



Gaustadalléen 21
0349 Oslo
Norway

(+47) 22 95 85 44
(+47) 22 95 85 46

Technical Description

The Zlight2 is an evaluation board demonstrating the CC2531 chip from Texas Instruments used as an LED light controller. The board is powered through USB, receiving +5V DC through the micro USB connector and drawing up to 500mA under normal operation.

The wireless control protocol used is ZigBee Light Link, which employs an IEEE802.15.4 MAC at 2.4GHz. 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 CC2531 System on Chip has a differential RF output. On the Zlight2 board, this differential output is fed to a half wave dipole antenna through a simple filter to reduce harmonic radiation. The antenna is integrated on the board. The antenna gain is 2.15dBi. There is no single ended- or 50 ohm reference plane on the Zlight2 board, which means that standard RF measurement equipment cannot be connected to the board through a conductive path.