

Gaustadalléen 21 0349 Oslo Norway

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

Technical Description

The CC1180DB, see Figure 1, includes Texas Instruments' CC1180, which is a sub-1 GHz system-on-chip (SoC) designed for low power wireless applications. The CC1180 combines a sub-1 GHz transceiver and a single-cycle 8051 MCU, 32 kB of in-system programmable flash memory and 4 kB of RAM.

CC1180 has a balanced output (RF_N and RF_P), which is transformed to a single ended, 50 ohm signal through a passive component (capacitor/inductor) balun. The output of the balun is low pass filtered to attenuate harmonic radiation and then connected to a PCB antenna. For antenna performance please refer to design note DN024 (www.ti.com/lit/swra227).

The CC1180 on the CC1180DB needs to be programmed in order to operate within the 915 MHz frequency band, i.e. the user needs to configure the CC1180DB for operation in the 902-928 MHz frequency band using appropriate tools and software provided by TI.



Figure 1 CC1180DB