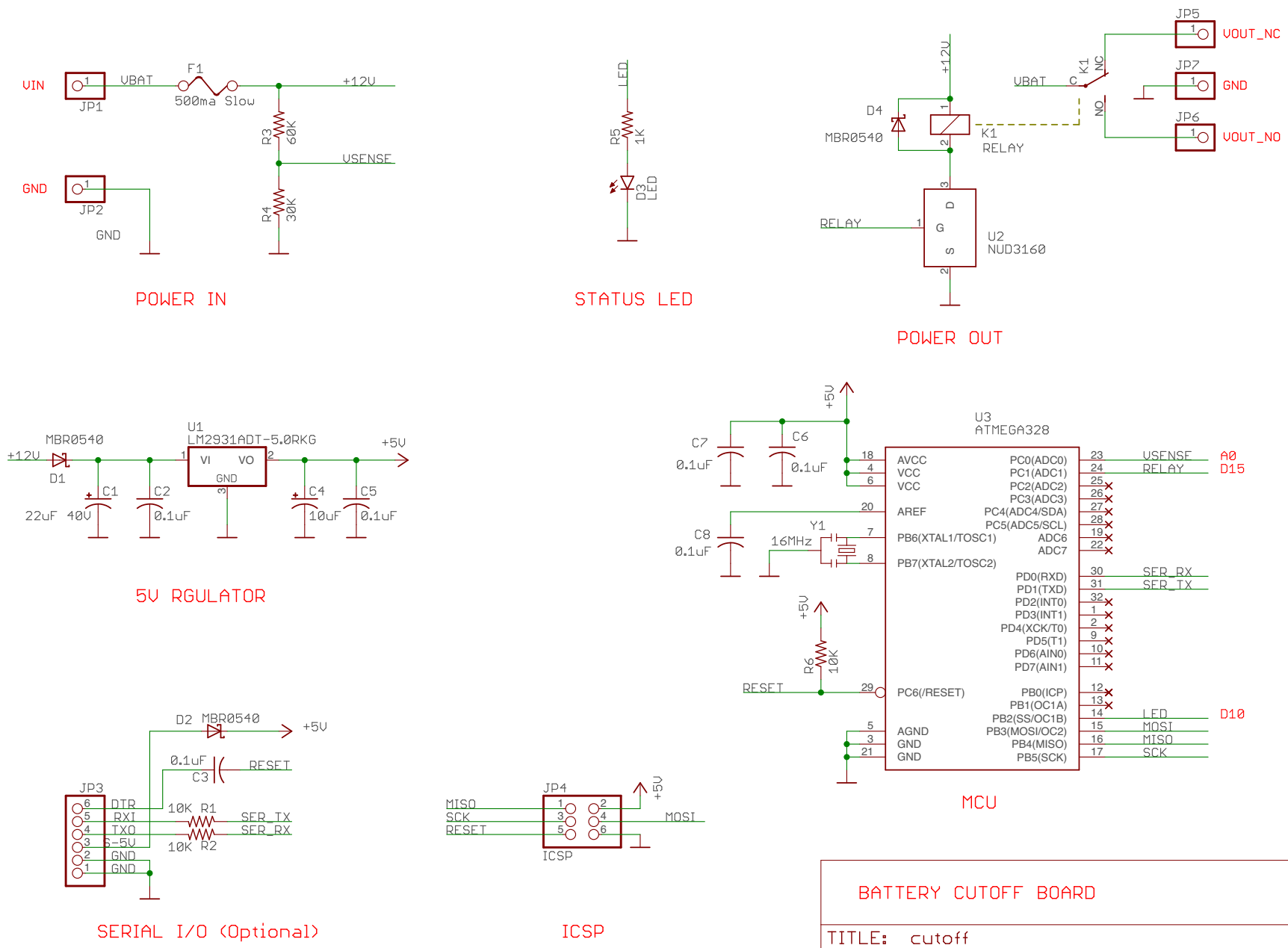
VIN
JP1
VBAT
F1
500ma Slow
+12V
R3
60K
VSENSE
GND
JP2
GND
R4
30K
POWER IN
LED
R5
1K
D3
LED
STATUS LED
+12V
D4
MBR0540
VBAT
C
K1
NC
NO
K1
RELAY
JP5
VOUT_NC
JP7
GND
JP6
VOUT_NO
RELAY
D
G
S
U2
NUD3160
POWER OUT
MBR0540
+12V
D1
U1
LM2931ADT-5.0RKG
VI
VO
GND
+5V
C1
22uF 40V
C2
0.1uF
C4
10uF
C5
0.1uF
5V RGULATOR
+5V
C7
0.1uF
C6
0.1uF
U3
ATMEGA328
AVCC
VCC
VCC
AREF
PB6(XTAL1/TOSC1)
PB7(XTAL2/TOSC2)
PC0(ADC0)
PC1(ADC1)
PC2(ADC2)
PC3(ADC3)
PC4(ADC4/SDA)
PC5(ADC5/SCL)
ADC6
ADC7
PD0(RXD)
PD1(TXD)
PD2(INT0)
PD3(INT1)
PD4(XCK/T0)
PD5(T1)
PD6(AIN0)
PD7(AIN1)
PC6(/RESET)
PB0(ICP)
PB1(OC1A)
PB2(SS/OC1B)
PB3(MOSI/OC2)
PB4(MISO)
PB5(SCK)
AGND
GND
GND
C8
0.1uF
Y1
16MHz
+5V
R6
10K
RESET
VSENSE
RELAY
SER_RX
SER_TX
LED
MOSI
MISO
SCK
A0
D15
D10
MCU
D2 MBR0540
+5V
0.1uF
C3
RESET
JP3
DTR
RXI
TXO
6-5V
GND
GND
10K R1
10K R2
SER_TX
SER_RX
SERIAL I/O (Optional)
MISO
SCK
RESET
JP4
+5V
MOSI
ICSP
ICSP
BATTERY CUTOFF BOARD
TITLE: cutoff
Document Number:
REV: 1
Date: 1/1/17 8:25 PM
Sheet: 1/1