Light Level / Sensors Section

3.3V

U7
ALS-PT19
Or TEMD6200
ALS-PT19 only in 4000 qty

LIGHTLEVEL_FRONT

R2
C2
1.0uF

GND

3.3V

U8
ALS-PT19

LIGHTLEVEL_REAR

R2
C3
1.0uF

GND

3.3V

1.0uF
C4

GND

I2C Pullup

3.3V
R3 — SDA
R4 — SCL

3.3V

1.0uF
C1

GND

3.3V

4k7 R8

3.3V

100k R6

U6
8 VDD   CS 2
6 VDDIO SDI/SDA 3 — SDA
          SCK/SCL 4 — SCL
          GND SDO/ADR 5

BME280 Addr: 0x77
Measures:
Temperature
Humidity
Pressure

0.1uF
C5   1*2

GND GND

3.3V

U5
6 VDD   SDA 9 — SDA
          SCL 10 — SCL
2 RESET   WAKE 7
5 SENSE   INT 3
4 PWM   AUX 8 — AUX
  GND   ADDR 1

CCS811
Addr: 0x5B

RESET

3.3V

EP

GND

3.3V

10k R11

AUX

3.3V

100k R9

100k R12

GND

USB Section

V_USB

D1

USB_D- USB_D+

JP1
D+1
D-1
VBUS1
GND1
USB
USBA-SMD-MALE

GND

Photon Section

V_USB   3.3V

1 VIN   3V3 24
2 GND   RST 23
3 TX   VBAT 22
4 RX   GND 21
5 WKP   D7 20
6 DAC   D6 19
7 A5   Photon D5 18 — RESET
8 A4   D4 17
9 A3   D3 16
10 A2   D2 15
11 A1   D1 14 — SCL
12 A0   D0 13 — SDA

GND

GND

OSHLED

LIGHTLEVEL_FRONT

LIGHTLEVEL_REAR

SJ1
31 USB_D+   1 2 — USB_D+
30 USB_D-   1 2 — USB_D-
29 RGB_BLUE   SJ2
28 RGB_GREEN
27 RGB_RED
26 SETUP
25 EN

Open Hardware Section

open hardware

OSHLED — R1 1k5 — D2 — GND

H2
MOUNT-HOLE3.2

H1
MOUNT-HOLE3.2

TITLE: EnvironmentMonitorV4.1

Design by: Stephen Harrison

REV:
V4.1

Date: 07/05/2017 03:19

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