



Hoffsveien 70 c
0377 Oslo
Norway

(+47) 23 36 98 00

Technical Description CC2650MODA, FCC ID: ZAT26M1

The CC2650MODA is a PCB module for Texas Instruments' ultra-low power, multi-protocol, wireless MCU, CC2650. The module contains all required passive components, including a 32.768 kHz crystal, a 24 MHz crystal and a ceramic chip antenna.

The CC2650 radio includes a 4.8 GHz PLL running off the 24 MHz crystal oscillator. The PLL outputs the 2.4 GHz digitally modulated RF signal which is amplified in the IC-internal PA and then output on the ICs differential RF pins. The PA can be controlled from -20 dBm to 5 dBm output power.

On the module PCB the differential RF output is transformed to a single ended 50 ohm signal through a passive component (capacitor / inductor) balun. The output of the balun is passed through a T-filter to reduce harmonic emission and then connected to the onboard chip antenna.

The ceramic chip antenna on the module is WAN7020L246M03 ber from Onewave Electronic Co, Ltd. The antenna is soldered on the PCB and as such not replaceable by the end user.

The module is intended to be used with TI's *Bluetooth*® low energy stack running GFSK modulation at 1 Mbps data rate, or one of TI's IEEE 802.15.4 stacks running O-QPSK at 250 kbps data rate.