SOURCE

+5V

U3 LT1764AEQ

VOLTAGE REGULATOR

IN   OUT   4
SHDN
GND GND   ADJ

VBUS 1
D-   2
D+   3
ID   4
GND   5

+5V J1

C3 10uF
C4 0.1uF
C8 10uF
C9 0.1uF

SENSE+   SENSE-

3.8V

R6 0.025R 1%

8K2 1% R8

R7

1K R9

3K3 1%

J4
1
2
3
PINHD-1X3

TO DEVICE

SENSE+ 1
SENSE- 8

SENSE+/VCC
SENSE-

ALCC 6

GND GND GND

SDA 5
SCL 4

I2C-DATA
I2C-CLK

C1 1uF

+5V +5V +5V
R1 3K3 R2 3K3 R3 3K3

GND GND EXP
2 3 7

U1 LTC2943

SENSE

ATMEGA328TQFP32

+5V

0.1uF C10

18 AVCC   PC0(ADC0) 23
4   VCC   PC1(ADC1) 24
6   VCC   PC2(ADC2) 25
                PC3(ADC3) 26
20 AREF   PC4(ADC4/SDA) 27   I2C-DATA
                PC5(ADC5/SCL) 28   I2C-CLK
20pF C11   7   PB6(XTAL1/TOSC1) ADC6 19
16Mhz Q1   ADC7 22
20pF C12   8   PB7(XTAL2/TOSC2)
                PD0(RXD) 30 SER_RX
                PD1(TXD) 31 SER_TX
                PD2(INT0) 32 START
                PD3(INT1) 2 DEBUG
R10 10K   PD4(XCK/T0)
+5V   PD5(T1)   9
                PD6(AIN0) 10 OLED_RST
RESET   29   PC6(/RESET) PD7(AIN1) 11 OLED_D/C
                PB0(ICP) 12
                PB1(OC1A) 13
5   AGND   PB2(SS/OC1B) 14
3   GND   PB3(MOSI/OC2) 15 MOSI
21 GND   PB4(MISO) 16 MISO
                PB5(SCK)   17 SCK

U4

MCU

"ARDUINO MINI PRO 328P 5V 16Mhz"

START

S1

ACTION

J5
MISO 1 2
SCK   3 4 MOSI
RESET 5 6
PINHD-2X3

+5V

ICSP (POGO)

0.1uF C5

20
VCC VCCIO

TXO 1   R4 10K   SER_RX
RXI 5   R5 10K   SER_TX

DTRO 2   C6   SB1   RESET
                Dev

TX_LED 23
RX_LED 22 0.1uF

TEST 26

3V3OUT 17   C7 0.1uF

GND GND GND GND
7 18 21 25
U2 FT232RL

VBUS 1
D-   2   16 D-
D+   3   15 D+
ID   4
GND   5

C2 10uF

USB J2

USB/SERIAL (OPTIONAL)

+5V

2
VCC

SCL 3 SCK
SDA 4 MOSI
RST 5 OLED_RST
D/C 6 OLED_D/C

GND 1

OLED

DISPLAY

1 I2C-CLK
2 I2C-DATA
3 DEBUG
4 SCK
5 MOSI
6
7
8
G

LOGIC ANALYZER
(PROTOYPE ONLY)

* PROTOTYPE ONLY
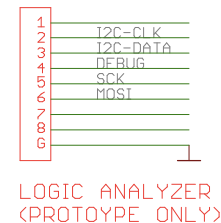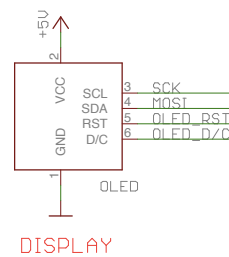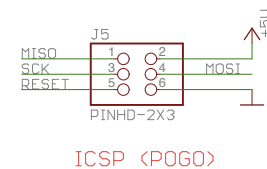
Power Play - OLED

TITLE: pmon_oled

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