



MESHLE CCT Interface

Overview

MDBT-CCT – Bluetooth Module based on Nordic nRF52840 SoC Solution (Revision 2 IC) with pre-flashed MESHLE CCT (Tunable White) Interface Firmware. Suitable ideally for Light Control applications based on PWM signal. For the detailed module datasheet see [MDBT50Q-1MV2](#)

Features

Hardware

- BT5.4 qualified module designed based on Nordic nRF52840 SoC solution
- Compact size with 10.5 x 15.5 x 2.05 mm
- Complete BT5.4 / BT5.3 / BT5.2 / BT5.1 / BT5 low energy solution with integrated chip antenna
- Pre-Certified Module: FCC / IC / CE / Telec / KC / SRRC / NCC / WPC Certified & CE RED / RCM Compliant.
- 32-bit ARM® Cortex™ M4F CPU
- Supply: 1.7V – 5.5V
- Operating Temp: -40°C to +85°C

Software

- Password-protected Bluetooth mesh network
- Configuration and control via smartphone
- Adjustable PWM Signal
- Group control

- Timers
- Rules
- Adjustable start up state
- Firmware Update Over The Air (OTA)

- Support Bluetooth EnOcean-Sensors & Kinetic Wall Switches
- Remote Control*
- Voice Control*
- Cloud Dashboard*

*Gateway is required

Pinout

Pin-Label	Pin-Function	Pin-Name	Pin-Number	Input / Output
PWM0	Cold White	P0.13	37	OUT PWM
PWM1	Warm White	P0.14	36	OUT PWM
LED1	Info LED	P0.27	16	OUT
Soft Reset	Reset-/Program-Button	P0.11	27	IN (Pulled Up)
XL1*	External Oscillator	P0.00	17	
XL2*	External Oscillator	P0.01	18	
SWDIO	Debug-/Flash-Interface	SWDIO	51	
SWDCLK	Debug-/Flash-Interface	SWDCLK	53	
VDD*	+3V3	VDD	28	
VDDH*	+3V3	VDDH	30	
GND*	Ground	GND_1, GND_2, GND_3, GND_4, GND_5	1, 2, 15, 33, 55, GND	

Reference Schematics

MDBT50Q-1MV2 BLE Module

