Erebus Labs Sensor BOM
Rev 1   Chris Clary   Initial Build   4/1/2014

Main CPU Block

Item	Qty	Reference	Value	Description
1	1	PSOC3		PSOC3 microprocessor
2	2	C2,C3	1uF	CAP CER 1uF 25V 10% X5R 0603
3	7	C4,C5,C6,C15,C16,C17,C18	0.1uF	CAP CER 0.1uF 16V Y5V 0603
3	2	C19,C29	22pF	CAP CER 22pF 50V NP0 0603
4	1	R1	5.6kΩ	RES 5.6k OHM 1/8W 5% 0805 SMD
5	1	R11	3kΩ	RES 1.5k OHM 1/8W 5% 0805 SMD
6	1	Q1	32.768kHz	32.768KHZ 12.5PF THRU

Programmer Block

Item	Qty	Reference	Value	Description
7	1	C1	0.1uF	CAP CER 0.1uF 16V Y5V 0603
8	1	ISP		CON HEADER DUAL POSITION .05" SMD

USB Interface

Item	Qty	Reference	Value	Description
9	1	C13	0.1uF	CAP CER 0.1uF 16V Y5V 0603
10	2	R4,R5	22Ω	RES 22 OHM 1/10W 5% 0603 SMD
11	1	R6	1.5KΩ	RES 1.5k OHM 1/8W 5% 0805 SMD
12	1	R11	100KΩ	RES 100k OHM 1/8W 5% 0805 SMD
13	1	X1	USB Mini B	
14	1	Z1,Z2,Z3	ESD Diode	SUPRESSOR ESD 5VDC 0603 SMD

Sensor Interface

Item	Qty	Reference	Value	Description
15	1	C13	0.1uF	CAP CER 0.1uF 16V Y5V 0603
16	4	R12,R13,R14,R15	10KΩ	RES 1Ok OHM 1/8W 5% 0805 SMD
17	1	X2	RJ-45	

Manufacturer	Mfr Part Number
Cypress	CY8C3245PVI-150
Taiyo Yuden	TMK107BJ105KA-T
Kemet	C0603C104Z4VACTU
TDK	C1068C0G1H220J080AA
Yageo	RC0805JR-075K6L
Yageo	RC0805JR-073KL
Abracon Corp.	AB38T-32.768KHZ

Manufacturer	Mfr Part Number
Kemet	C0603C104Z4VACTU
Samtec	FTSH-105-01-L-DV-TR

Manufacturer	Mfr Part Number
Kemet	C0603C104Z4VACTU
Yageo	RC0603JR-0712RL
Yageo	RC0805JR-07100KL
Yageo	RC0805JR-071K5L
Bourne Inc.	CG0603MLC-05LE

Manufacturer	Mfr Part Number
Kemet	C0603C104Z4VACTU
Yageo	RC0805JR-0710KL