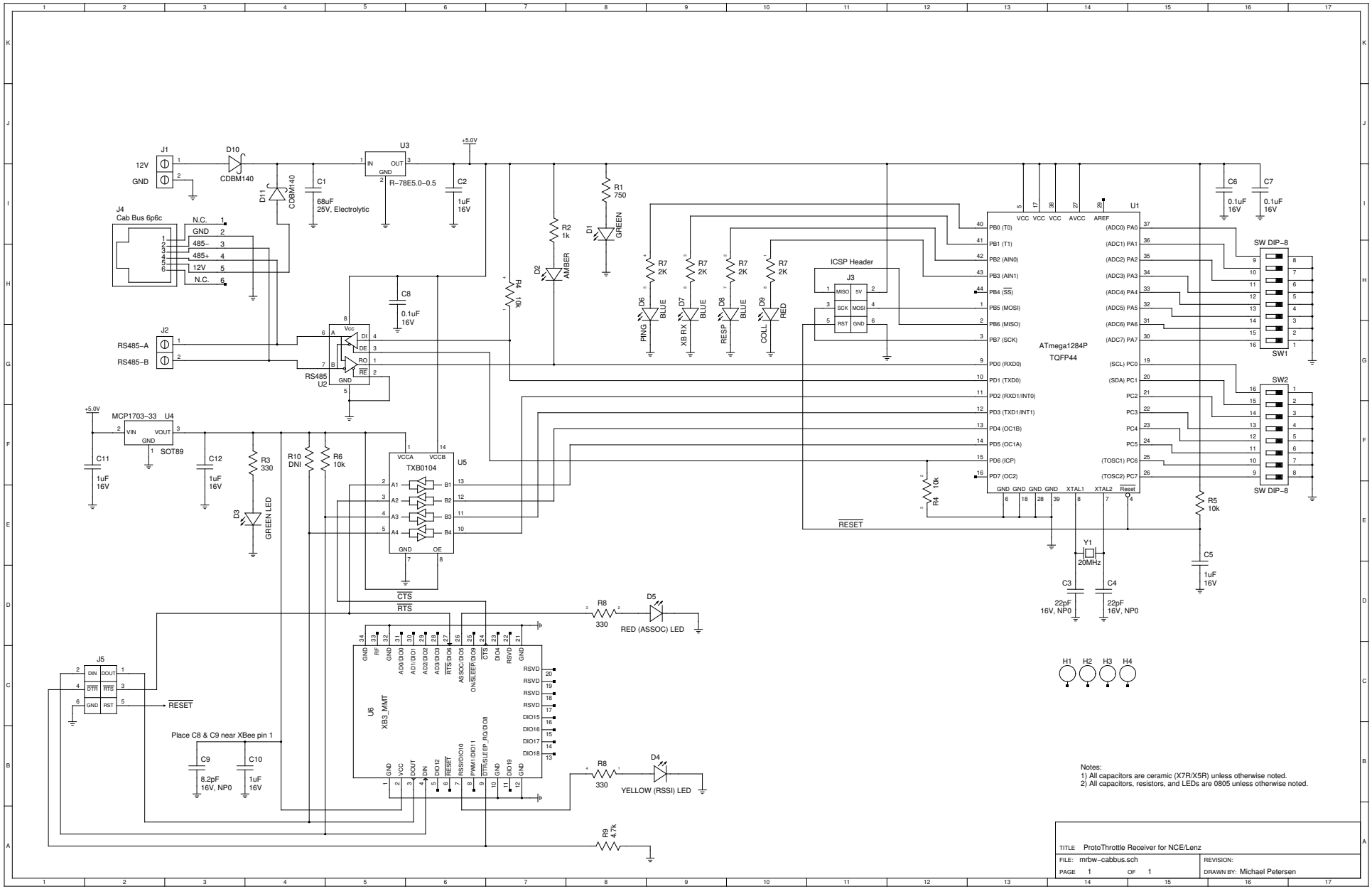
J1
12V
GND
D10
CDBM140
D11
CDBM140
C1
68uF
25V, Electrolytic
U3
IN
OUT
GND
R-78E5.0-0.5
+5.0V
C2
1uF
16V
R1
750
D1
GREEN
R2
1k
D2
AMBER
R4
10k
J4
Cab Bus 6p6c
N.C.
GND
485-
485+
12V
N.C.
C8
0.1uF
16V
J2
RS485-A
RS485-B
RS485
U2
Vcc
DI
DE
RO
RE
GND
R7
2K
D6
BLUE
PING
D7
BLUE
XB RX
D8
BLUE
RESP
D9
RED
COLL
ICSP Header
J3
MISO
5V
SCK
MOSI
RST
GND
ATmega1284P
TQFP44
U1
VCC VCC VCC AVCC AREF
PB0 (T0)
PB1 (T1)
PB2 (AIN0)
PB3 (AIN1)
PB4 (SS)
PB5 (MOSI)
PB6 (MISO)
PB7 (SCK)
PD0 (RXD0)
PD1 (TXD0)
PD2 (RXD1/INT0)
PD3 (TXD1/INT1)
PD4 (OC1B)
PD5 (OC1A)
PD6 (ICP)
PD7 (OC2)
GND GND GND GND XTAL1 XTAL2 Reset
(ADC0) PA0
(ADC1) PA1
(ADC2) PA2
(ADC3) PA3
(ADC4) PA4
(ADC5) PA5
(ADC6) PA6
(ADC7) PA7
(SCL) PC0
(SDA) PC1
PC2
PC3
PC4
PC5
(TOSC1) PC6
(TOSC2) PC7
C6
0.1uF
16V
C7
0.1uF
16V
SW DIP-8
SW1
SW2
SW DIP-8
R5
10k
C5
1uF
16V
Y1
20MHz
C3
22pF
16V, NP0
C4
22pF
16V, NP0
R4
10k
RESET
MCP1703-33
U4
VIN
VOUT
GND
SOT89
C11
1uF
16V
C12
1uF
16V
R3
330
D3
GREEN LED
R10
DNI
R6
10k
U5
TXB0104
VCCA
VCCB
A1
A2
A3
A4
B1
B2
B3
B4
GND
OE
CTS
RTS
R8
330
D5
RED (ASSOC) LED
J5
DIN
DOUT
DTR
RTS
GND
RST
RESET
U6
XB3_MMT
GND
RF
GND
AD0/DIO0
AD1/DIO1
AD2/DIO2
AD3/DIO3
RTS/DIO6
ASSOC/DIO5
ON/SLEEP/DIO9
CTS
DIO4
RSVD
GND
RSVD
RSVD
RSVD
RSVD
DIO15
DIO16
DIO17
DIO18
GND
VCC
DOUT
DIN
DIO12
RESET
RSSI/DIO10
PWM1/DIO11
DTR/SLEEP_RQ/DIO8
GND
DIO19
GND
Place C8 & C9 near XBee pin 1
C9
8.2pF
16V, NP0
C10
1uF
16V
R8
330
D4
YELLOW (RSSI) LED
R9
4.7k
H1
H2
H3
H4
Notes:
1) All capacitors are ceramic (X7R/X5R) unless otherwise noted.
2) All capacitors, resistors, and LEDs are 0805 unless otherwise noted.
TITLE ProtoThrottle Receiver for NCE/Lenz
FILE: mrbw-cabbus.sch
REVISION:
PAGE 1 OF 1
DRAWN BY: Michael Petersen