Sensor Platform Multi-Sensor Shield Revised: Thursday, Mar 11, 2016

Bill Of Materials

Item	Quantity	Reference	Part	PCB Footprint	DESCRIPTION	MFG1	MFG1_PART#	DISTR1	DISTR1_PART#	DNP	ROHM Comment
1	20	C1,C2,C3,C5,C6,C9,C10,C11,C17,C21,C23,C24,C2	0.1uF	C0402	CAP CER 0.1UF 10V 10% X5R 0402	Murata	GRM155R61A104KA01D	DIGIKEY	490-1318-1-ND		
2	1	C7	1nF	C0402	CAP CER 1000PF 50V 10% X7R 0402	Murata	GRM155R71H102KA01D	DIGIKEY	490-1303-1-ND		
3	1	C8	0.47uF	C0402	CAP CER 0.47UF 10V 10% X5R 0402	Murata	GRM155R61A474KE15D	DIGIKEY	490-3264-1-ND		
4	6	C12, C32, C33, C34,C35,C36, C38	1uF	C0402	CAP CER 1UF 6.3V 10% X5R 0402	Murata	GRM155R60J105KE19D	DIGIKEY	490-1320-1-ND		
5	1	C19	2.2nF	C0402	CAP CER 2200PF 50V 5% X7R 0402	Murata	GRM155R71H222JA01J	DIGIKEY	490-6359-1-ND		
6	1	C22	10nF	C0402	CAP CER 10000PF 50V 10% X7R 0402	Murata	GRM155R71H103KA88D	DIGIKEY	490-4516-1-ND		
7	1	D1	SML-P11VTT86	LED0402	LED 0402 RED 50MW 20MA SMD	ROHM	SML-P11VTT86	ROHM	511-1654-1-ND		
8	9	R1,R38,R8,R9,R10,R34,R36,R37,R43,R45,R46	10k	R0603	RES SMD 10K OHM 5% 1/10W 0603	ROHM	MCR03ERTJ103	ROHM	RHM10KCGTR-ND		
9	27	R11,R12,R13,R14,R15,R16,R17,R18,R19,R20,R21	0	R0603	RES 0.0 OHM 1/10W JUMP 0603 SMD	ROHM	MCR03ERTJ000	ROHM	RHM0.0CGTR-ND		
9	1	R47	0	R0603	RES 0.0 OHM 1/10W JUMP 0603 SMD	ROHM	MCR03ERTJ000	ROHM	RHM0.0CGTR-ND	DNP	
10	1	R35	22	R0603	RES SMD 22 OHM 5% 1/10W 0603	ROHM	MCR03ERTJ220	ROHM	RHM22CGTR-ND		
11	1	R42	200k	R0402	RES SMD 200K OHM 1% 1/16W 0402	ROHM	TRR01MZPF2003	ROHM	RHM200KBHCT-ND		
12	1	U1	BDE0600G	SSOP5	IC TEMP SENSOR THERM 60°C SSOP5	ROHM	BDE0600G-TR	ROHM	BDE0600GTR-ND		
13	1	U2	BM1383AGLV	BM1383AGLV	Pressure Sensor IC	ROHM	BM1383AGLV	ROHM	BM1383AGLV		
14	1	U4	BU52014HFV	HVSOF5	IC HALL EFFECT SW BIPO HVSOF5	ROHM	BU52014HFV-TR	ROHM	BU52014HFVTR-ND		
15	1	U5	ML8511 or ML8511A	TQFN12	UV SENSOR W/AMP TQFN12	LAPIS/ROHM	ML8511AFCZ05BL	ROHM	ML8511AFCZ05BLCT-ND		
16	1	U6	RPR-0521	IC_3P94X2P36	ALS/Proximity Sensor	ROHM	RPR-0521	ROHM	RPR-0521		
17	1	U7	BH1745NUC	BH1745NUC	Color Sensor	ROHM	BH1745NUC	ROHM	BH1745NUC-E2CT-ND		
18	1	U8	KMX62	LGA_3x3x0P9	MAGNETOMETER AND ACCELEROMETER TRI-AXIS LGA16	Kionix/ROHM	KMX62	ROHM	KMX62		
19	1	U11	KXG03	LGA_3x3x0P9	Gyro Sensor	Kionix/ROHM	KXG03-1034	ROHM	KXG03		
20	1	U12	SPM0423HD4H-WB	IC_4P72X3P76	MIC MEMS DIGITAL PDM OMNI -26DB	Knowles	SPM0423HD4H-WB	DIGIKEY	423-1126-2-ND		
21	2	U13,U15	KX122-1037	LGA_3X3X0P9	BOARD EVAL KXCJK ACCELEROMETER	Kionix/ROHM	KX122-1037	ROHM	1191-1041-1-ND		
22	2	U14,U16	KX122-1048	LGA_3X3X0P9	BOARD EVAL KXCJK ACCELEROMETER	Kionix/ROHM	KX122-1048	ROHM	KX122-1048		
23	1	U17	BM1422GMV	MLLGA010V020A	3-Axis Magnetometer	Rohm	BM1422GMV	ROHM	BM1422GMV		
24	1	U18	NVT2003DP,118	TSSOP10	3 Channel Level Shifter	NXP	NVT2003DP,118	DIGIKEY	568-8383-2-ND		
25	1	U19	BU18TA2WNVX-TR	4-SSON-EP	1.8v LDO	Rohm	BU18TA2WNVX-TR	ROHM	BU18TA2WNVXCT-ND		
26	1	H1	ROHM Breakout Board Expansion	HDR_THVT_1X5_100	CONN RCPT .100" 5POS TIN WW - Recptacle on top			DIGIKEY		DNP	Standard Pitch Through-Hole Female
27	1	H2	ROHM Breakout Board Expansion	HDR_THVT_1X4_100	CONN RCPT .100" 4POS TIN WW - Recptacle on top			DIGIKEY		DNP	Standard Pitch Through-Hole Male
28	1	H3	ROHM Breakout Board Expansion	HDR_THVT_1X3_100	CONN RCPT .100" 3POS TIN WW - Recptacle on top			DIGIKEY		DNP	Standard Pitch Through-Hole Male
29	1	H4	Arduino Standard Headers	HDR_THVT_1X8_100	CONN HEADER VERT SGL 8POS - Long side on bottom	See Item 34	See Item 34	DIGIKEY	See Item 34		Standard Pitch Through-Hole Male
30	1	H5	Arduino Standard Headers	HDR_THVT_1X6_100	CONN HEADER VERT SGL 6POS - Long side on bottom	See Item 34	See Item 34	DIGIKEY	See Item 34		Standard Pitch Through-Hole Male
31	1	H6	Arduino Standard Headers	HDR_THVT_1X8_100	CONN HEADER VERT SGL 8POS - Long side on bottom	See Item 34	See Item 34	DIGIKEY	See Item 34		Standard Pitch Through-Hole Male
32	1	H7	Arduino Standard Headers	HDR_THVT_1X10_100	CONN HEADER VERT SGL 10POS - Long side on bottom	See Item 34	See Item 34	DIGIKEY	See Item 34		Standard Pitch Through-Hole Male
33	1	H8	1 Added Function Header	HDR_THVT_1X10_100	CONN HEADER VERT SGL 10POS - Long side on bottom			DIGIKEY		DNP	Standard Pitch Through-Hole Male
34	1	Header Purchase Info (This is the sum of headers for lines 30-33)	32-Pin Header	N/A	CONN HEADER VERT SGL 2POS	Sullins Connector Solutio	PREC032SAAN-RC	DIGIKEY	S1012EC-32-ND		Break these into line items 29 to 32