Voltage Regulator

J1
Barrel_Jack_Switch_QAM

SW2
CST10T2CR_Switch_QAM

+9V

F2
1.0A

TP3
9V TP

C12
.01uF, 50V

GNDREF

LM7805_QAM
U4
Input Ground Output

+9V

+5V

TP15
5V TP

R10
1k, 1/4W

GNDREF

C11
.33uF, 35V

C9
.1uF, 50V

GNDREF

GNDREF

Debugging Button

+5V

C8
.1uF, 50V

GNDREF

R9
10k, 1/4W

SW1
SW_DPST_QM

GNDREF

Light Sensor System

+5V

C1
.1uF, 50V

GNDREF

R3
PDV-P5003_QAM

R4
10k, 1/4W

TP5
Light Sensor TP

+5V

C3
.1uF, 50V

GNDREF

V+

U1E
MCP6004_QAM

V-

GNDREF

C2
.1uF, 50V

GNDREF

+5V

R2
10k, 1/4W

Vref

TP2
Vref TP

R1
10k, 1/4W

GNDREF

U1A
MCP6004_QAM

R5
10k, 1/4W

TP4
OPAMP TP1

R7
10k, 1/4W

U1B
MCP6004_QAM

Vref

R6
100k, 1/4W

TP1
OPAMP TP2

PIC18F57Q43_QAM

U2

NC NC VBUS VBUS
ID ID VOFF VOFF
CDC_RX DBG3
CDC_TX DBG0
DBG1 GND
DBG2 VTG
RC2 RA7
RC3 RA6
RB2 RA5
RB1 RB3
RC4 RB0
RC5 RA2
RC6 RA1
RD4 RA0
GND GND
RA3 RD7
RA4 RD6
RE2 RD5
RC7 RB5
RD0 RF7
RD1 RF6
RD2 RF5
RD3 RF4
GND GND
RF0 RE1
RF1 RE0
RF2 RC1
RF3 RC0

TP10
Connect to GND5

TP11
Connect to VOFF

+5V

C6
.1uF

GNDREF

TP9
Header TP2

Header TP1

TP8

GNDREF GND1

GNDREF GND2

TP6
Header TP4

Header TP3

TP7

GND4 GNDREF

GND3 GNDREF

Debugging LED

D2
RED

GNDREF

R11
10k, 1/4W

U5
Ribbon_Cable_QM

TP17
Digital Output TP

GNDREF