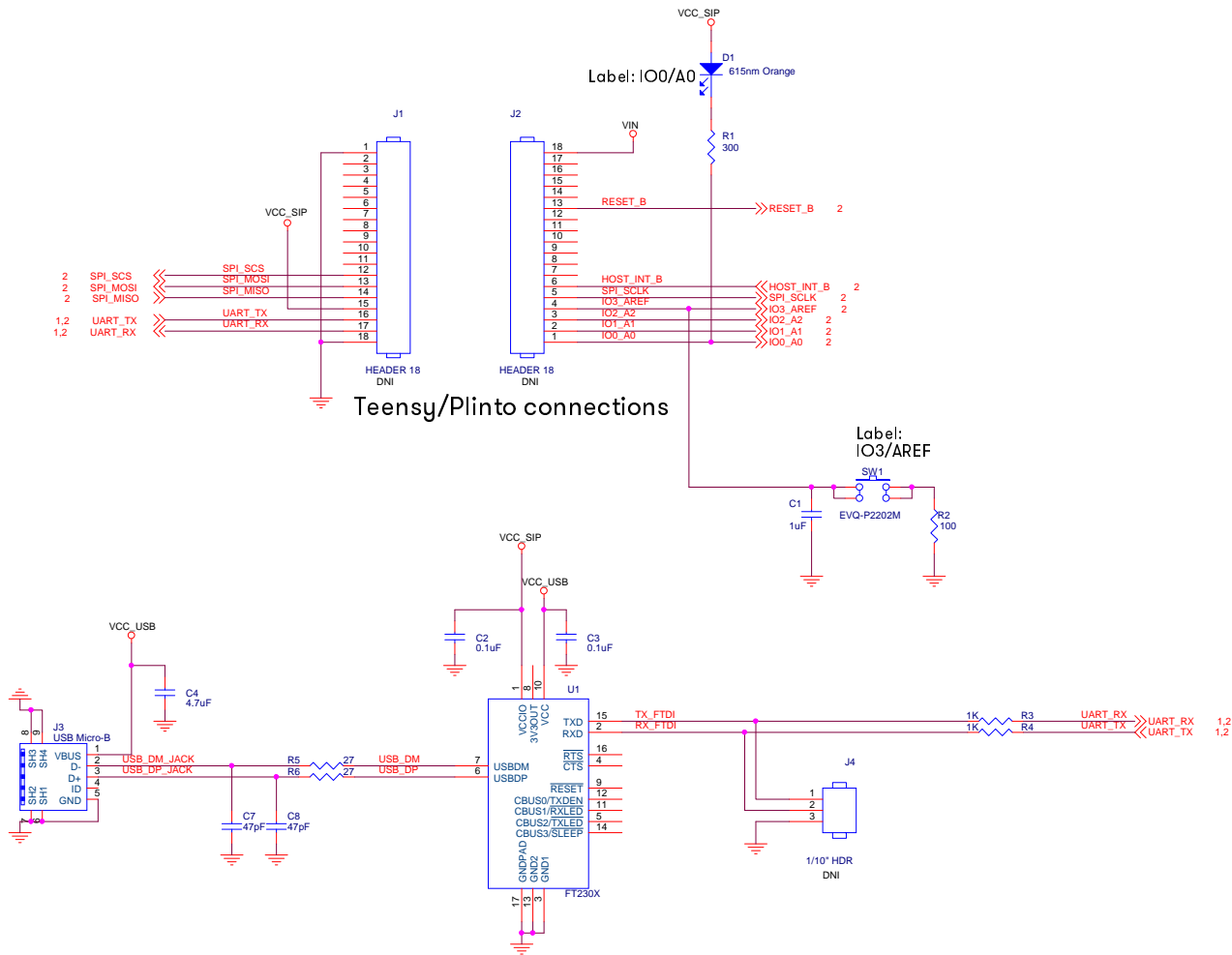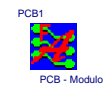# Afero Modulo-1

This board is designed to connect directly to a Teensy 3.1 board. It can also be attached to standard Arduino Uno shields by using the Afero Plinto adapter board.

VCC_SIP

Label: IO0/A0

D1
615nm Orange

VIN

J1   J2

R1
300

VCC_SIP

RESET_B   RESET_B   2

SPI_SCS   SPI_SCS
SPI_MOSI   SPI_MOSI
SPI_MISO   SPI_MISO

UART_TX   UART_TX
UART_RX   UART_RX

HOST_INT_B   HOST_INT_B   2
SPI_SCLK   SPI_SCLK   2
IO3_AREF   IO3_AREF   2
IO2_A2   IO2_A2   2
IO1_A1   IO1_A1   2
IO0_A0   IO0_A0   2

HEADER 18   HEADER 18
DNI   DNI

Teensy/Plinto connections

Label:
IO3/AREF

SW1

C1   R2
1uF   EVQ-P2202M 100

VCC_SIP

VCC_USB

VCC_USB

C2   C3
0.1uF   0.1uF

C4
4.7uF

U1

VCCIO 3V3OUT VCC

TXD   TX_FTDI   UART_RX   UART_RX   1,2
RXD   RX_FTDI   UART_TX   UART_TX   1,2

1K   R3
1K   R4

RTS
CTS

J3
USB Micro-B

R5   27   USB_DM
R6   27   USB_DP

VBUS
D-   USB_DM_JACK
D+   USB_DP_JACK
ID
GND

USBDM
USBDP

RESET
CBUS0/TXDEN
CBUS1/RXLED
CBUS2/TXLED
CBUS3/SLEEP

GNDPAD
GND2
GND1

FT230X

C7   C8
47pF 47pF

J4

1/10" HDR
DNI

USB<>UART interface

PCB1

PCB - Modulo

VIN

VCC_USB

BAV70
D2

U2

IN   OUT
EN   NC
GND

VCC_SIP

C5
1uF

C6
4.7uF,10V

3.3V,300mA

LDO

R8   0   ANT_TRACE

L2
4.7nH

L3
4.7nH
DNI

VCC_SIP

C9   C10   C11
12pF   0.1uF   22uF

RESET_B   1

VCC_SIP

R9
10K

U3

| 1 | HOST_INT_B | HOST_INT_B | HOST_INT_B | VCC | 6 |

RF ANT OUT   17   RF

IO0/A0   2   IO0_A0   IO0_A0   1
IO1/A1   3   IO1_A1   IO1_A1   1
IO2/A2   4   IO2_A2   IO2_A2   1
IO3/AREF 5   IO3_AREF IO3_AREF 1

1   SPI_MISO   SPI_MISO   7   SPI_MISO
1   SPI_SCS   SPI_SCS   8   SPI_SCS
1   SPI_SCLK   SPI_SCLK   9   SPI_SCLK
1   SPI_MOSI   SPI_MOSI   10   SPI_MOSI

RESET_B   19   RESET_B   RESET_B

J6

4
3
2
1

4PADS

1   UART_RX   UART_RX   14   DBG UART RX   RES1   12   TP1
1   UART_TX   UART_TX   15   DBG UART TX   RES2   13   TP2
RES3   20   FACT

C12
1nF
DNI

R10
0

VCC_SIP

GND1 GND2 GND3 GND4 GND5 GND6 GND7
11 16 18 21 22 23 24

ASR-1

Afero module