



MESHLE Roller Shutter Interface

Overview

MDBT-Switch – Bluetooth Module based on Nordic nRF52840 SoC Solution (Revision 2 IC) with pre-flashed MESHLE Roller Shutter Interface Firmware. Suitable ideally for roller shutter control applications including position and slats angle. 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 / SRRRC / 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

| | | |
|--|---|---|
| <ul style="list-style-type: none">• Password-protected Bluetooth mesh network• Configuration and control via smartphone• Position Calibration• Slat Angle Control• Group control | <ul style="list-style-type: none">• Timers• Rules• Adjustable start up state• Firmware Update Over The Air (OTA) | <ul style="list-style-type: none">• Support Bluetooth EnOcean-Sensors & Wall Switches• Remote Control*• Voice Control*• Cloud Dashboard* |
|--|---|---|

*Gateway is required

Pinout

| Pin-Label | Pin-Function | Pin-Name | Pin-Number | Input / Output |
|------------|------------------------|---|--------------------------|-------------------|
| GPIO0 | Channel 1 | P0.13 | 37 | OUT |
| GPIO1 | Channel 2 | P0.14 | 36 | OUT |
| | | | | |
| BTN1 | Button 1 | P0.12 | 29 | IN (Pulled Up) |
| BTN2 | Button 2 | P0.24 | 48 | IN (Pulled Up) |
| | | | | |
| 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

