

Gateway Node - DC-DC Converter Cape Board Bill of Materials - Drawing# 10021093rA				
Ref	Value	Manufacturer	Manufacturer PN#	Description
C1	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C2	0.10uF	Kemet	C0805C104K1RAC	CAP CER 0.1UF 100V 10% X7R 0805
C3	10uF	Kemet	T521X106M063ATE050	CAP TANT 10UF 63V 20% 2917
C4	10uF	Kemet	T521X106M063ATE050	CAP TANT 10UF 63V 20% 2917
C5	22,000.0pF	Kemet	C1206C223J1RACTU	CAP CER 0.022UF 100V 5% X7R 1206
C6	2.2uF	TDK	C4532X7R2A225M230KA	CAP CER 2.2UF 100V 20% X7R 1812
C7	2.2uF	TDK	C4532X7R2A225M230KA	CAP CER 2.2UF 100V 20% X7R 1812
C8	2.2uF	TDK	C4532X7R2A225M230KA	CAP CER 2.2UF 100V 20% X7R 1812
C9	22uF	TDK	C3225X7R1C226M250AC	CAP CER 22UF 16V 20% X7R 1210
C10	330pF	Kemet	C0805C331J1GACTU	CAP CER 330PF 100V 5% NP0 0805
C11	150uF	Panasonic	EEF-HE0J151R	CAP ALUM 150UF 6.3V 20% SMD
C12	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C13	680pF	Kemet	C0805C681J1GACTU	CAP CER 680PF 100V 5% NP0 0805
C14	10,000.0pF	Kemet	C0603C103K1RAC	CAP CER 10000PF 100V X7R 0603
C15	10,000.0pF	Kemet	C0603C103K1RAC	CAP CER 10000PF 100V X7R 0603
C16	0.47uF	Murata	GRM21BR71H474KA88L	CAP CER 0.47UF 50V 10% X7R 0805
C17	22,000.0pF	Kemet	C1206C223J1RACTU	CAP CER 0.022UF 100V 5% X7R 1206
C18	0.10uF	Kemet	C0805C104K1RAC	CAP CER 0.1UF 100V 10% X7R 0805
C19	2.2uF	TDK	C4532X7R2A225M230KA	CAP CER 2.2UF 100V 20% X7R 1812
C20	330pF	Kemet	C0805C331J1GACTU	CAP CER 330PF 100V 5% NP0 0805
C21	10uF	Kemet	T521X106M063ATE050	CAP TANT 10UF 63V 20% 2917
C22	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C23	2.2uF	TDK	C4532X7R2A225M230KA	CAP CER 2.2UF 100V 20% X7R 1812
C24	2.2uF	TDK	C4532X7R2A225M230KA	CAP CER 2.2UF 100V 20% X7R 1812
C25	22uF	TDK	C3225X7R1C226M250AC	CAP CER 22UF 16V 20% X7R 1210
C26	150uF	Panasonic	EEF-HE0J151R	CAP ALUM 150UF 6.3V 20% SMD
C27	68uF	AVX	TPSC686K016R0125	CAP TANT 68UF 16V 10% 2312
C28	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C29	820pF	Kemet	C0805C821J1GACTU	CAP CER 820PF 100V 5% NP0 0805
C30	10,000.0pF	Kemet	C0603C103K1RAC	CAP CER 10000PF 100V X7R 0603
C31	10,000.0pF	Kemet	C0603C103K1RAC	CAP CER 10000PF 100V X7R 0603
C32	0.47uF	Murata	GRM21BR71H474KA88L	CAP CER 0.47UF 50V 10% X7R 0805

Ref	Value	Manufacturer	Manufacturer PN#	Description
C33	22,000.0pF	Kemet	C1206C223J1RACTU	CAP CER 0.022UF 100V 5% X7R 1206
C34	330pF	Kemet	C0805C331J1GACTU	CAP CER 330PF 100V 5% NP0 0805
C35	0.10uF	Kemet	C0805C104K1RAC	CAP CER 0.1UF 100V 10% X7R 0805
C36	2.2uF	TDK	C4532X7R2A225M230KA	CAP CER 2.2UF 100V 20% X7R 1812
C37	22uF	TDK	CKG57NX7S2A226M500JH	CAP CER 22UF 100V 20% X7S SMD
C38	2.2uF	TDK	C4532X7R2A225M230KA	CAP CER 2.2UF 100V 20% X7R 1812
C39	2.2uF	TDK	C4532X7R2A225M230KA	CAP CER 2.2UF 100V 20% X7R 1812
C40	47uF	Vishay Sprague	597D476X9050Z2T	CAP TANT 47UF 50V 10% 3024
C41	47uF	Vishay Sprague	597D476X9050Z2T	CAP TANT 47UF 50V 10% 3024
C42	47uF	Vishay Sprague	597D476X9050Z2T	CAP TANT 47UF 50V 10% 3024
C43	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C44	0.10uF	Kemet	C0603C104K4RAC	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603
C45	TBD			TO BE DETERMINED, HEIGHT 0.95mm
C46	TBD			TO BE DETERMINED, HEIGHT 1.45mm
C47	10,000.0pF	Kemet	C0603C103K1RAC	CAP CER 10000PF 100V X7R 0603
C48	10,000.0pF	Kemet	C0603C103K1RAC	CAP CER 10000PF 100V X7R 0603
C49	0.47uF	Murata	GRM21BR71H474KA88L	CAP CER 0.47UF 50V 10% X7R 0805
D1	VS-30WQ10FNPBF	Vishay	VS-30WQ10FNPBF	DIODE SCHOTTKY 100V 3.5A DPAK
D2	VS-30WQ10FNPBF	Vishay	VS-30WQ10FNPBF	DIODE SCHOTTKY 100V 3.5A DPAK
D3	B360A-13-F	Diodes Inc	B360A-13-F	DIODE SCHOTTKY 60V 3A SMA
D4	VS-30WQ10FNPBF	Vishay	VS-30WQ10FNPBF	DIODE SCHOTTKY 100V 3.5A DPAK
J1	1803280	Phoenix Contact	1803280	CONN HEADER RT ANG 3POS 3.81MM
J2	1803277	Phoenix	1803277	CONN HEADER RT ANG 2POS 3.81MM
J3	1803277	Phoenix	1803277	CONN HEADER RT ANG 2POS 3.81MM
J4	TSW-105-08-L-D-RA	Samtec	TSW-105-08-L-D-RA	CONN HEADER 10POS .100 DL R/A AU
J5	SSQ-123-03-G-D	Samtec Inc	SSQ-123-03-G-D	CONN RCPT .100" 46POS DUAL GOLD
J6	SSQ-123-03-G-D	Samtec Inc	SSQ-123-03-G-D	CONN RCPT .100" 46POS DUAL GOLD
L1	68uH	Würth	74435586800	INDUCTOR POWER 68UH 7.5A SMD
L2	82uH	Würth	74435588200	INDUCTOR POWER 82UH 7A SMD
L3	100uH	Taiyo Yuden	NR8040T101M	INDUCTOR 100UH 1A 20% SMD
L4	82uH	Würth	74435588200	INDUCTOR POWER 82UH 7A SMD
P1	1803581	Phoenix Contact	1803581	CONN TERMBLOCK PLUG 3POS 3.81MM
P2	1803578	Phoenix Contact	1803578	CONN TERMBLOCK PLUG 2POS 3.81MM

Ref	Value	Manufacturer	Manufacturer PN#	Description
P3	1803578	Phoenix Contact	1803578	CONN TERMBLOCK PLUG 2POS 3.81MM
R1	0.033	Susumu	KRL6432E-M-R033-F-T1	RES 0.033 OHM 3W 1% 2512 WIDE
R2	4.99K	Vishay	CRCW08054K99FKEA	RES 4.99K OHM 0.125W 1% 0805
R3	294.0K	Vishay	CRCW0603294KFKEA	RES 294K OHM 0.125W 1% 0603
R4	10	Panasonic	ERJ-1TNF10R0U	RES 10 OHM 1W 1% 2512 SMD
R5	2.94K	Vishay	CRCW08052K94FKEA	RES 2.94K OHM 0.125W 1% 0805
R6	15.8K	Vishay	CRCW060315K8FKEA	RES 15.8K OHM 0.125W 1% 0603
R7	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.125W 1% 0603
R8	25.5K	Vishay	CRCW080525K5FKEA	RES 25.5K OHM 0.125W 1% 0805
R9	31.6K	Vishay	CRCW080531K6FKEA	RES 31.6K OHM 0.125W 1% 0805
R10	1.00M	Vishay	CRCW06031M00FKEA	RES 1.0M OHM 0.125W 1% 0805
R11	4.99K	Vishay	CRCW08054K99FKEA	RES 4.99K OHM 0.125W 1% 0805
R12	10	Panasonic	ERJ-1TNF10R0U	RES 10 OHM 1W 1% 2512 SMD
R13	1.62K	Vishay	CRCW08051K62FKEA	RES 1.62K OHM 0.125W 1% 0805
R14	383.0K	Vishay	CRCW0603383KFKEA	RES 383K OHM 0.125W 1% 0603
R15	25.5K	Vishay	CRCW080525K5FKEA	RES 25.5K OHM 0.125W 1% 0805
R16	16.9K	Vishay	CRCW080516K9FKEA	RES 16.9K OHM 0.125W 1% 0805
R17	4.99K	Vishay	CRCW08054K99FKEA	RES 4.99K OHM 0.125W 1% 0805
R18	10	Panasonic	ERJ-1TNF10R0U	RES 10 OHM 1W 1% 2512 SMD
R19	TBD			TO BE DETERMINED, HEIGHT 0.5mm
R20	25.5K	Vishay	CRCW080525K5FKEA	RES 25.5K OHM 0.125W 1% 0805
R21	16.9K	Vishay	CRCW080516K9FKEA	RES 16.9K OHM 0.125W 1% 0805
R22	10.0K	Vishay	CRCW060310K0FKEA	RES 10.0K OHM 0.125W 1% 0603
TP1	RED	Keystone Electronics	5005	TEST POINT PC COMPACT .063"D RED
TP2	ORANGE	Keystone Electronics	5008	TEST POINT PC COMPACT .063"D ORN
TP3	BLACK	Keystone Electronics	5006	TEST POINT PC COMPACT .063"D BLK
TP4	YELLOW	Keystone Electronics	5009	TEST POINT PC COMPACT .063"D YEL
TP5	ORANGE	Keystone Electronics	5008	TEST POINT PC COMPACT .063"D ORN
TP6	WHITE	Keystone Electronics	5007	TEST POINT PC COMPACT .063"D WHT
U1	LM5576QMH/NOPB	Texas Instruments	LM5576QMH/NOPB	IC REG BUCK ADJ 3A 20ETSSOP
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	AD8603AUJZ	Analog Devices	AD8603AUJZ-REEL7	IC OPAMP GP R-R CMOS TSOT23-5

Ref	Value	Manufacturer	Manufacturer PN#	Description
U5	MAX5035BASA+	Maxim Integrated	MAX5035BASA+	IC REG BUCK 5V 1A 8SOIC
U6	LM5576QMH/NOPB	Texas Instruments	LM5576QMH/NOPB	IC REG BUCK ADJ 3A 20ETSSOP
U7	LM5576QMH/NOPB	Texas Instruments	LM5576QMH/NOPB	IC REG BUCK ADJ 3A 20ETSSOP