

USB-Micro Stecker

The diagram illustrates the electrical connections for a USB-Micro Stecker. The connector (J1) has the following pins and connections:

- SHIELD**: Connected to the shield of the cable.
- SHELL*4**: Connected to the shield of the cable.
- VBUS (1)**: Connected to the 5V power line.
- D- (2)**: Connected to the D- data line.
- D+ (3)**: Connected to the D+ data line.
- ID (4)**: Connected to the ID line.
- GND (5)**: Connected to the ground plane.

The power line (5V) is connected to the 5V pin of the connector through a series of components: a 0R resistor (R8), a 100nF capacitor (C22) connected to GND, and another 0R resistor (R9). A 1k resistor (R37) is connected to the ID pin and GND.

Energieversorgung

The diagram illustrates the power supply circuit for the microcontroller board. It features a 5V input connected to a 10uF capacitor (C1) and the VDD/VBAT pin (pin 4) of the MCP73831 (IC1). The PROG pin (pin 5) is connected to a 2k resistor (R1) and the VBAT pin (pin 3). The STAT pin (pin 1) is connected to GND. The VBAT pin (pin 3) is also connected to a 10uF capacitor (C2) and the VBAT pin of the LT1963EST-1.5 (IC2). The VBAT pin (pin 3) is connected to the IN pin (pin 1) of IC2. The OUT pin (pin 3) of IC2 is connected to the 3V3 output. The GND pin (pin 2) of IC2 is connected to GND. The 3V3 output is connected to a 10uF capacitor (C3), a 1uF capacitor (C4), and a 100nF capacitor (C5). The 3V3 output is also connected to the VBAT pin of the battery (X1-1).

USB-Verbindung

The diagram illustrates the USB connection for the VUB300 IC. The USB_BUS is connected to the D+, D-, and GND pins of the IC. The SD_BUS is connected to the SD_D0, SD_D1, SD_D2, SD_D3, SD_CLK, SD_CMD, SD_WP, and SD_NCD pins. The VUB300 IC is connected to a 3V3 supply and GND. Various capacitors (C16, C19, C15, C7, C9, C11, C14) and resistors (R4, R6) are shown. The VUB300 BUS is connected to the VUB_RESET pin.

Sheet: 1/3