



Bill of Materials for the SEC-6D6KW-OBC-SIC-GEVB_LLC Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C52, C85, C90, C115, C116, C119, C142, C143, C146, C147	10	MLCC 0805-50V-100pFK-NP0	100pF		0805	WURTH	885012007057	Yes	Yes
C60, C109, C111, C122, C124, C130, C135, C138, C155, C162	10	MLCC 1206-25V-106M-X7R	10pF		1206	WURTH	885012208069	Yes	Yes
C61, C83	2	MLCC 0805-50V-102M-X7R	1000pF		0805	WURTH	885012207086	Yes	Yes
C63	1	MLCC 0805-25V-474M-X7R	.47uF		0805	WURTH	885012207076	Yes	Yes
C70	1	MLCC 0805-50V-10pFK-NP0	10pF		0805	WURTH	885012007051	Yes	Yes
C71, C75, C82	3	MLCC 0805-50V-471J-NP0	470pF		0805	WURTH	885012007061	Yes	Yes
C72	1	MLCC 0805-50V-472M-X7R	4700pF		0805	WURTH	885012207090	Yes	Yes
C73	1	MLCC 0805-25V-224M-X7R	.22uF		0805	WURTH	885012207074	Yes	Yes
C74	1	MLCC 0805-35V-475M-X7R	4.7uF		0805	TDK	CGA4J1X7R1V475K125AC	Yes	Yes
C76	1	MLCC 0805-50V-473M-X7R	.047uF		0805	WURTH	885012207096	Yes	Yes
C77	1	MLCC 0805-50V-220pFK-NP0	220pF		0805	WURTH	885012007059	Yes	Yes
C80, C110, C112, C136, C139	5	MLCC 0805-25V-104M-X7R	.1uF		0805	WURTH	85012207072	Yes	Yes
C51, C156	2	MLCC 0805-50V-103M-X7R	.01uF		0805	WURTH	885012207092	Yes	Yes
C98, C101, C104	3	MLCC 0805-25V-225M-X7R	2.2uF		0805	WURTH	885012207079	Yes	Yes
C189	1	MLCC 1206-35V-475K-X7R	4.7uF		1206	TDK	CGA5L1X7R1V475K160AC	Yes	Yes
D1, D2	2	Zener Diode 15V 0.5W,SOD-123				ON Semiconductor	SZMMSZ15T1G	No	Yes
D10, D11, D12, D38, D39, D41	6	Schottky 40V 0.5A,SOD-123				ON Semiconductor	MBR0540	No	Yes
D5, D6, D8, D77, D78, D150, D164	7	Switching Diode 100V 200mA,SOD-323				ON Semiconductor	SBAS16HT1G	No	Yes
Q23	1	MOSFET 60V 7.5Ω, SOT23				ON Semiconductor	2V7002LT1G	No	Yes
R62, R63	2	Chip resister 0805 1K ohm-J	1K		0805	Any		Yes	Yes

R69, R90	2	Chip resister 0805 220 ohm-J	220		0805	Any		Yes	Yes
R70	1	Chip resister 0805 18K ohm-J	18K		0805	Any		Yes	Yes
R71	1	Chip resister 0805 5.1K ohm-J	1K		0805	Any		Yes	Yes
R72	1	Chip resister 0805 51K ohm-J	51K		0805	Any		Yes	Yes
R73, R79	2	Chip resister 0805 200K ohm-J	200K		0805	Any		Yes	Yes
R74	1	Chip resister 0805 15K ohm-J	15K		0805	Any		Yes	Yes
R75, R81, R84, R85	4	Chip resister 0805 10K ohm-J	10K		0805	Any		Yes	Yes
R76	1	N/A				Any		Yes	Yes
R77	1	Chip resister 0805 68K ohm-J	68K		0805	Any		Yes	Yes
R78	1	Chip resister 0805 12.4KF ohm-F	4KF		0805	Any		Yes	Yes
R80	1	Chip resister 0805 10 ohm-J	10		0805	Any		Yes	Yes
R82, R83, R91, R92	4	Chip resister 0805 4.75KF ohm-F	75KF		0805	Any		Yes	Yes
R86	1	Chip resister 0805 2.2K ohm-J	2K		0805	Any		Yes	Yes
R96	1	Chip resister 0805 33K ohm-J	33K		0805	Any		Yes	Yes
R97	1	Chip resister 0805 47 ohm-J	47		0805	Any		Yes	Yes
R98	1	Chip resister 0805 100K ohm-J	100K		0805	Any		Yes	Yes
R131, R145	2	Chip resister 0805 470 ohm-J	470		0805	Any		Yes	Yes
T72	1	Current Transformer EE10				Magsonder	MCTE10-1801	Yes	Yes
U16, U17, U18, U19	4	IC SiC MOSFET Driver, Single +4/-6A,SOIC-16W				ON Semiconductor	NCV57000DWR2G	No	Yes
U60	1	IC , Secondary Side LLC Controller with Synchronous Rectifier Control,SOP-16				ON Semiconductor	NCP4390	No	Yes
U80	1	IC Amplifier,Rail-to-Rail Output,SOT-23-5L				ON Semiconductor	NCV2003SN2T1G	No	Yes