

User LED & User Button

BOOT USB DFU:

- 1) Press UBTN button then Press RESET button
- 2) Keep pressing UBTN then Release RESET
- 3) Wait 1s then Release UBTN

PA4

1 JMP1-1

2.2K R8

ULED

GND

PA0

3 JMP1-2

10K R9

10K R12

UBTN

+3V3

BUTTON-2P-REINFORCE-3100060P1

BOOT0

The schematic diagram illustrates the USB shield circuit for the IP4220CZ6. The IP4220CZ6 chip is connected to the shield's pins as follows:

- VP (pin 5) is connected to SUPPLY\_VUSB.
- GND (pin 2) is connected to GND.
- I/O\_2 (pin 6) is connected to USB0\_D-.
- I/O\_3 (pin 4) is connected to USB1\_D+.
- I/O\_4 (pin 1) is connected to USB0\_D+.
- I/O\_5 (pin 3) is connected to USB1\_D-.

The shield's pins are connected to the USB connector pins as follows:

- PB12 (pin 1) is connected to USBID.
- USB1D\_P (pin 2) is connected to USB1\_D+.
- USB1D\_N (pin 3) is connected to USB1\_D-.
- USB0D\_P (pin 4) is connected to USB0\_D+.
- USB0D\_N (pin 5) is connected to USB0\_D-.

The shield also includes two 32.768KHz crystals (Y1 and Y2) and two 27pF capacitors (C1 and C2). The shield is labeled 'MISC' and 'USB'.

Power Pins + Power Supply LD1117 (3.3V)

The diagram illustrates the power supply configuration for the LD1117 (3.3V) regulator. It shows the connection of power pins (JP6, JP7, JP10, JP9, JP8, JP11) to GND and 3V3. The USB PWR (VBUS) input is connected to the 5V input of the LD1117 regulator. The regulator's output is connected to the 3V3 output, which is then connected to the 3V3 Power ON pin. The regulator is also connected to a 3.3k resistor (R5) and a 100nF capacitor (C12) at the input, and a 2.2k resistor (R6) and a 10uF capacitor (C10) at the output.

[illegible]