

[illegible]

LEDs

The schematic diagram illustrates the LED circuit. It features five LEDs (LED1 to LED5) connected in parallel to a common ground (M5). Each LED is driven by a microcontroller pin (PB4 to PB7) through a current-limiting resistor (R81 to R85). The resistors are 100 ohms, 5%, and R0603. The LEDs are labeled LED0603. Additionally, there are two more LEDs (LED6 and LED7) connected to V3D3 and VBUS respectively, through resistors R89 and R71, also labeled LED0603.

RF_CONN

The diagram illustrates the RF connection for the RF-Module. The connector J81 has the following connections:

- Pin 1: CE
- Pin 3: SCK
- Pin 5: MISO
- Pin 7: MISO
- Pin 2: CSN
- Pin 4: MOSI
- Pin 6: NRF_IRQ
- Pin 8: NRF_IRQ

The CSN, MOSI, and NRF_IRQ lines are connected to a common node that is also connected to capacitor C83 (0.1uF, 16V, C0603). This node is connected to the V3D3 power supply. Capacitor C84 (10uF, 10V, C0603) is connected between V3D3 and ground.

SWITCH

The diagram illustrates a 3-to-1 multiplexer circuit using three 74VHC14 inverters (S81, S82, S83) and two 74VHC04 inverters (S85, S84). The multiplexer selects between three inputs (PB1, PB3, PA8) based on a MODE signal. The selected input is connected to the VCCX pin of the 74VHC04 inverters. The 74VHC14 inverters are configured as buffers for the MODE signal. The 74VHC04 inverters are configured as buffers for the selected input. The output of the multiplexer is connected to the VCCX pin of the 74VHC04 inverters.

Left

Right

Power

The Power supply circuit diagram shows the following components and connections:

- Battery (BAT):** Connected to the VBAT pin of the switch (S86).
- Switch (S86):** A 2x3 switch that controls the power flow from the battery to the VBAT pin.
- Diode (C88):** A 10uF capacitor connected to the VBAT pin.
- VBAT:** The output of the switch and diode network.
- BAT_DET:** A voltage divider consisting of resistors R95 and R96, and a capacitor C91, connected to the BAT_DET pin.
- Diode (S1):** A diode connected to the VBAT pin.
- Capacitor (C87):** A 10uF capacitor connected to the VBAT pin.
- VBUS:** The output of the diode and capacitor network.
- VSD0:** A voltage divider consisting of resistors R94 and R96, and a capacitor C89, connected to the VSD0 pin.
- V3D3:** The output of the voltage divider and capacitor network.

