

The diagram illustrates the electrical connections for the MAX30101 Pulse Oximeter and Heart Rate Sensor module. The central component is the MAX30101EFD+ chip (U1). The connections are as follows:

- I2C Interface:** The SSR_SCL and SSR_SDA pins are connected to the SCL and SDA pins of the chip. Pull-up resistors R3 and R2 (4k7) are connected to the SCL and SDA lines, respectively, to a +1V8 supply.
- Power and Ground:** The PGND pin is connected to GND. The VDD pin is connected to a +5V supply. The VLED+ pin is connected to a +5V supply and a 100nF capacitor (C2) to GND. The VLED- pin is connected to GND.
- Heart Rate Output:** The HR_INT pin is connected to a 4.7k resistor (R1) and a +1V8 supply.
- Other Pins:** Pins 1, 2, 3, 4, 5, 6, and 7 are marked as N.C. (Not Connected).

[illegible]

The diagram shows an LDO regulator circuit. The input is +3.3V connected to pin 1 (IN). Pin 3 (EN) is also connected to +3.3V. Pin 4 (NC) is marked with an 'X'. The output of the regulator (pin 5, OUT) is connected to +1V8. Pin 2 (GND) is connected to a ground symbol. A capacitor C5 (1uF) is connected between the output (+1V8) and ground.

Connectors

The diagram illustrates a connector J1 with 5 pins. The pins are labeled 1 through 5. The connections are as follows:

- Pin 1: +3.3V
- Pin 2: RST
- Pin 3: HOST_SCL
- Pin 4: HOST_SDA
- Pin 5: GND