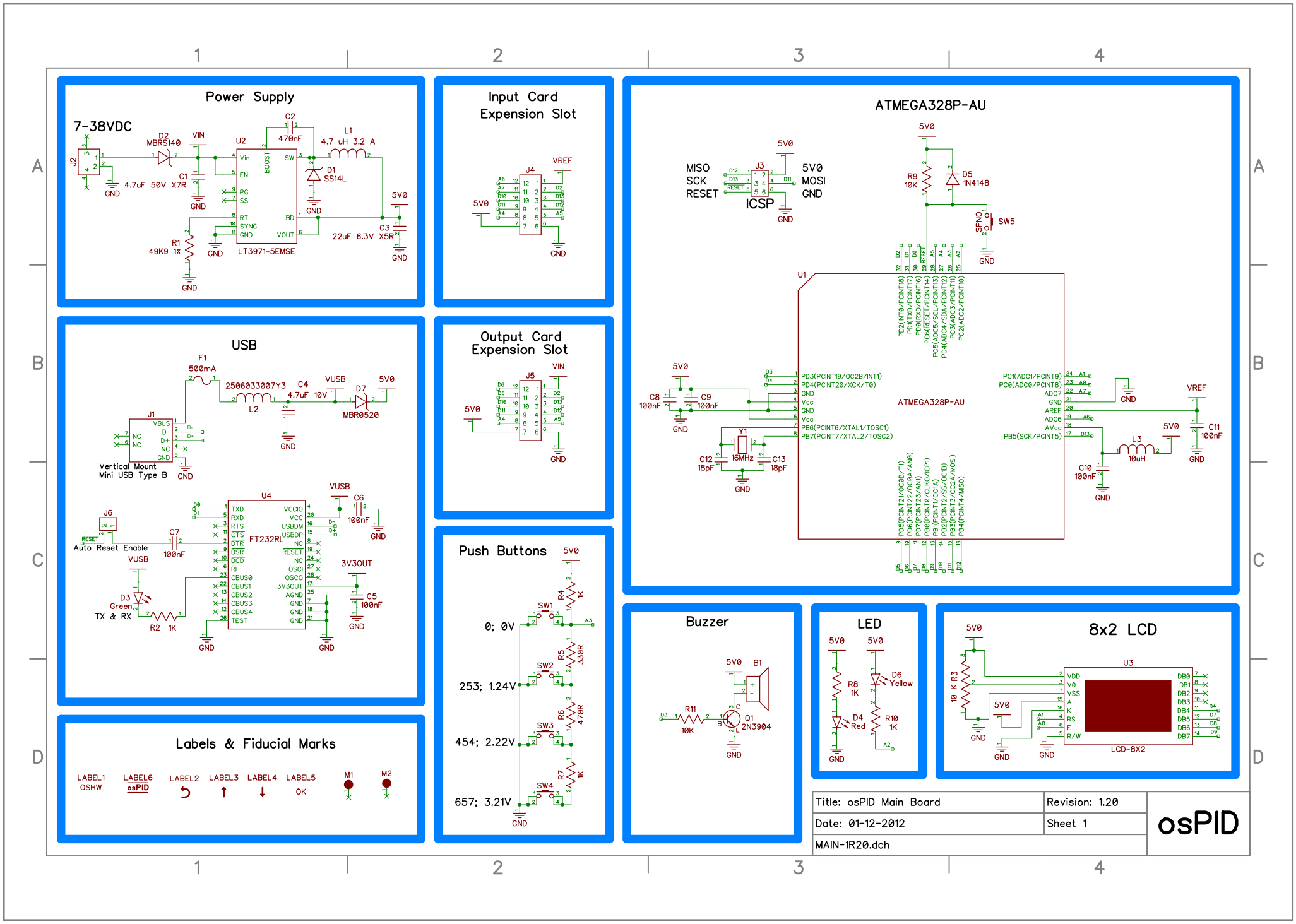
Power Supply
7-38VDC
J2
D2
MBRS140
VIN
U2
C2
470nF
L1
4.7 uH 3.2 A
D1
SS14L
C1
4.7uF 50V X7R
GND
R1
49K9 1%
LT3971-5EMSE
C3
22uF 6.3V X5R
5V0
Input Card
Expension Slot
J4
VREF
Output Card
Expension Slot
J5
VIN
ATMEGA328P-AU
MISO
SCK
RESET
J3
ICSP
5V0
MOSI
GND
R9
10K
D5
1N4148
SW5
SPNO
U1
PD3(PCINT19/OC2B/INT1)
PD4(PCINT20/XCK/T0)
PB6(PCINT6/XTAL1/TOSC1)
PB7(PCINT7/XTAL2/TOSC2)
PC1(ADC1/PCINT9)
PC0(ADC0/PCINT8)
ADC7
AREF
ADC6
AVcc
PB5(SCK/PCINT5)
C8
100nF
C9
100nF
Y1
16MHz
C12
18pF
C13
18pF
C10
100nF
L3
10uH
C11
100nF
VREF
USB
F1
500mA
2506033007Y3
L2
C4
4.7uF 10V
VUSB
D7
MBR0520
J1
VBUS
Vertical Mount
Mini USB Type B
U4
FT232RL
J6
Auto Reset Enable
C7
100nF
C6
100nF
D3
Green
TX & RX
R2 1K
3V3OUT
C5
100nF
Push Buttons
SW1
SW2
SW3
SW4
R4 1K
R5 330R
R6 470R
R7 1K
0; 0V
253; 1.24V
454; 2.22V
657; 3.21V
Buzzer
B1
R11
10K
Q1
2N3904
LED
R8
1K
D4
Red
D6
Yellow
R10
1K
8x2 LCD
10 K R3
U3
VDD
V0
VSS
A
K
RS
E
R/W
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
LCD-8X2
Labels & Fiducial Marks
LABEL1
OSHW
LABEL6
osPID
LABEL2
LABEL3
LABEL4
LABEL5
OK
M1
M2
Title: osPID Main Board
Revision: 1.20
Date: 01-12-2012
Sheet 1
MAIN-1R20.dch
osPID