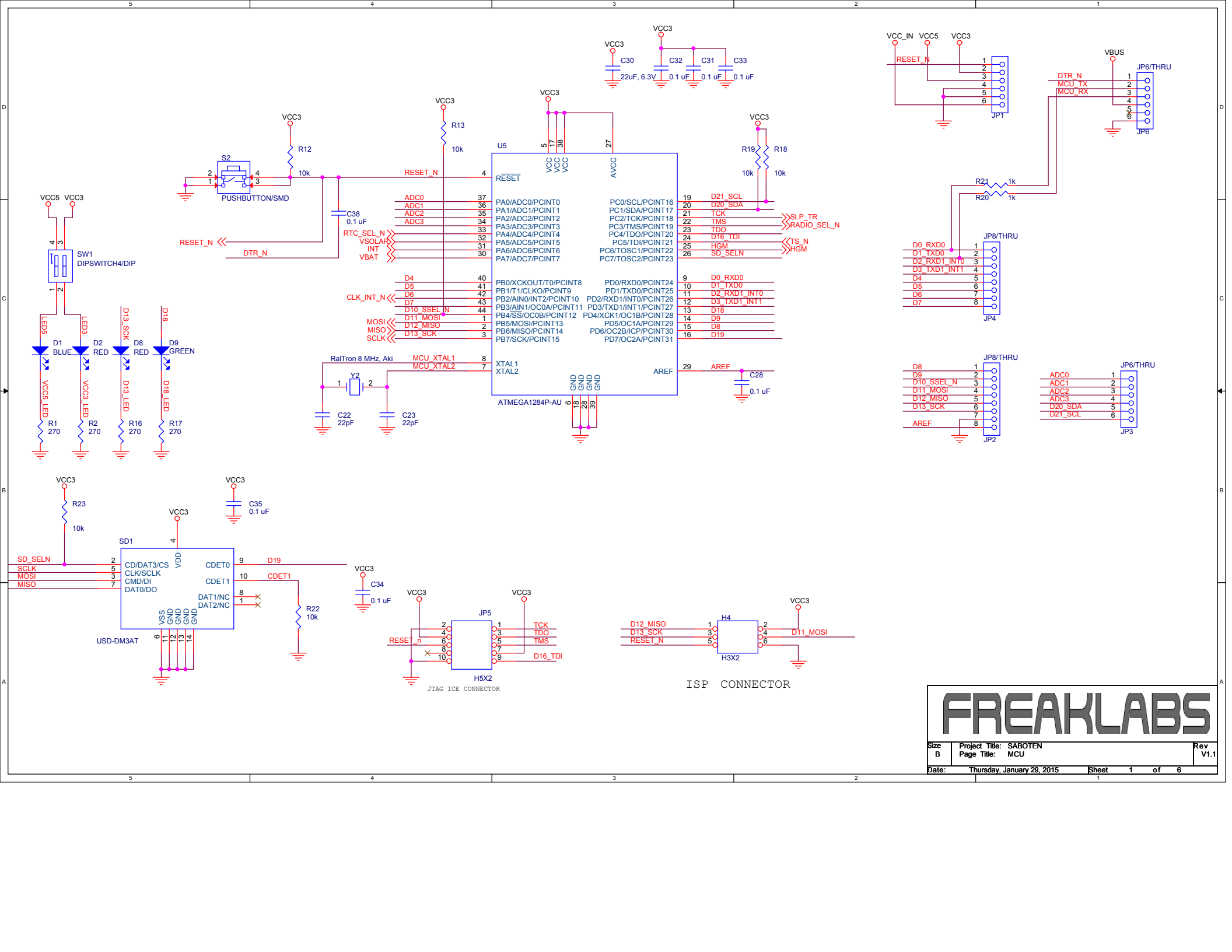
VCC3
C30
22uF, 6.3V
C32
0.1 uF
C31
0.1 uF
C33
0.1 uF
VCC_IN
VCC5
RESET_N
JP1
VBUS
DTR_N
MCU_TX
MCU_RX
JP6/THRU
JP6
R13
10k
R12
10k
S2
PUSHBUTTON/SMD
C38
0.1 uF
U5
RESET
R19
10k
R18
10k
R21
1k
R20
1k
JP8/THRU
JP4
D0_RXD0
D1_TXD0
D2_RXD1_INT0
D3_TXD1_INT1
D4
D5
D6
D7
SW1
DIPSWITCH4/DIP
LED5
LED3
D13_SCK
D18
D1
BLUE
D2
RED
D8
RED
D9
GREEN
VCC5_LED
VCC3_LED
D13_LED
D18_LED
R1
270
R2
270
R16
270
R17
270
ADC0
ADC1
ADC2
ADC3
RTC_SEL_N
VSOLAR
INT
VBAT
DTR_N
D4
D5
D6
D7
D10_SSEL_N
D11_MOSI
D12_MISO
D13_SCK
CLK_INT_N
MOSI
MISO
SCLK
PA0/ADC0/PCINT0
PA1/ADC1/PCINT1
PA2/ADC2/PCINT2
PA3/ADC3/PCINT3
PA4/ADC4/PCINT4
PA5/ADC5/PCINT5
PA6/ADC6/PCINT6
PA7/ADC7/PCINT7
PB0/XCKOUT/T0/PCINT8
PB1/T1/CLKO/PCINT9
PB2/AIN0/INT2/PCINT10
PB3/AIN1/OC0A/PCINT11
PB4/SS/OC0B/PCINT12
PB5/MOSI/PCINT13
PB6/MISO/PCINT14
PB7/SCK/PCINT15
PC0/SCL/PCINT16
PC1/SDA/PCINT17
PC2/TCK/PCINT18
PC3/TMS/PCINT19
PC4/TDO/PCINT20
PC5/TDI/PCINT21
PC6/TOSC1/PCINT22
PC7/TOSC2/PCINT23
PD0/RXD0/PCINT24
PD1/TXD0/PCINT25
PD2/RXD1/INT0/PCINT26
PD3/TXD1/INT1/PCINT27
PD4/XCK1/OC1B/PCINT28
PD5/OC1A/PCINT29
PD6/OC2B/ICP/PCINT30
PD7/OC2A/PCINT31
D21_SCL
D20_SDA
TCK
TMS
TDO
D16_TDI
HGM
SD_SELN
SLP_TR
RADIO_SEL_N
TS_N
D19
D18
D9
D8
D1_TXD0
D2_RXD1_INT0
D3_TXD1_INT1
RalTron 8 MHz, Aki
MCU_XTAL1
MCU_XTAL2
Y2
C22
22pF
C23
22pF
XTAL1
XTAL2
AREF
C28
0.1 uF
ATMEGA1284P-AU
JP8/THRU
JP2
D8
D9
D10_SSEL_N
D11_MOSI
D12_MISO
D13_SCK
AREF
JP6/THRU
JP3
ADC0
ADC1
ADC2
ADC3
D20_SDA
D21_SCL
R23
10k
SD1
SD_SELN
SCLK
MOSI
MISO
CD/DAT3/CS
CLK/SCLK
CMD/DI
DAT0/DO
VDD
CDET0
CDET1
DAT1/NC
DAT2/NC
VSS
GND
USD-DM3AT
C35
0.1 uF
C34
0.1 uF
R22
10k
JP5
RESET_n
H5X2
JTAG ICE CONNECTOR
H4
H3X2
D12_MISO
D13_SCK
RESET_N
D11_MOSI
ISP CONNECTOR
FREAKLABS
Size
B
Project Title: SABOTEN
Page Title: MCU
Rev
V1.1
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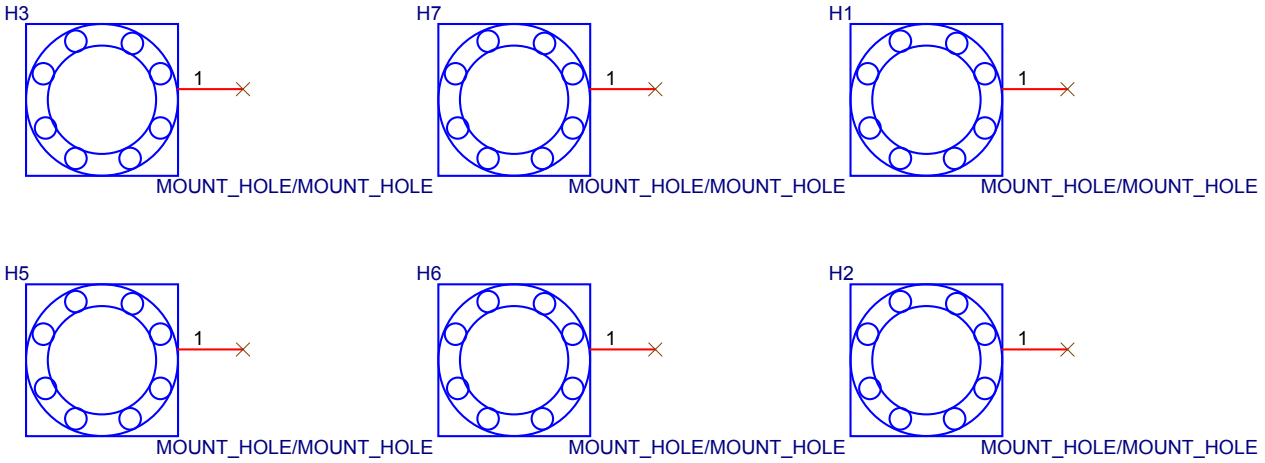

FREAKLABS

Size	Project Title: SABOTEN	Rev
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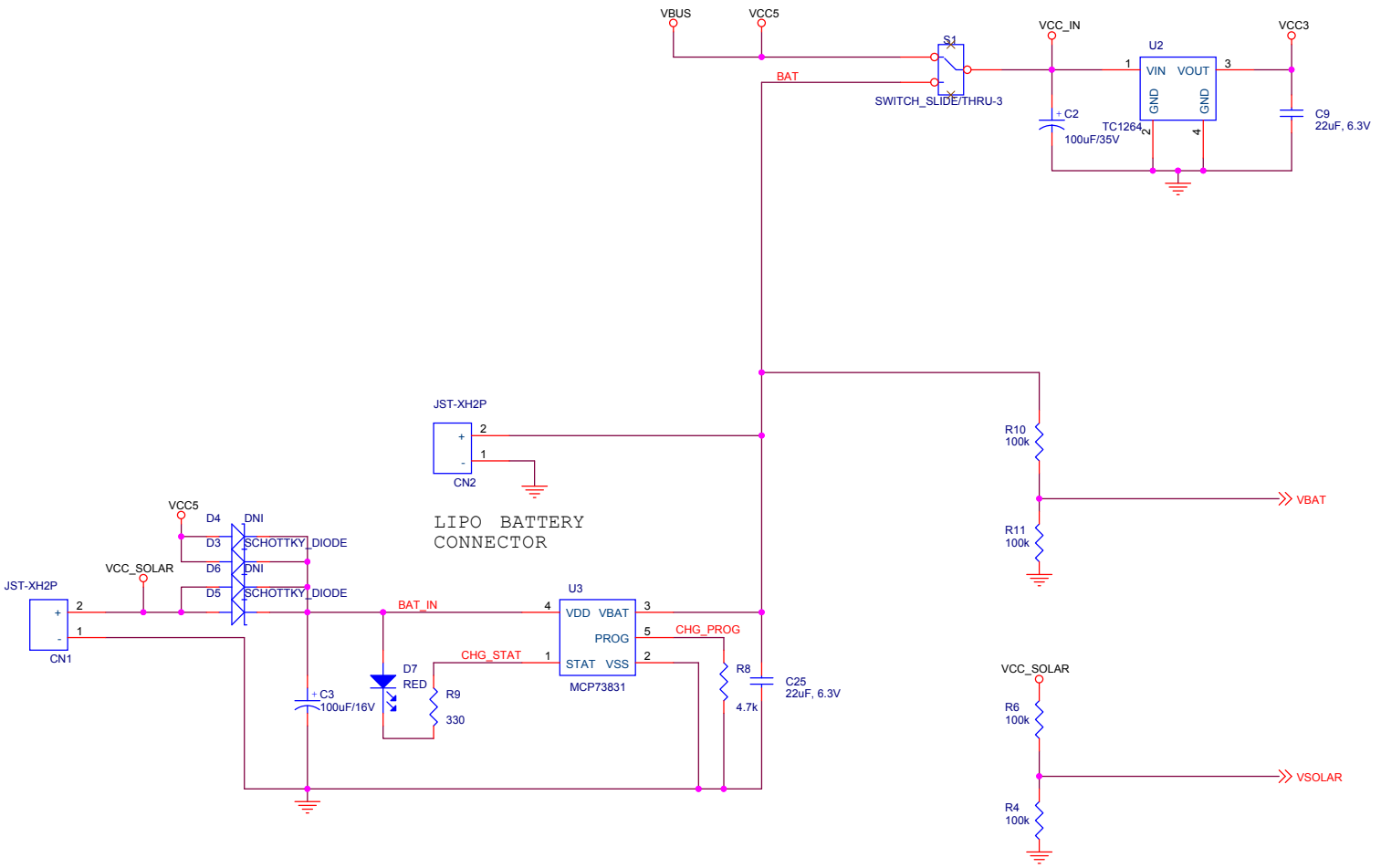
Date: Thursday, January 29, 2015	Sheet 2 of 6	



FREAKLABS

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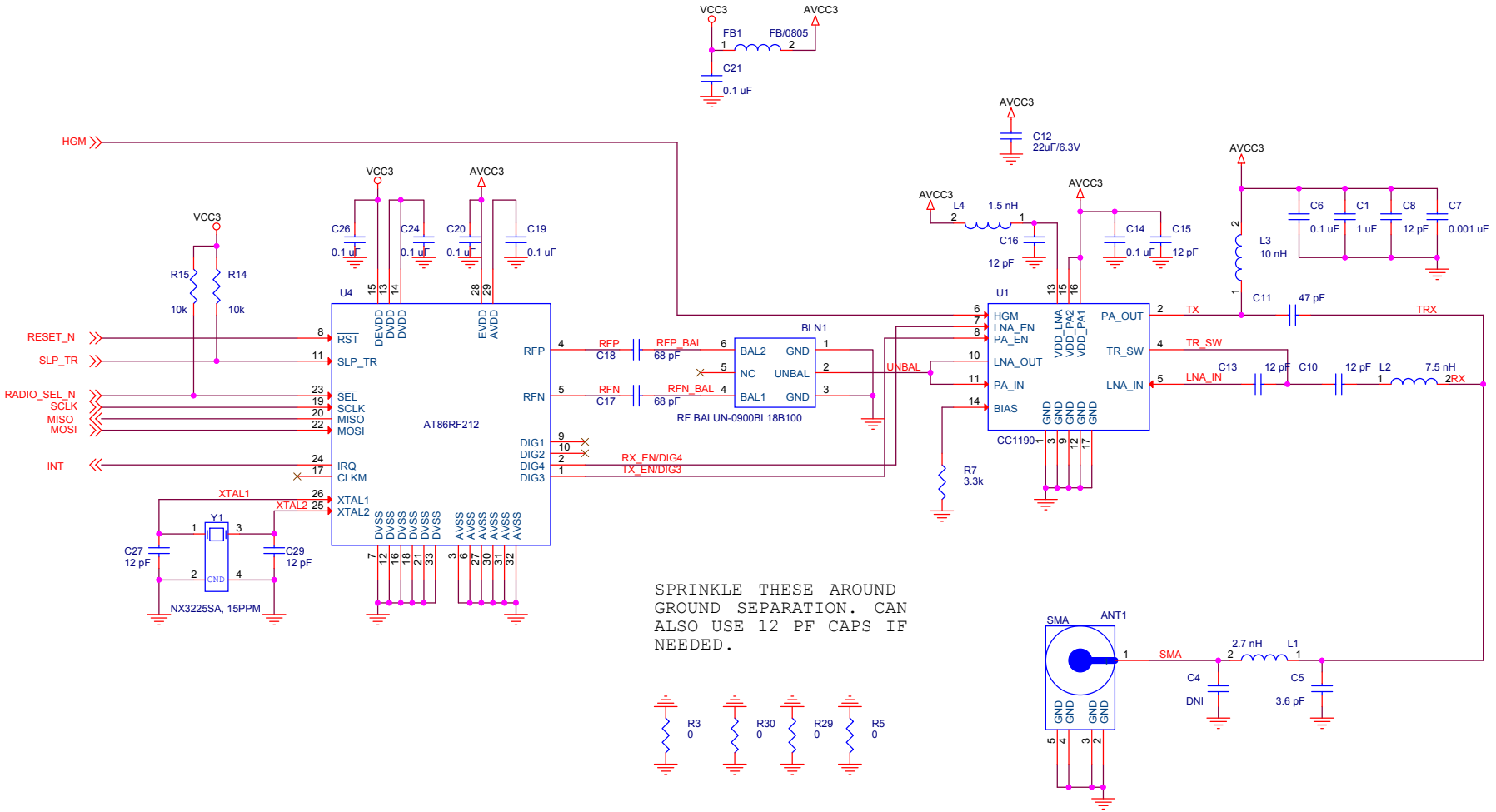
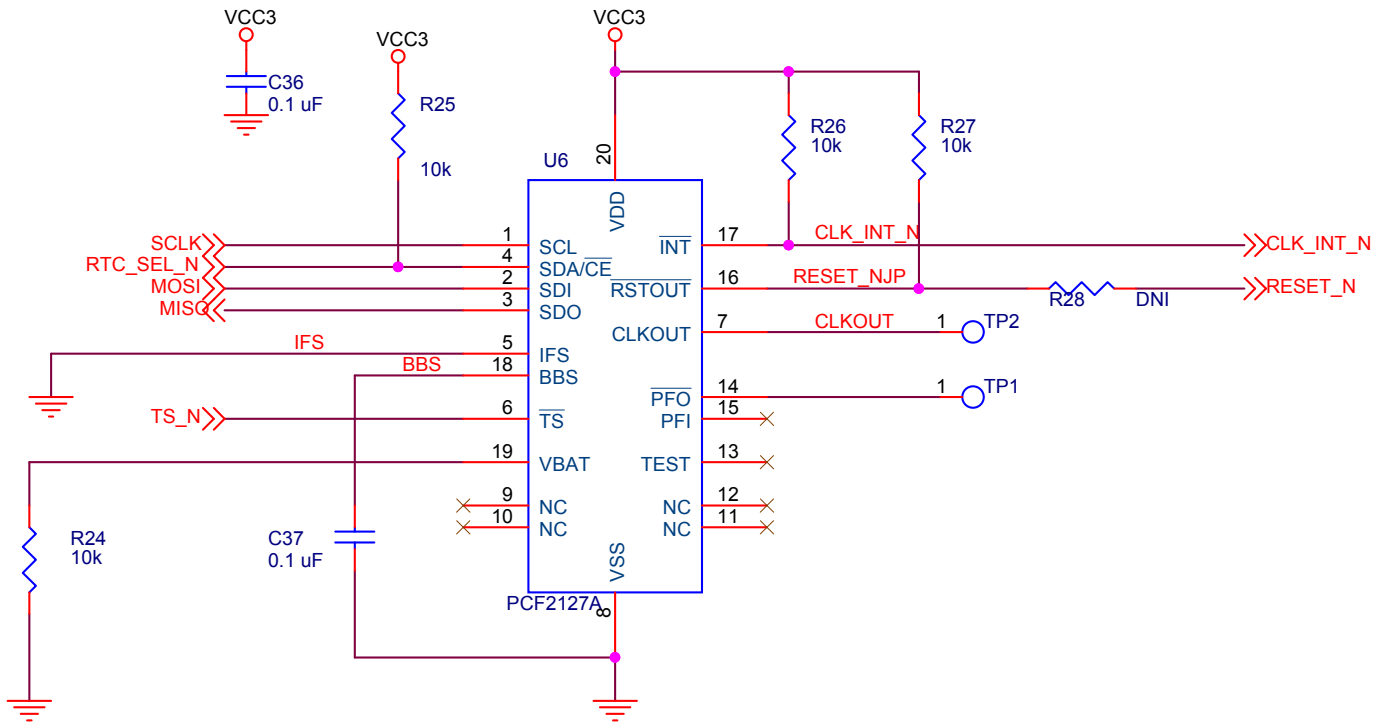
Date: Thursday, January 29, 2015	Sheet 3 of 6	



SPRINKLE THESE AROUND GROUND SEPARATION. CAN ALSO USE 12 PF CAPS IF NEEDED.

FREAKLABS

Size	Project Title: SABOTEN	Rev
B	Page Title: RADIO	V1.1
Date: Thursday, January 29, 2015	Sheet 4 of 6	



FREAKLABS

Size	Project Title: SABOTEN	Rev
A	Page Title: RTC	V1.1
Date: Thursday, January 29, 2015	Sheet 5 of 6	