

Gateway Node - Sensor Node Switching Cape Board Bill of Materials - Drawing# 10021094rA				
Ref	Value	Manufacturer	Manufacturer PN#	Description
C1	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C2	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C3	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C4	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C5	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C6	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C7	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C8	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C9	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C10	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C11	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C12	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C13	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C14	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C15	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C16	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C17	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C18	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C19	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C20	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C21	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C22	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C23	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C24	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C25	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C26	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C27	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C28	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C29	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C30	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C31	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD
C32	0.1uF	AVX Corp	TAJA104K035RNJ	CAP TANTALUM .10UF 35V 10% SMD

Ref	Value	Manufacturer	Manufacturer PN#	Description
C33	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C34	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C35	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
D1	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D2	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D3	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D4	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D5	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D6	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D7	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D8	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D9	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D10	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D11	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D12	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D13	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D14	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
D15	DB2J31700L	Panasonic	DB2J31700L	DIODE 30V 1A SMINI2
D16	BZX384-C3V3,115	NXP Semiconductors	BZX384-C3V3,115	DIODE ZENER 3.3V 300MW SOD323
J1	1803277	Phoenix	1803277	CONN HEADER RT ANG 2POS 3.81MM
J2	1881448	Phoenix Contact	1881448	CONN TERM BLK HDR 2.5MM 2POS
J3	1803277	Phoenix	1803277	CONN HEADER RT ANG 2POS 3.81MM
J4	70553-0002	Molex	70553-0002	CONN, RT Angle Header, --, 3, TH
J5	1881448	Phoenix Contact	1881448	CONN TERM BLK HDR 2.5MM 2POS
J6	70553-0002	Molex	70553-0002	CONN, RT Angle Header, --, 3, TH
J7	1881448	Phoenix Contact	1881448	CONN TERM BLK HDR 2.5MM 2POS
J8	70553-0002	Molex	70553-0002	CONN, RT Angle Header, --, 3, TH
J9	1881448	Phoenix Contact	1881448	CONN TERM BLK HDR 2.5MM 2POS
J10	70553-0002	Molex	70553-0002	CONN, RT Angle Header, --, 3, TH
J11	SSQ-123-03-G-D	Samtec Inc	SSQ-123-03-G-D	CONN RCPT .100" 46POS DUAL GOLD
J12	SSQ-123-03-G-D	Samtec Inc	SSQ-123-03-G-D	CONN RCPT .100" 46POS DUAL GOLD
J13	TSW-105-08-L-D-RA	Samtec	TSW-105-08-L-D-RA	CONN HEADER 10POS .100 DL R/A AU
J14	TSW-105-08-L-D-RA	Samtec	TSW-105-08-L-D-RA	CONN HEADER 10POS .100 DL R/A AU

Ref	Value	Manufacturer	Manufacturer PN#	Description
J15	TSW-105-08-L-D-RA	Samtec	TSW-105-08-L-D-RA	CONN HEADER 10POS .100 DL R/A AU
J16	TSW-105-08-L-D-RA	Samtec	TSW-105-08-L-D-RA	CONN HEADER 10POS .100 DL R/A AU
JP1	961210-6404-AR	3M	961210-6404-AR	CONN HEADER VERT DUAL 10POS GOLD
K1	DK2a-L2-3V	Panasonic PEWA	DK2a-L2-3V	2 Form A, 3VDC 2 Form A 10A 250VAC
K2	TLP3542(F)	Toshiba	TLP3542(F)	PHOTOCOUPLER PHOTORELAY 6-DIP
K3	DK2a-L2-3V	Panasonic PEWA	DK2a-L2-3V	2 Form A, 3VDC 2 Form A 10A 250VAC
K4	TLP3542(F)	Toshiba	TLP3542(F)	PHOTOCOUPLER PHOTORELAY 6-DIP
K5	DK2a-L2-3V	Panasonic PEWA	DK2a-L2-3V	2 Form A, 3VDC 2 Form A 10A 250VAC
K6	TLP3542(F)	Toshiba	TLP3542(F)	PHOTOCOUPLER PHOTORELAY 6-DIP
K7	DK2a-L2-3V	Panasonic PEWA	DK2a-L2-3V	2 Form A, 3VDC 2 Form A 10A 250VAC
K8	TLP3542(F)	Toshiba	TLP3542(F)	PHOTOCOUPLER PHOTORELAY 6-DIP
P1	1803578	Phoenix Contact	1803578	CONN TERMBLOCK PLUG 2POS 3.81MM
P2	1881325	Phoenix Contact	1881325	CONN TERM BLK PLUG 2.5MM 2POS
P3	1803578	Phoenix Contact	1803578	CONN TERMBLOCK PLUG 2POS 3.81MM
P4	50-57-9403	Molex Inc	50-57-9403	CONN HOUSING 3POS .100 W/LATCH
P5	1881325	Phoenix Contact	1881325	CONN TERM BLK PLUG 2.5MM 2POS
P6	50-57-9403	Molex Inc	50-57-9403	CONN HOUSING 3POS .100 W/LATCH
P7	1881325	Phoenix Contact	1881325	CONN TERM BLK PLUG 2.5MM 2POS
P8	50-57-9403	Molex Inc	50-57-9403	CONN HOUSING 3POS .100 W/LATCH
P9	1881325	Phoenix Contact	1881325	CONN TERM BLK PLUG 2.5MM 2POS
P10	50-57-9403	Molex Inc	50-57-9403	CONN HOUSING 3POS .100 W/LATCH
R1	0.1	Stackpole Electronics	CSRN2512FKR100	RES .1 OHM 2W 1% 2512 CSRN SMD
R2	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R3	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R4	2.37k	Panasonic	ERJ-1TNF2371U	RES 2.37K OHM 1W 1% 2512 SMD
R5	15.8K	Vishay	CRCW060315K8FKEA	RES 15.8K OHM 0.1W 1% 0603
R6	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R7	0.1	Stackpole Electronics	CSRN2512FKR100	RES .1 OHM 2W 1% 2512 CSRN SMD
R8	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R9	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R10	15.8K	Vishay	CRCW060315K8FKEA	RES 15.8K OHM 0.1W 1% 0603
R11	2.37k	Panasonic	ERJ-1TNF2371U	RES 2.37K OHM 1W 1% 2512 SMD
R12	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603

Ref	Value	Manufacturer	Manufacturer PN#	Description
R13	0.1	Stackpole Electronics	CSRN2512FKR100	RES .1 OHM 2W 1% 2512 CSRN SMD
R14	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R15	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R16	15.8K	Vishay	CRCW060315K8FKEA	RES 15.8K OHM 0.1W 1% 0603
R17	2.37k	Panasonic	ERJ-1TNF2371U	RES 2.37K OHM 1W 1% 2512 SMD
R18	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R19	0.1	Stackpole Electronics	CSRN2512FKR100	RES .1 OHM 2W 1% 2512 CSRN SMD
R20	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R21	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R22	2.37k	Panasonic	ERJ-1TNF2371U	RES 2.37K OHM 1W 1% 2512 SMD
R23	15.8K	Vishay	CRCW060315K8FKEA	RES 15.8K OHM 0.1W 1% 0603
R24	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R25	5.62K	Vishay	CRCW06035K62FKEA	RES 5.62K OHM 0.1W 1% 0603
R26	5.62K	Vishay	CRCW06035K62FKEA	RES 5.62K OHM 0.1W 1% 0603
R27	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R28	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R29	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R30	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
R31	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.1W 1% 0603
RN1	10k	Vishay Thin Film	NOMCT16031002AT1	RES ARRAY 10K OHM 8 RES 16SOIC
SW1	CHS-02TB	Copal Electronics Inc	CHS-02TB	SWITCH DIP 2-POS SLIDE SMD 6V
SW2	CHS-08TB	Copal Electronics Inc	CHS-08TB	SWITCH DIP 8-POS SLIDE SMD 6V
U1	IRF7316TRPBF	International Rectifier	IRF7316TRPBF	MOSFET 2P-CH 30V 4.9A 8-SOIC
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	IRF7316TRPBF	International Rectifier	IRF7316TRPBF	MOSFET 2P-CH 30V 4.9A 8-SOIC
U5	LT1787HVIS8#PBF	Linear Technology	LT1787HVIS8#PBF	IC AMP PREC CURR SENSE HV 8-SOIC
U6	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U7	IRF7316TRPBF	International Rectifier	IRF7316TRPBF	MOSFET 2P-CH 30V 4.9A 8-SOIC
U8	LT1787HVIS8#PBF	Linear Technology	LT1787HVIS8#PBF	IC AMP PREC CURR SENSE HV 8-SOIC
U9	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U10	IRF7316TRPBF	International Rectifier	IRF7316TRPBF	MOSFET 2P-CH 30V 4.9A 8-SOIC
U11	LT1787HVIS8#PBF	Linear Technology	LT1787HVIS8#PBF	IC AMP PREC CURR SENSE HV 8-SOIC

Ref	Value	Manufacturer	Manufacturer PN#	Description
U12	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5
U13	MAX3226E	Maxim IC	MAX3226ECUE+	IC TXRX RS232 250KBPS SD 16TSSOP
U14	CAT24C256WI-GT3	On Semiconductor	CAT24C256WI-GT3	IC EEPROM 256KBIT 400KHZ 8SOIC
U15	MAX3226E	Maxim IC	MAX3226ECUE+	IC TXRX RS232 250KBPS SD 16TSSOP
U16	MAX3226E	Maxim IC	MAX3226ECUE+	IC TXRX RS232 250KBPS SD 16TSSOP
U17	MAX3226E	Maxim IC	MAX3226ECUE+	IC TXRX RS232 250KBPS SD 16TSSOP
U18	SN74CB3T3245PWR	Texas Instruments	SN74CB3T3245PWR	IC 2.5/3.3V FET BUS SW 20-TSSOP
U19	SN74CB3T3245PWR	Texas Instruments	SN74CB3T3245PWR	IC 2.5/3.3V FET BUS SW 20-TSSOP
V1	SOLDER_PAD			0.125" x 0.250" TEST PAD