



Gaustadalléen 21
0349 Oslo
Norway

(+47) 23 36 98 00
(+47) 23 36 98 01

Technical Description

The CC2538-CC2592EM is a development tool for IEEE 802.15.4 solutions in the 2.4 GHz ISM band. The CC2538 is a System-on-Chip solution tailored for 2.4 GHz ZigBee applications. CC2592 is a PA/LNA front end for radios operating in the 2.4 GHz frequency band

The CC2538-CC2592EM board is equipped with a 2.4 GHz PCB antenna. The board does not have any form of housing or cover, other than an RF shield for the CC2592 chip. The CC2538-CC2592EM is an engineering development board and cannot be used in an end product.

The wireless control protocol is based on IEEE 802.15.4 at 2.4 GHz. The frequency range is 2405MHz to 2480MHz, with 5MHz channel spacing. The PHY layer uses a DSSS technique with a chip rate of 2Mbps and a data rate of 250kbps. The modulation format is half sine shaped O-QPSK.

The CC2592 LNA/PA has a single ended RF antenna terminal. On the CC2538-CC2592EM, this single ended terminal is connected to the antenna through a matching network to ensure a 50 ohm RF match at the antenna. The antenna gain is 3.3 dBi.