regulation circuit on the module. A 26MHz crystal is used on the module. It is a high performance 10mW SMD IOT wireless Transceiver that can be used in a wide range of short distance IOT communication. Transmission range is 60m. It's programmable with SPI interface. The frequency range is 2438.99~2458.98Mhz. It works with 2-FSK modulation on the control panel. The module is set default to Rx mode. Change the module to Idle mode and then change to Tx mode, the MCU can write the data to the cache of the module. Start the transmit in program, the data will be transmit from the module. After the transmit is completed, the PIN GDO0 of the module will set a pulse. When the MCU get the pulse, the program will set the module back to Rx mode.

The frequency of the internal PCB antenna is  $2400 \sim 2483.5$  MHz, the gain is  $-3 \sim 0$  dBi, the impedance is 500 hm and the VSWR is less than 2.