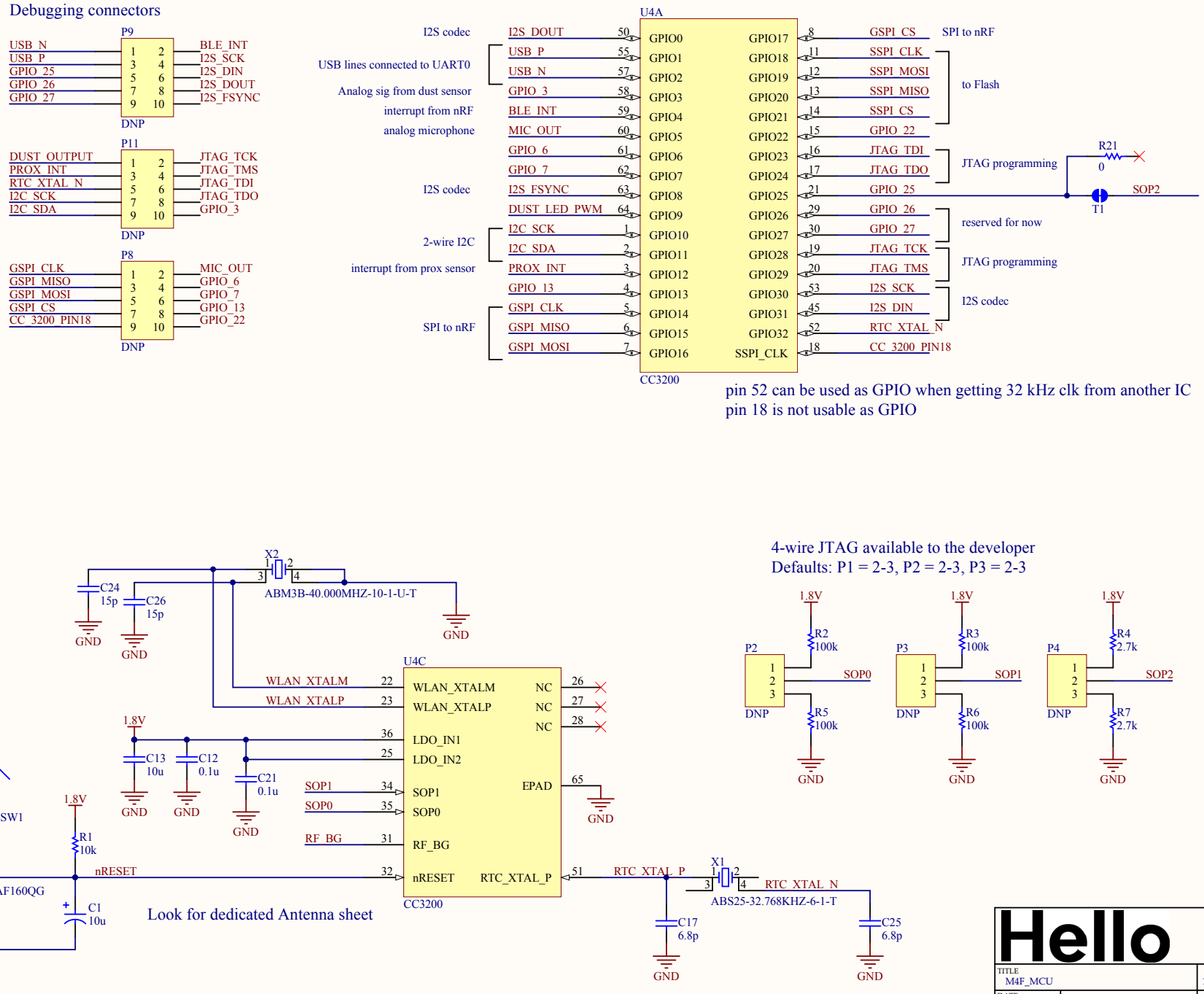
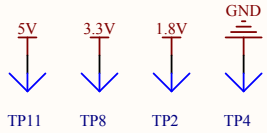

Debugging connectors
P9
USB_N
USB_P
GPIO_25
GPIO_26
GPIO_27
BLE_INT
I2S_SCK
I2S_DIN
I2S_DOUT
I2S_FSYNC
DNP
P11
DUST_OUTPUT
PROX_INT
RTC_XTAL_N
I2C_SCK
I2C_SDA
JTAG_TCK
JTAG_TMS
JTAG_TDI
JTAG_TDO
GPIO_3
DNP
P8
GSPI_CLK
GSPI_MISO
GSPI_MOSI
GSPI_CS
CC_3200_PIN18
MIC_OUT
GPIO_6
GPIO_7
GPIO_13
GPIO_22
DNP
U4A
I2S codec
USB lines connected to UART0
Analog sig from dust sensor
interrupt from nRF
analog microphone
I2S codec
2-wire I2C
interrupt from prox sensor
SPI to nRF
I2S_DOUT
USB_P
USB_N
GPIO_3
BLE_INT
MIC_OUT
GPIO_6
GPIO_7
I2S_FSYNC
DUST_LED_PWM
I2C_SCK
I2C_SDA
PROX_INT
GPIO_13
GSPI_CLK
GSPI_MISO
GSPI_MOSI
GPIO0
GPIO1
GPIO2
GPIO3
GPIO4
GPIO5
GPIO6
GPIO7
GPIO8
GPIO9
GPIO10
GPIO11
GPIO12
GPIO13
GPIO14
GPIO15
GPIO16
GPIO17
GPIO18
GPIO19
GPIO20
GPIO21
GPIO22
GPIO23
GPIO24
GPIO25
GPIO26
GPIO27
GPIO28
GPIO29
GPIO30
GPIO31
GPIO32
SSPI_CLK
GSPI_CS
SSPI_CLK
SSPI_MOSI
SSPI_MISO
SSPI_CS
GPIO_22
JTAG_TDI
JTAG_TDO
GPIO_25
GPIO_26
GPIO_27
JTAG_TCK
JTAG_TMS
I2S_SCK
I2S_DIN
RTC_XTAL_N
CC_3200_PIN18
SPI to nRF
to Flash
JTAG programming
reserved for now
JTAG programming
I2S codec
R21
0
T1
SOP2
CC3200
pin 52 can be used as GPIO when getting 32 kHz clk from another IC
pin 18 is not usable as GPIO
4-wire JTAG available to the developer
Defaults: P1 = 2-3, P2 = 2-3, P3 = 2-3
P2
P3
P4
R2 100k
R3 100k
R4 2.7k
R5 100k
R6 100k
R7 2.7k
SOP0
SOP1
SOP2
DNP
1.8V
GND
X2
ABM3B-40.000MHZ-10-1-U-T
C24 15p
C26 15p
U4C
WLAN_XTALM
WLAN_XTALP
LDO_IN1
LDO_IN2
SOP1
SOP0
RF_BG
nRESET
NC
EPAD
RTC_XTAL_P
C13 10u
C12 0.1u
C21 0.1u
TP1
TP3
SW1
R1 10k
C1 10u
TL3700AF160QG
Look for dedicated Antenna sheet
X1
ABS25-32.768KHZ-6-1-T
RTC_XTAL_N
C17 6.8p
C25 6.8p
CC3200
Hello
TITLE
M4F_MCU
REV
1
DATE
7/11/2014
DRAWN BY
D. Fusi
SHEET 1 OF 6

H1 Hole H4 Hole H2 Hole H3 Hole

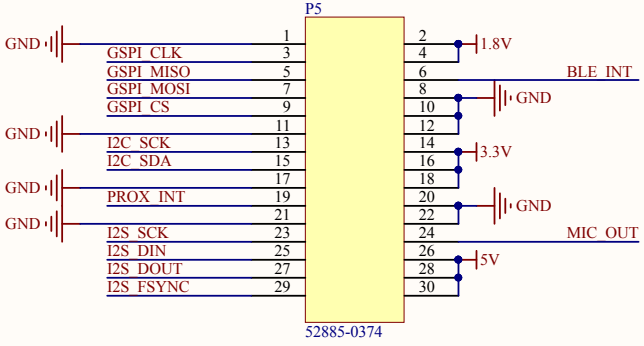
mounting holes

SOP2 pull-up from ID line. Needed to reprogram the device from USB

R22 brings voltage down to 1.8V

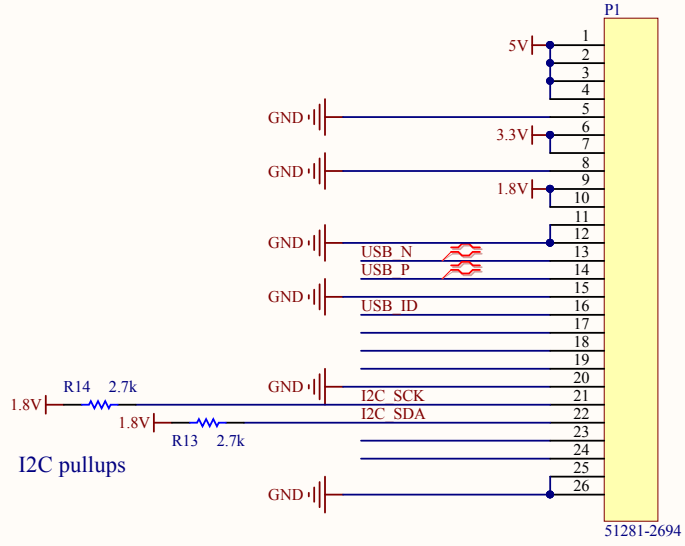


to the top board



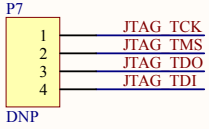
Connect UART1 to UART on nRF

to the bottom board



I2C pullups

programming / debugging connectors



Bring out these signals on a ribbon cable:

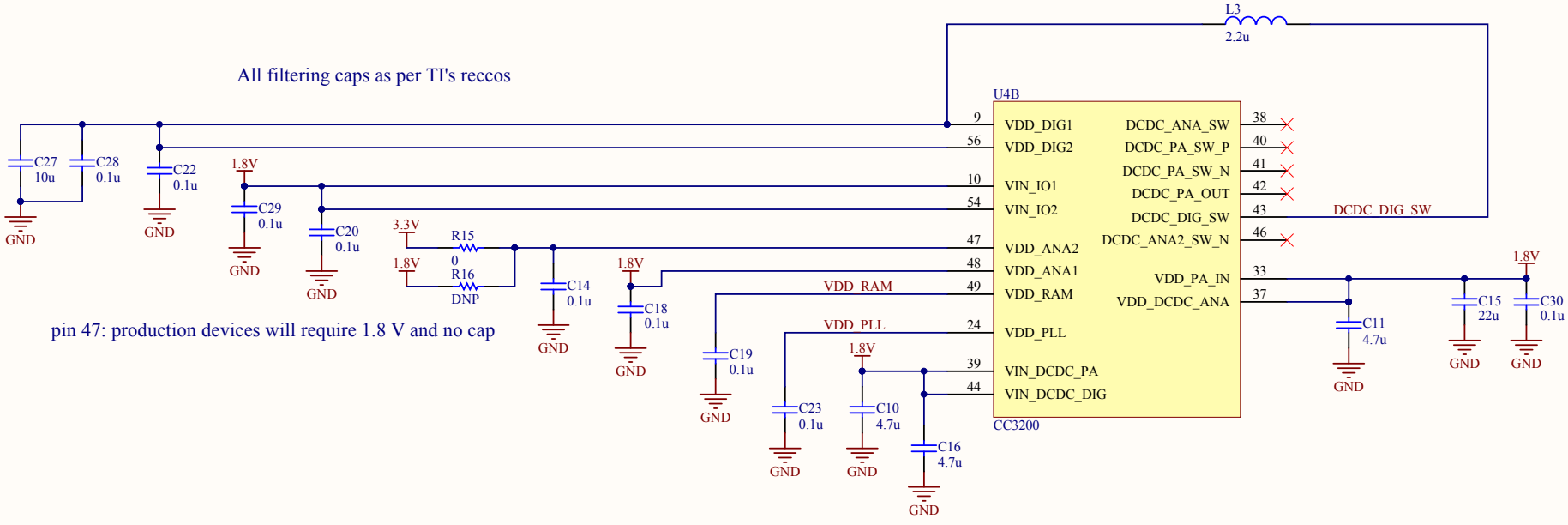
1.8 V, GND

nRF 2-JTAG and UART

CC3200 4-JTAG and UART

Hello

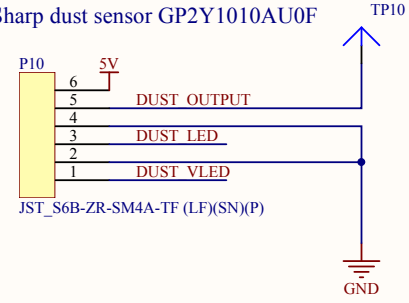
TITLE: Morpheus_middle		REV: 1
DATE: 7/22/2014	DRAWN BY: D. Fusi	SHEET 2 OF 6

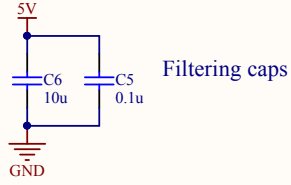


Hello

TITLE: M4F_MCU_Power	REV: 1
DATE: 7/17/2014	DRAWN BY: D. Fusi
	SHEET 3 OF 6

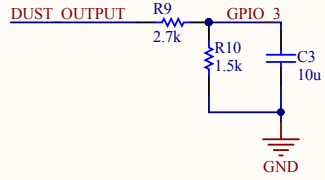
Connector for Sharp dust sensor GP2Y1010AU0F



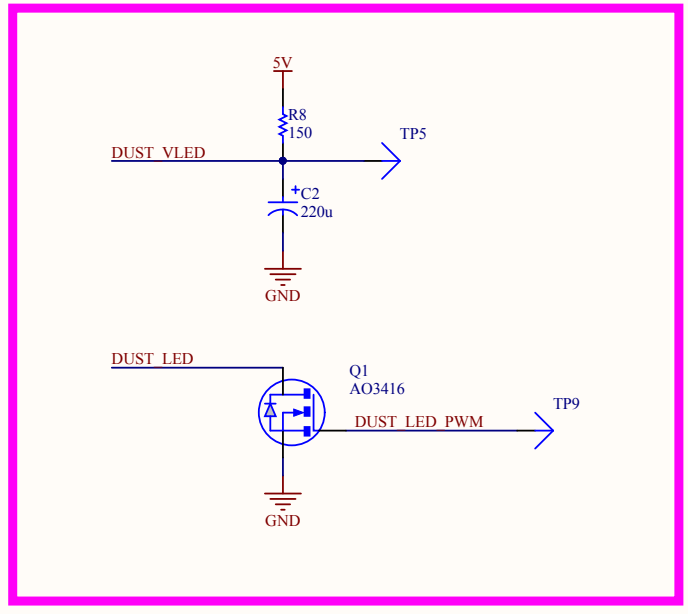


Filtering caps

level shifting from 4V to 1.8V, plus anti-aliasing filter

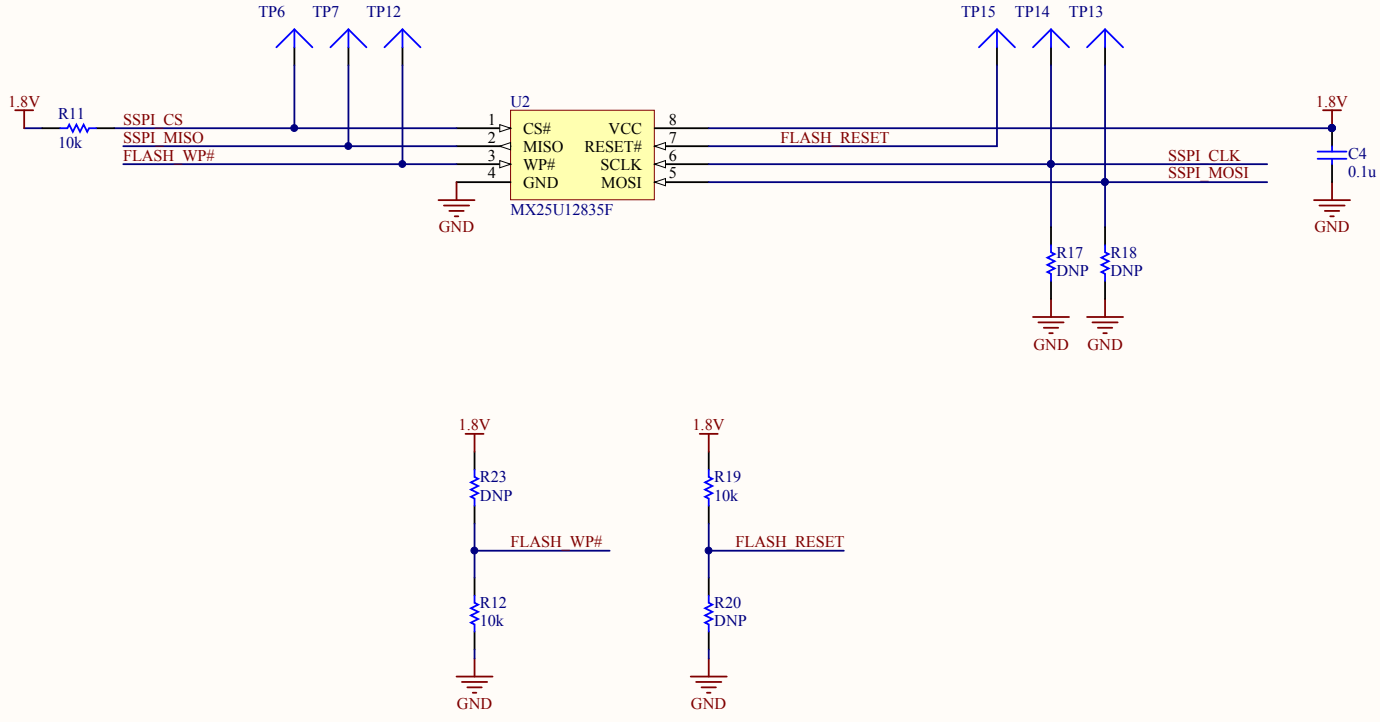


As on the GP2Y1010 datasheet



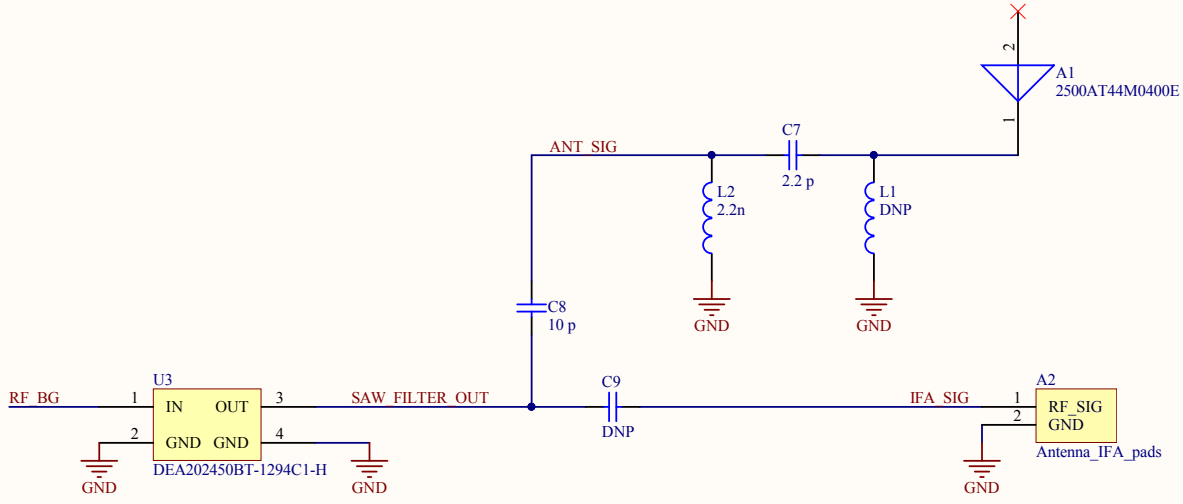
Hello

TITLE: Air_quality		REV: 1
DATE: 7/17/2014	DRAWN BY: D. Fusi	SHEET 4 OF 6



Datasheet is unclear, so for now we pull reset high and WP low

Hello			
TITLE: Flash memory			REV: 1
DATE: 7/17/2014	DRAWN BY: D. Fusi		SHEET 5 OF 6



Hello

TITLE: M4F_MCU_Antennas	REV: 1
DATE: 7/17/2014	DRAWN BY: D. Fusi
	SHEET 6 OF 6