microSWIFT v2.2 Parts List by vendor (Excludes circuit boards)

COMPONENT	DESCRIPTION	PART #	SUPPLIER	SUPPLIER PN	Pkg Qty	Price	BOM QTY	COST	LINK
Ground Control									
Iridium Modem	RockBLOCK 9603 SBD modem	9603	Ground Control	SKU: FP-RB-9603	1	$ 302.00	1	$ 302.00	Link
Mouser									
Antenna, GPS/Iridium	Maxtenna M1600HCT-P-SMA	M1600HCT-P-S	Mouser	259-M1600HCT-P-SMA	1	$ 64.00	1	$ 64.00	Link
Cable assembly, Boot to Backplane	Picoblade 14 pos, 150mm length	151341402	Mouser	538-15134-1402	1	$ 7.77	1	$ 7.77	Link
Cable assembly, Top Hat to Backplane	Picoblade 14 pos, 50mm length	151341400	Mouser	538-15134-1400	1	$ 7.46	1	$ 7.46	Link
Digikey									
Cable assembly, Iridium modem to Backplane	Picoblade 10 pos, 50mm length	151341000	Digikey	WM17198-ND	1	$ 5.62	1	$ 5.62	Link
Standoff, Primary & Exp. Board to Backplane	#4-40 Male-Female standoff, 5mm long	94511000	Digikey	732-12334-ND	1	$ 0.28	8	$ 2.24	Link
Spacer, Modem to Backplane	#2, 5mm (.197") long	5243059905	Digikey	RPC3356-ND	1	$ 0.12	2	$ 0.23	Link
Ribbon cable, CT cable assembly	CBL RIBN 6COND 0.05 GRAY 3.28'	639106155210	Digi Key	732-11799-ND	2	$ 1.73	1	$ 0.87	Link
Connector, instrument side, CT cable assembly	CONN CIRC INSERT 10P SOLDER CUP	FFA.3S.310.ZLA	Digi Key	FFA.3S.310.ZLA-ND	1	$ 51.12	1	$ 51.12	Link
Connector board side, CT cable assembly	IDC receptacle 6 position	61200623021	Digi Key	732-5443-ND	1	$ 1.67	1	$ 1.67	Link
Battery holder	4x C cell holder	BH24CW	Digi Key	BH24CW-ND	1	$ 2.67	2	$ 5.35	Link
Digikey Cable Builder									
RF cable assembly, Iridium modem to Top Hat	SMA plug to SMA RA plug, 4", RG-174								Link
	Note: 5" cable from v2.1 can be used								
Blue Robotics									
Main housing tube	Blue Robotics 3" x 15.6" cast acrylic	BR-100293	Blue Robotics	BR-100293	1	$ 260.00	1	$ 260.00	Link
O-ring flanges (with tab)	3"		Blue Robotics	WTE3-M-LOCKING-FLANGE-SEAL	1	$ 35.00	2	$ 70.00	Link
O-ring flanges (tab removed)	For use with APL custom long tubes								
End cap top	Acrylic dome		Blue Robotics	WTE3-P-END-CAP-R1-RP	1	$ 32.00	1	$ 32.00	Link
End cap bottom	Acrylic flat		Blue Robotics	WTE3-P-DOME-R1-RP	1	$ 15.00	1	$ 15.00	Link
TSYS01 Temp Sensor	Blue Robotics TSYS01 Temp Sensor	BR-100317	Blue Robotics	BR-100317	1	$ 70.00	1	$ 70.00	Link
McMaster									
Main housing tube, Long	17.75" Long custom made cast acrylic		McMaster-Carr	8486K565					Link
O-ring radial seal	Radial o-ring for 3" series flanges		McMaster-Carr	9452K157	50	$ 12.99	4	$ 1.04	Link
O-ring face seal	Face o-ring for 3" series flanges		McMaster-Carr	9452K155	50	$ 12.53	2	$ 0.50	Link
Screw, Blue Robotics Enclosure	M3x0.5, 12mm long SHCS		McMaster-Carr	91292A114	100	$ 6.00	20	$ 1.20	Link
Screw, Top Hat and support brackets to Backp	#6-32 x 0.375" Pan Head Screw		McMaster-Carr	91772A146	100	$ 6.46	10	$ 0.65	Link
Screw, Boot to Backplane	#4-40 x 0.375" Pan Head Screw		McMaster-Carr	91772A108	100	$ 6.20	2	$ 0.12	Link
Screw, Primary board to Backplane	#4-40 x 0.250" screw		McMaster-Carr	91772A106	100	$ 4.88	8	$ 0.39	Link
Alternate if too long	#4-40 x 0.219"		McMaster-Carr	91772A514	100	$ 3.10	8	$ 0.25	Link
Hex nut, Primary & Exp. Board to Backplane	#4-40 low profile lock nut		McMaster-Carr	90101A004	50	$ 4.86	8	$ 0.78	Link
Screw, Battery holder to Backplane	#4-40 x .4375"		McMaster-Carr	91772A109	100	$ 6.27	2	$ 0.13	Link
Press fit stud, Modem to Backplane	#2-56 x 0.50		McMaster-Carr	93580A544	50	$ 9.77	2	$ 0.39	Link
Hex nut, Modem	#2-56 hex nut		McMaster-Carr	91841A003	100	$ 3.90	2	$ 0.08	Link
Lock washer #2	#2 external tooth lock washer		McMaster-Carr	98449A500	100	$ 3.25	2	$ 0.07	Link
Hex Nut w/ Lock Washer #4-40	#4-40 hex nut with ingegrated lock washer		McMaster-Carr	96278A005	100	$ 9.23	8	$ 0.74	Link
Buoyancy foam collar	6x 6" x 2" x .25" EPDM Foam		McMaster-Carr	93725K116	50	$ 93.51	2	$ 3.74	Link
Zip Tie	.18" x 17" UV rated zip tie		McMaster-Carr	7130K61	100	$ 23.40	1	$ 0.23	Link
Battery cells	C cell alkaline battery 1.5V	04914, 4014, A	McMaster-Carr	71455K63	72	76.08	8	$ 8.45	Link
Plastic washer, CT sensor	M16		McMaster-Carr	95610A640	25	$ 12.90	2	$ 1.03	Link
Nut, CT sensor	M16 x 1.0 mm		McMaster-Carr	90326A203	5	$ 11.66	1	$ 2.33	Link
Grainger									
Yellow tape for foam collar	Yellow vinyl tape	471	Grainger	15F765	1	$ 34.28	0.03333	$ 1.14	Link
Backing tape for foam	Gorilla tape, 1.875" wide x 8'	105629	Grainger	787ER2	135	$ 17.02	6	$ 0.76	Link
Xylem/Aanderaa									
Aanderaa 4319B CT sensor	Aanderaa Conductivity/Temp sensor	5819C	Xylem	5819C	1	$2,972	1	$ 2,972.00	
DF Robot									
AS7341 Light Sensor Breakout	AS7341 11-channel light sensor	SEN0365	DF Robot	SEN0365	1	$ 16.50	1	$ 16.50	Link
Adafruit									
OpenOBS Turbidity Sensor	VCNL 4010 Proximity/Light sensor	466	Adafruit	466	1	$ 7.50	1	$ 7.50	Link

Letters Unlimited

Sticker	APL sticker		Letters Unlimited	-		1	$ 4.50	1	$ 4.50	Link

SCUBA.com

Ballast, if no CT	350 g lead shot		Scuba.com	-		10	$ 56.99	1	$ 5.70	Link