

Layer Stack Legend						
Material	Layer	Thickness	Dielectric Material	Type	Gerber	
	Top Overlay			Legend	GTO	
Surface Material	Top Solder			Solder Mask	GTS	
CF-003	Top	0.02mm	SM-001	Signal	GTL	
Prepreg		0.13mm	PP-008	Dielectric		
CF-004	GND-1	0.04mm		Internal Plane	GP1	
Core		0.18mm	Core-009	Dielectric		
CF-004	Signal-1	0.04mm		Signal	G1	
Prepreg		0.13mm	PP-008	Dielectric		
CF-004	Signal-2	0.04mm		Signal	G2	
Core		0.18mm	Core-009	Dielectric		
CF-004	GND-2	0.04mm		Internal Plane	GP2	
Prepreg		0.13mm	PP-008	Dielectric		
CF-003	Bottom	0.02mm		Signal	GBL	
Surface Material	Board Layer Stack Bottom Solder	0.03mm	SM-001	Solder Mask	GBS	
	Board Layer Stack Bottom Overlay			Legend	GBO	
Total thickness: 0.98mm						

Bill Of Materials

Line #	Designator	Quantity
	C201, C207, C305, C306, C307, C308, C313, C418, C422, C437	10
	C202, C203, C204, C205, C206, C300, C302, C303, C304, C309, C310, C311, C312, C410, C416, C417, C419, C421, C436, C506, C514, C518, C526	23
	C400, C408	2
	C401	1
	C402	1
	C403, C409	2
	C404, C405	2
	C406, C413	2
	C407, C414	2
	C411	1
	C412	1
	C415, C420	2
	C423, C424, C425	3
	C426, C427	2
	C429	1
	C430	1
	C432	1
	C433, C435	2
	C434	1
	C500, C501, C502	3
	C503, C504, C505, C507, C508, C515, C516, C517, C519, C520, C524, C525, C527, C528, C529	15
	C510, C511, C512	3
	C513, C522, C531	3
	C523	1
	CN201	1
	D200	1
	D201, D301	2
	D202, D302	2
	D203, D300	2
	FB500, FB501, FB502, FB503, FB504	5
	L400, L406	2
	L401	1
	L402	1
	L403, L407	2
	L404, L408	2
	L405, L409	2
	L410, L411	2
	L412	1
	L413	1
	L500, L501, L502	3
	R200, R210, R211, R212, R213, R214, R301, R302, R303, R304, R305, R306, R308, R309, R310, R311, R402, R405	18
	R201	1
	R202, R314, R315, R316	4
	R203	1
	R204	1
	R205	1
	R206, R207, R312, R313	4
	R208	1
	R209	1
	R300, R307	2
	R400, R401	2
	R403, R407, R408	3
	R404	1
	R406	1
	R500, R504, R507	3
	R501	1
	R502, R506, R509	3
	R505	1
	R508	1
	SH1	1
	U201	1
	U300	1
	U400, U402	2
	U401	1
	U403	1
	U500, U501, U502	3
	Y400	1

Bill Of Materials

Line #	Designator	Quantity	manufacturer	Operating Temperature	Package / Case	Part Number	Tolerance	Value	price	Supplier 1
	C201, C207, C305, C306, C307, C308, C313, C418, C422, C437	10	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	GRT155CT1A105KE13D	±10%	1 µF	0.04	DigiKey
	C202, C203, C204, C205, C206, C300, C302, C303, C304, C309, C310, C311, C312, C410, C416, C417, C419, C421, C436, C506, C514, C518, C526	23	KEMET	-55°C ~ 125°C	0402 (1005 Metric)	C0402C104K4RECAUTO	±10%	0.1 µF	0.01	DigiKey
	C400, C408	2	Murata Electronics	-55°C ~ 125°C	0201 (0603 Metric)	GJM0335C1E100GB01D	±2%	10 pF	0.01	DigiKey
	C401	1	Murata Electronics	-55°C ~ 125°C	0201 (0603 Metric)	GJM0335C1E6R8BB01D	±0.1pF	6.8 pF	0.01	DigiKey
	C402	1	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	GJM1555C1H390JB01D	±5%	39 pF	0.02	DigiKey
	C403, C409	2	Murata Electronics	-55°C ~ 125°C	0201 (0603 Metric)	GJM0335C1E1R5BB01D	±0.1pF	1.5 pF	0.01	DigiKey
	C404, C405	2	Murata Electronics	-55°C ~ 125°C	0201 (0603 Metric)	GJM0335C1E4R7BB01D	±0.1pF	4.7 pF	0.01	DigiKey
	C406, C413	2	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	GRM155R71A474KE01D	±10%	0.47 µF	0.12	DigiKey
	C407, C414	2	Murata Electronics	-55°C ~ 125°C	0201 (0603 Metric)	GJM0335C1H3R1BB01D	±0.1pF	3.1 pF	0.01	DigiKey
	C411	1	KEMET	-55°C ~ 125°C	0201 (0603 Metric)	C0201C470J8GAC7867	±5%	47 pF	0.01	DigiKey
	C412	1	KEMET	-55°C ~ 125°C	0402 (1005 Metric)	C0402C473M4RAC7867	±20%	0.047 µF	0.01	DigiKey
	C415, C420	2	Johanson Technology Inc.	-55°C ~ 125°C	0201 (0603 Metric)	QLCD250Q101J1GV001T	±5%	100 pF	0.02	DigiKey
	C423, C424, C425	3	Murata Electronics	-55°C ~ 125°C	0201 (0603 Metric)	GRM0335C1H560GA01D	±2%	56 pF	0.01	DigiKey
	C426, C427	2	Murata Electronics	-55°C ~ 125°C	0201 (0603 Metric)	GJM0335C1E1R4BB01D	±0.1pF	1.4 pF	0.01	DigiKey
	C429	1	Murata Electronics	-55°C ~ 125°C	0201 (0603 Metric)	GRM0335C1H620GA01D	±2%	62 pF	0.01	DigiKey
	C430	1	KEMET	-55°C ~ 125°C	0201 (0603 Metric)	CBR02C229B3GAC	±0.1pF	2.2 pF	0.02	DigiKey
	C432	1	Samsung Electro-Mechanics	-55°C ~ 85°C	0402 (1005 Metric)	CL05A105KO5NNNC	±10%	1 µF	0.01	DigiKey
	C433, C435	2	Murata Electronics	-55°C ~ 125°C	0201 (0603 Metric)	GRM0335C1H221JA01D	±5%	220 pF	0.01	DigiKey
	C434	1	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	GRM1555C1E103JE01J	±5%	10000 pF	0.02	DigiKey
	C500, C501, C502	3	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	CC0201KRX7R88BB222	±10%	2200 pF	0.01	DigiKey
	C503, C504, C505, C507, C508, C515, C516, C517, C519, C520, C524, C525, C527, C528, C529	15	Murata Electronics	-55°C ~ 105°C	0603 (1608 Metric)	GRM188C80J226ME15D	±20%	22 µF	0.03	DigiKey
	C510, C511, C512	3	Cal-Chip Electronics, Inc.	-55°C ~ 125°C	0603 (1608 Metric)	GMC10X7R106K10NT	±10%	10 µF	0.26	DigiKey
	C513, C522, C531	3	TDK Corporation	-55°C ~ 125°C	0402 (1005 Metric)	CGA2B1X7S1C474K050BC	±10%	0.47 µF	0.03	DigiKey
	C523	1	Murata Electronics	-55°C ~ 85°C	0805 (2012 Metric)	GRM21BR1A476ME15K	±20%	47 µF	0.13	DigiKey
	CN201	1								
	D200	1	Semtech Corporation	-40°C ~ 125°C (TJ)	0402 (1005 Metric)	RCLAMP0561PQTCT			0.13	DigiKey
	D201, D301	2	Everlight Electronics Co Ltd		0402 (1005 Metric)	EAST10052GA0		Green	0.09	DigiKey
	D202, D302	2	Stanley Electric Co		0402 (1005 Metric)	FHY1105P-TR		Yellow	0.05	DigiKey
	D203, D300	2	Everlight Electronics Co Ltd		0402 (1005 Metric)	EAST10053RA0		Red	0.05	DigiKey
	FB500, FB501, FB502, FB503, FB504	5	Murata Electronics	-55°C ~ 125°C	0603 (1608 Metric)	BLE18PS080SN1D		8.5 Ohms @ 100 MHz	0.08	DigiKey
	L400, L406	2	Murata Electronics	-40°C ~ 140°C	0402 (1005 Metric)	LQW15AWR10J80D	±5%	100 nH	0.09	DigiKey
	L401	1	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	LQW15AN10NG80D	±2%	10 nH	0.07	DigiKey
	L402	1	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	LQW15AN5N6G8ZD	±2%	5.6 nH	0.07	DigiKey
	L403, L407	2	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	LQW15AN8NG0ZD	±2%	68 nH	0.06	DigiKey
	L404, L408	2	TDK Corporation	-40°C ~ 105°C	Nonstandard	VLS252010CX-150M-1	±20%	15 µH	0.14	DigiKey
	L405, L409	2	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	LOW15AN82NG00D	±2%	82 nH	0.05	DigiKey
	L410, L411	2	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	LQW15ANR10J00D	±5%	100 nH	0.04	DigiKey
	L412	1	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	LOW15AN6N0B8ZD	±0.1nH	6 nH	0.07	DigiKey
	L413	1	Murata Electronics	-55°C ~ 125°C	0402 (1005 Metric)	LOW15AN2N2D10D	±0.5nH	2.2 nH	0.05	DigiKey
	L500, L501, L502	3	Bourns Inc.	-40°C ~ 125°C	Nonstandard	SRN4018-2R2M	±20%	2.2 µH	0.17	DigiKey
	R200, R210, R211, R212, R213, R214, R301, R302, R303, R304, R305, R306, R308, R309, R310, R311, R402, R405	18	Yageo	-55°C ~ 155°C	0201 (0603 Metric)	AC0201JR-070RL	Jumper	0 Ohms	0.01	DigiKey
	R201	1	Panasonic Electronic Components	-55°C ~ 125°C	1506, Convex, Long Side Terminals	EXB-2HV101JV	±5%		0.03	DigiKey
	R202, R314, R315, R316	4	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	RC0201JR-07680RL	±5%	680 Ohms	0.01	DigiKey
	R203	1	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	RC0201JR-07750RL	±5%	750 Ohms	0.01	DigiKey
	R204	1	Vishay Dale	-55°C ~ 155°C	0201 (0603 Metric)	CRCW02011K50JNED	±5%	1.5 kOhms	0.10	DigiKey
	R205	1	Panasonic Electronic Components	-55°C ~ 125°C	0804, Convex, Long Side Terminals	EXB-28V101JX	±5%		0.01	DigiKey
	R206, R207, R312, R313	4	Yageo	-55°C ~ 155°C	0201 (0603 Metric)	AC0201FR-074K7L	±1%	4.7 kOhms	0.01	DigiKey
	R208	1	Yageo	-55°C ~ 155°C	0201 (0603 Metric)	AC0201FR-0747KL	±1%	47 kOhms	0.01	DigiKey
	R209	1	Vishay Dale	-55°C ~ 155°C	0201 (0603 Metric)	CRCW020133K0FKED	±1%	33 kOhms	0.02	DigiKey
	R300, R307	2	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	AF0201FR-0710KL	±1%	10 kOhms	0.01	DigiKey
	R400, R401	2	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	RC0201FR-07220RL	±1%	220 Ohms	0.01	DigiKey
	R403, R407, R408	3	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	RC0201FR-071KL	±1%	1 kOhms	0.01	DigiKey
	R404	1	Panasonic Electronic Components	-55°C ~ 125°C	0201 (0603 Metric)	ERJ-1GNF5101C	±1%	5.1 kOhms	0.01	DigiKey
	R406	1	Panasonic Electronic Components	-55°C ~ 125°C	0201 (0603 Metric)	ERJ-1GJF3301C	±1%	3.3 kOhms	0.02	DigiKey
	R500, R504, R507	3	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	RC0201FR-13100KL	±1%	100 kOhms	0.01	DigiKey
	R501	1	Yageo	-55°C ~ 155°C	0201 (0603 Metric)	AC0201FR-072K49L	±1%	2.49 kOhms	0.01	DigiKey
	R502, R506, R509	3	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	RC0201FR-074K87L	±1%	4.87 kOhms	0.01	DigiKey
	R505	1	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	RC0201FR-0715K4L	±1%	15.4 kOhms	0.01	DigiKey
	R508	1	Yageo	-55°C ~ 125°C	0201 (0603 Metric)	RC0201FR-0719K1L	±1%	19.1 kOhms	0.01	DigiKey
	SH1	1								
	U201	1								
	U300	1								
	U400, U402	2								
	U401	1								
	U403	1								
	U500, U501, U502	3								
	Y400	1				FT2MNTUM-32.0-T1	±0.5ppm			