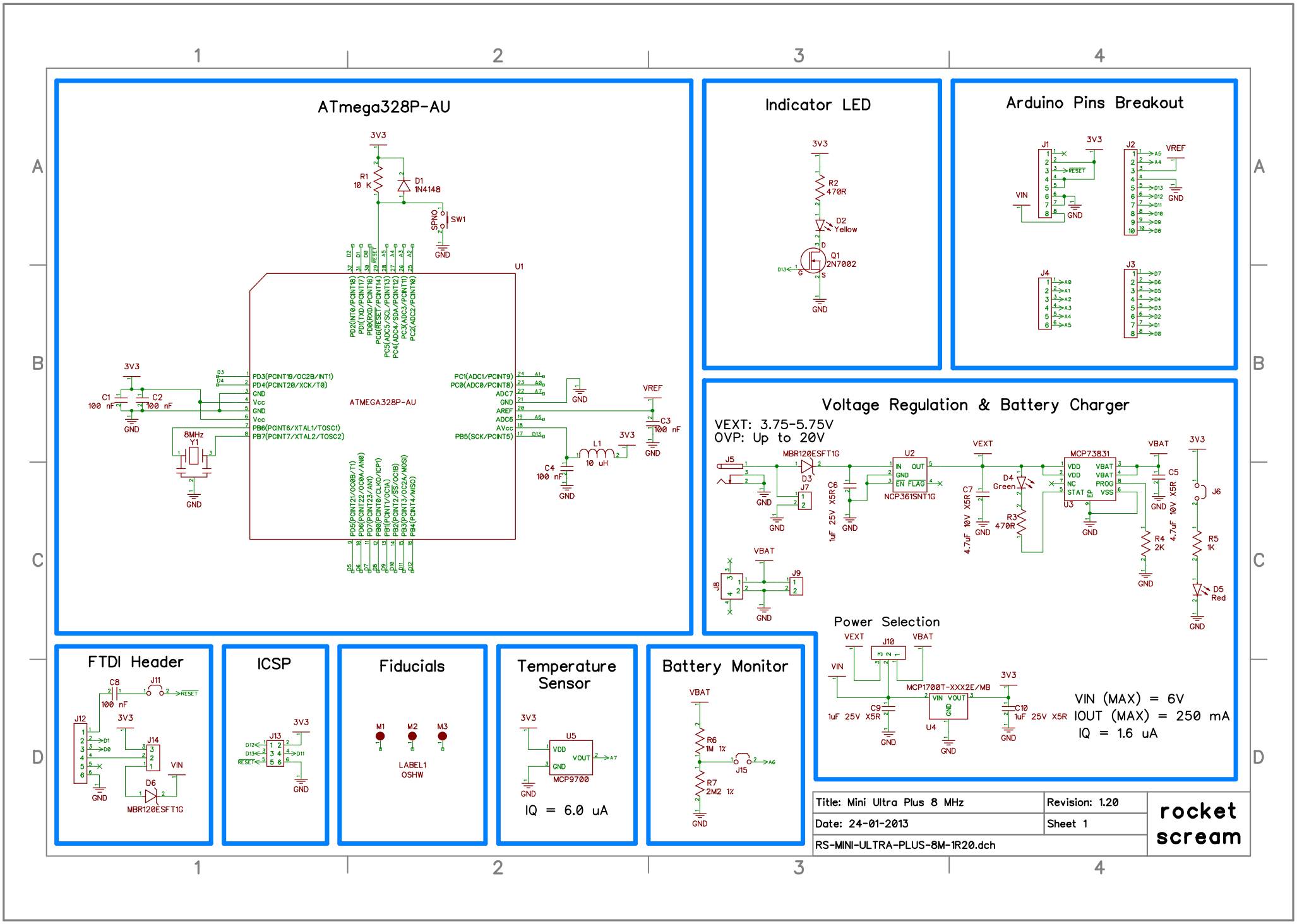
ATmega328P-AU
3V3
R1
10 K
D1
1N4148
SW1
SPNO
GND
U1
ATMEGA328P-AU
PD3(PCINT19/OC2B/INT1)
PD4(PCINT20/XCK/T0)
GND
Vcc
Vcc
PB6(PCINT6/XTAL1/TOSC1)
PB7(PCINT7/XTAL2/TOSC2)
PC1(ADC1/PCINT9)
PC0(ADC0/PCINT8)
ADC7
GND
AREF
ADC6
AVcc
PB5(SCK/PCINT5)
C1
100 nF
C2
100 nF
8MHz
Y1
VREF
C3
100 nF
C4
100 nF
L1
10 uH
Indicator LED
R2
470R
D2
Yellow
Q1
2N7002
Arduino Pins Breakout
J1
J2
J3
J4
VIN
VREF
Voltage Regulation & Battery Charger
VEXT: 3.75-5.75V
OVP: Up to 20V
J5
MBR120ESFT1G
D3
J7
C6
1uF 25V X5R
U2
NCP361SNT1G
VEXT
C7
4.7uF 10V X5R
D4
Green
R3
470R
MCP73831
U3
VBAT
C5
4.7uF 10V X5R
R4
2K
J6
R5
1K
D5
Red
J8
J9
Power Selection
J10
MCP1700T-XXX2E/MB
U4
C9
1uF 25V X5R
C10
1uF 25V X5R
VIN (MAX) = 6V
IOUT (MAX) = 250 mA
IQ = 1.6 uA
FTDI Header
C8
100 nF
J11
RESET
J12
J14
D6
MBR120ESFT1G
ICSP
J13
Fiducials
M1
M2
M3
LABEL1
OSHW
Temperature Sensor
U5
MCP9700
IQ = 6.0 uA
Battery Monitor
R6
1M 1%
J15
R7
2M2 1%
Title: Mini Ultra Plus 8 MHz
Revision: 1.20
Date: 24-01-2013
Sheet 1
RS-MINI-ULTRA-PLUS-8M-1R20.dch
rocket scream