

Sensor Node Board Bill of Materials - Drawing# 10021014rB

Ref	Value	Manufacturer	Manufacturer PN#	Description
C1	1000pF	Kemet	PME295RB4100MR30	CAP FILM 1000PF 480VAC RADIAL
C2	1000pF	Kemet	PME295RB4100MR30	CAP FILM 1000PF 480VAC RADIAL
C3	1.0uF	TDK Corporation	CKG57KX7R2A105M	CAP CER 1UF 100V 20% X7R SMD
C4	22uF	Vishay Sprague	597D226X9063F2T	CAP TANT 22UF 63V 10% 2924
C5	22uF	Vishay Sprague	597D226X9063F2T	CAP TANT 22UF 63V 10% 2924
C6	100uF	Panasonic	EEV-FK2A101M	CAP ALUM 100UF 100V 20% SMD
C7	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C8	1.0uF	TDK Corporation	CKG32KX7R1H105M335AH	CAP CER 1UF 50V 20% X7R SMD
C9	10uF	Kemet	T521X106M063ATE050	CAP TANT 10UF 63V 20% 2917
C10	10uF	Kemet	T521X106M063ATE050	CAP TANT 10UF 63V 20% 2917
C11	22uF	AVX Corporation	TPME226K050R0075	CAP TANT 22UF 50V 10% 2917
C12	22uF	AVX Corporation	TPME226K050R0075	CAP TANT 22UF 50V 10% 2917
C13	1.0uF	TDK Corporation	CKG57KX7R2A105M	CAP CER 1UF 100V 20% X7R SMD
C14	0.033uF	Yageo	CC1206KRX7R9BB333	CAP CER 0.033UF 50V 10% X7R 1206
C15	1000pF	Kemet	PME295RB4100MR30	CAP FILM 1000PF 480VAC RADIAL
C16	1000pF	Kemet	PME295RB4100MR30	CAP FILM 1000PF 480VAC RADIAL
C17	0.033uF	Yageo	CC1206KRX7R9BB333	CAP CER 0.033UF 50V 10% X7R 1206
C18	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C19	47uF	Panasonic	EEU-EB1J470S	CAP ALUM 47UF 63V 20% RADIAL
C20	33uF	AVX Corporation	TPSC336K010R0150	CAP TANT 33UF 10V 10% 2312
C21	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C22	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C23	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C24	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C25	0.033uF	Yageo	CC1206KRX7R9BB333	CAP CER 0.033UF 50V 10% X7R 1206
C26	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C27	0.033uF	Yageo	CC1206KRX7R9BB333	CAP CER 0.033UF 50V 10% X7R 1206
C28	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C29	0.033uF	Yageo	CC1206KRX7R9BB333	CAP CER 0.033UF 50V 10% X7R 1206
C30	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C31	0.033uF	Yageo	CC1206KRX7R9BB333	CAP CER 0.033UF 50V 10% X7R 1206
C32	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO

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C33	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C34	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C35	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C36	10uF	AVX Corp	TPSD106K035R0125	CAP TANT LOESR 10UF 35V 10% SMD
C37	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C38	15pF	Kemet	C0805C150J5GACTU	CAP CERAMIC 15PF 50V NP0 0805
C39	15pF	Kemet	C0805C150J5GACTU	CAP CERAMIC 15PF 50V NP0 0805
C40	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C41	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C42	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C43	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C44	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C45	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C46	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C47	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C48	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C49	4.7uF	Vishay Sprague	593D475X9050D2TE3	CAP TANT 4.7UF 50V 10% 2917
C50	1.0uF	TDK Corporation	C3216X7R2A105K	CAP CER 1.0UF 100V X7R 1206
C51	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C52	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C53	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C54	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C55	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C56	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C57	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C58	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C59	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C60	1.0uF	Kemet	C1206C105K3RAC	CAP, CER, 1.0uF, 25V, 10%, X7R, 1206
C61	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C62	10uF	AVX Corp	TPSD106K035R0125	CAP TANT LOESR 10UF 35V 10% SMD
C63	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C64	0.1uF	Kemet	C1206F104K3RACTU	CAP CER .1UF 25V X7R 1206 FO
C65	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD

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C66	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
D1	B360A-13-F	Diodes Inc	B360A-13-F	DIODE SCHOTTKY 60V 3A SMA
D2	LTST-C150GKT	Lite-On Inc	LTST-C150GKT	LED GREEN CLEAR 1206 SMD
D3	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D4	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D5	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D6	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D7	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D8	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D9	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D10	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D11	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D12	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D13	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D14	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D15	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D16	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D17	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D18	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D19	WP710A10SEC/J4	Kingbright Company LLC	WP710A10SEC/J4	3MM ORANGE LED ROUND
F1	0154.125DR	Littelfuse Inc	0154.125DR	FUSEBLOCK W/.125A FUSE SMD FST
J1	1881558	Phoenix Contact	1881558	CONN TERM BLK HDR 2.5MM 2POS
J2	1881558	Phoenix Contact	1881558	CONN TERM BLK HDR 2.5MM 2POS
J3	1881558	Phoenix Contact	1881558	CONN TERM BLK HDR 2.5MM 2POS
J4	1881558	Phoenix Contact	1881558	CONN TERM BLK HDR 2.5MM 2POS
J5	1803426	Phoenix Contact	1803426	CONN HEADER VERT 2POS 3.81MM
J6	87831-0620	Molex	87831-0620	CONN HEADER 6POS 2MM VERT GOLD
J7	70543-0001	Molex Inc	70543-0001	CONN HEADER 2POS .100 VERT GOLD
J8	70543-0001	Molex Inc	70543-0001	CONN HEADER 2POS .100 VERT GOLD
J9	70543-0001	Molex Inc	70543-0001	CONN HEADER 2POS .100 VERT GOLD
J10	70543-0001	Molex Inc	70543-0001	CONN HEADER 2POS .100 VERT GOLD
JP1	87224-2	Tyco Electronics	87224-2	CONN HEADER VERT .100 2POS 15AU
K1	TX2-LT-3V-TH	Panasonic	TX2-LT-3V-TH	RELAY GENERAL PURPOSE DPDT 2A 3V

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K2	TX2-LT-3V-TH	Panasonic	TX2-LT-3V-TH	RELAY GENERAL PURPOSE DPDT 2A 3V
K3	TX2-LT-3V-TH	Panasonic	TX2-LT-3V-TH	RELAY GENERAL PURPOSE DPDT 2A 3V
K4	DK2a-L2-3V	Panasonic	DK2a-L2-3V	2 Form A, 3VDC 2 Form A 10A 250VAC
L1	22uH	Taiyo Yuden	NR10050T220M	INDUCTOR 22UH 2.6A 20% SMD
L2	15uH	Würth Electronics Inc	7447709150	INDUCTOR POWER 15UH 6.5A SMD
L3	1mH	API Delevan Inc	CM6460R-105	CHOKE COMMON MODE 1000.0UH SMD
L4	22uH	Taiyo Yuden	NR10050T220M	INDUCTOR 22UH 2.6A 20% SMD
L5	68uH	EPCOS Inc	B82464G4683M	INDUCTOR POWER 68UH 1.3A SMD
MOD1	VHB75W-Q48-S24	CUI Inc	VHB75W-Q48-S24	CONVERTER DC/DC 75W 24V 3.12A
MOD2	VYB15W-Q24-S3	CUI Inc	VYB15W-Q24-S3	CONVERTER DC/DC 15W 3.3V
R1	0.05	Stackpole	CSRN2512FK50L0	RES .05 OHM 2W 1% 2512 SMD
R2	TBD			VALUE TBD, 1206 SMD, HEIGHT 0.6mm
R3	158.0K	Vishay	CRCW1206158KFKEA	RES 158.0K OHM 1/4W 1206 SMD
R4	5k	Vishay Dale	ALSR015K000JE12	RES 5.0K OHM 5% WW AXIAL
R5	1M	Bourns Inc.	3299Y-1-105LF	TRIMMER 1M OHM 0.5W PC PIN
R6	TBD			VALUE TBD, 1206 SMD, HEIGHT 0.6mm
R7	475	Vishay	CRCW1206475RFKEA	RES 475 OHM 1/4W 1206 SMD
R8	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R9	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R10	475	Vishay	CRCW1206475RFKEA	RES 475 OHM 1/4W 1206 SMD
R11	23.7K	Vishay	CRCW120623K7FKEA	RES 23.7K OHM 1/4W 1206 SMD
R12	0	Vishay/Dale	CRCW12060000Z0EA	RES 0.0 OHM 1/4W 1206 SMD
R13	120	Vishay	CRCW1206120RJNEA	RES 120 OHM 1/4W 1206 SMD
R14	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R15	0.15	Stackpole	CSRN2010FKR150	RES .15OHM 1W 1% 2010 SMD
R16	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R17	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R18	475	Vishay	CRCW1206475RFKEA	RES 475 OHM 1/4W 1206 SMD
R19	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R20	0.15	Stackpole	CSRN2010FKR150	RES .15OHM 1W 1% 2010 SMD
R21	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R22	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R23	475	Vishay	CRCW1206475RFKEA	RES 475 OHM 1/4W 1206 SMD

Ref	Value	Manufacturer	Manufacturer PN#	Description
R24	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R25	0.15	Stackpole	CSRN2010FKR150	RES .15OHM 1W 1% 2010 SMD
R26	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R27	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R28	475	Vishay	CRCW1206475RFKEA	RES 475 OHM 1/4W 1206 SMD
R29	0.05	Stackpole	CSRN2512FK50L0	RES .05 OHM 2W 1% 2512 SMD
R30	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R31	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R32	475	Vishay	CRCW1206475RFKEA	RES 475 OHM 1/4W 1206 SMD
R33	TBD			VALUE TBD, 1206 SMD, HEIGHT 0.6mm
R34	23.7K	Vishay	CRCW120623K7FKEA	RES 23.7K OHM 1/4W 1206 SMD
R35	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R36	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R37	39	Vishay	CRCW120639R0JNEA	RES 39 OHM 1/4W 1206 SMD
R38	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R39	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R40	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R41	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R42	10.0K	Vishay	CRCW120610K0FKEA	RES 10.0K OHM 1/4W 1206 SMD
R43	0	Vishay/Dale	CRCW12060000Z0EA	RES 0.0 OHM 1/4W 1206 SMD
R44	TBD			VALUE TBD, 1206 SMD, HEIGHT 0.6mm
R45	TBD			VALUE TBD, 1206 SMD, HEIGHT 0.6mm
R46	TBD			VALUE TBD, 1206 SMD, HEIGHT 0.6mm
R47	TBD			VALUE TBD, 1206 SMD, HEIGHT 0.6mm
R48	31.6K	Vishay	CRCW120631K6FKEA	RES 31.6K OHM 1/4W 1206 SMD
R49	316	Vishay	CRCW1206316RFKEA	RES 316 OHM 1/4W 1206 SMD
R50	16.5K	Vishay	CRCW120616K5FKEA	RES 16.5K OHM 1/4W 1206 SMD
R51	TBD			VALUE TBD, 1206 SMD, HEIGHT 0.6mm
R52	31.6K	Vishay	CRCW120631K6FKEA	RES 31.6K OHM 1/4W 1206 SMD
R53	16.5K	Vishay	CRCW120616K5FKEA	RES 16.5K OHM 1/4W 1206 SMD
R54	TBD			VALUE TBD, 1206 SMD, HEIGHT 0.6mm
RN1	33k	Bourns Inc.	4816P-T01-333LF	RES ARRAY 33K OHM 8 RES 16SOIC
ST1	#4 SCREW TERMINAL			#4 SCREW TERMINAL W/ WASHER

Ref	Value	Manufacturer	Manufacturer PN#	Description
ST2	#4 SCREW TERMINAL			#4 SCREW TERMINAL W/ WASHER
ST3	#4 SCREW TERMINAL			#4 SCREW TERMINAL W/ WASHER
ST4	#4 SCREW TERMINAL			#4 SCREW TERMINAL W/ WASHER
SW1	TDA08H0SB1	C&K	TDA08H0SB1	SWITCH DIP 8POS HALF PITCH SMD
U1	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U2	LT1787HVIS8#PBF	Linear Technology	LT1787HVIS8#PBF	IC AMP PREC CURR SENSE HV 8-SOIC
U3	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U4	MAX5033AASA+	Maxim IC	MAX5033AASA+	IC BUCK 3.3V 0.5A 8SOIC
U5	QS6K21TR	Rohm	QS6K21TR	MOSFET N-CH 45V 1A TSMT6
U6	LT1787HVIS8#PBF	Linear Technology	LT1787HVIS8#PBF	IC AMP PREC CURR SENSE HV 8-SOIC
U7	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U8	QS6K21TR	Rohm	QS6K21TR	MOSFET N-CH 45V 1A TSMT6
U9	LT1787HVIS8#PBF	Linear Technology	LT1787HVIS8#PBF	IC AMP PREC CURR SENSE HV 8-SOIC
U10	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U11	QS6K21TR	Rohm	QS6K21TR	MOSFET N-CH 45V 1A TSMT6
U12	LT1787HVIS8#PBF	Linear Technology	LT1787HVIS8#PBF	IC AMP PREC CURR SENSE HV 8-SOIC
U13	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U14	STS4DPF30L	STMicroelectronics	STS4DPF30L	MOSFET 2P-CH 30V 4A 8-SOIC
U15	LT1787HVIS8#PBF	Linear Technology	LT1787HVIS8#PBF	IC AMP PREC CURR SENSE HV 8-SOIC
U16	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U17	LDA100STR	IXYS	LDA100STR	OPTOCOUPLER SGL TRANS-OUT 6-SMD
U18	PIC24FJ256GA106-I/PT	Microchip Technology	PIC24FJ256GA106-I/PT	IC PIC MCU FLASH 256K 64TQFP
U19	MAX3226E	Maxim IC	MAX3226ECUE+	IC TXRX RS232 250KBPS SD 16TSSOP
U20	ADS8344NB	Analog Devices	ADS8344NB	IC 16-BIT 8-CH A/D CONV 20-SSOP
U21	MAX3226E	Maxim IC	MAX3226ECUE+	IC TXRX RS232 250KBPS SD 16TSSOP
U22	AD1583ARTZ-REEL7	Analog Devices	AD1583ARTZ-REEL7	IC VREF SERIES PREC 3V SOT-23-3
U23	MAX3226E	Maxim IC	MAX3226ECUE+	IC TXRX RS232 250KBPS SD 16TSSOP
U24	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U25	LT1790BCS6-1.25#TRMPBF	Linear Technology	LT1790BCS6-1.25#TRMPBF	IC VREF SERIES 1.25V SOT-23-6
U26	MAX3226E	Maxim IC	MAX3226ECUE+	IC TXRX RS232 250KBPS SD 16TSSOP
Y1	3.6864MHz	ECS Inc	ECS-36-20-5PXDU-TR	CRYSTAL 3.6864 MHZ 20PF SMD