



Bill of Materials for the LC709501A05GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
IC1	1	Charge control LSI	-	-	QFN52	ON Semiconductor	LC709501F	No	Yes
IC2,IC3	2	Lib Protection	-	-	WDFN6	ON Semiconductor	LC06111TMT	No	Yes
IC4	1	USB Type-C Port Control	-	-	MLP14	ON Semiconductor	FUSB302BMPX	No	Yes
IC8	1	USB Port Emulator	-	-	TSOT23-5L		NT6003	Yes	Yes
IC10	1	2nd Boost IC	-	-	VQFN2x2-10	Synergy	SY7065AQMC	Yes	Yes
Q1, Q3, Q4, Q5	4	Pch Power MOSFET	-	-	ECH8	ON Semiconductor	ECH8310	No	Yes
Q6, Q7	2	Nch Power MOSFET	-	-	WDFN8	ON Semiconductor	NTTFS4H05N	No	Yes
Q9	1	Pch MOSFET	-	-	MCPH3	ON Semiconductor	MCH3375	No	Yes
D1	1	Schottky Diode	-	30V	SOT23	ON Semiconductor	BAT54CL	No	Yes
D4	1	Schottky Diode	-	30V	SOD-123	ON Semiconductor	BAT54T1G	No	Yes
L1	1	INDUCTOR COIL	4.6uH	-	ETQP6F4R6HFA	Panasonic	ETQP6F4R6HFA	Yes	Yes
L3, L5	2	Ferrite Bead	30Ω	-	2012	Murata	BLM21PG300SN1	Yes	Yes
L9	1	INDUCTOR COIL	1.5uH	-	7.1x 6.5 x 3.0	TDK	SPM6530T-1R5M	Yes	Yes
T1	1	Thermistor	10K	-		Semitec	103JT-025	Yes	Yes
X1	0	12MHz X'tal OSC	12MHz(DNP)	-	FCX-05	River Eletec	FCX-05	Yes	Yes
LED1, LED2, LED3, LED4	4	LED	White	-	1608		OSWT1608C1A	Yes	Yes
C33, C34	DNP	Chip Capacitor	8p(DNP)	50V	CAP_1005	Murata	GRM1552C1H8R0CZ01	Yes	Yes
C21, C22	DNP		1p(DNP)	50V	CAP_1005	Murata	GRM1554C1H1R0CZ01	Yes	Yes
C29, C39	2	Chip Capacitor	1000p	50V	CAP_1005	Murata	GRM155B11H102KA01D	Yes	Yes
C36, C38	2	Chip Capacitor	0.01u	10V	CAP_1005	Murata	GRM155B11H103KA01D	Yes	Yes
C10, C14, C16, C23, C24, C31, C50	7	Chip Capacitor	0.1u	50V	CAP_1005	Murata	GRM155B11H104KA01D	Yes	Yes
C17	1	Chip Capacitor	1u	25V	CAP_1005	Murata	GRM155B11H105KA01D	Yes	Yes
C19, C20, C25, C26, C27, C32, C35, C42, C66, C67	10	Chip Capacitor	1u	10V	CAP_1005	Murata	GRM155R61A105KE15J	Yes	Yes
C30	1	Chip Capacitor	22000p	50V	CAP_1005	Murata	GRM155B11H223KA01	Yes	Yes
C28	DNP	Chip Capacitor	2.2u(DNP)	25V	CAP_1005	Murata	GRM155B11H225KA01D	Yes	Yes
C40, C41	2	Chip Capacitor	390p	50V	CAP_1005	Murata	GRM155B11H391KA01D	Yes	Yes
C1, C2, C3, C4, C5, C6, C62, C63, C64, C65	10	Chip Capacitor	22u	16V	CAP_3225	Murata	GRM32EB31C226ME16	Yes	Yes
C9, C13	DNP	Chip Capacitor	22u(DNP)	16V	CAP_3225	Murata	GRM32EB31C226ME16	Yes	Yes
C7, C8	2	Chip Capacitor	47u	16V	CAP_3225	Murata	GRM32ER61C476KE15	Yes	Yes
R70	1	Chip Resistor	120K	±1%	RES_1005	ROHM	MCR01EZPFL1203	Yes	Yes
R44	1	Chip Resistor	180K	±1%	RES_1005	ROHM	MCR01EZPFL1803	Yes	Yes
R18	1	Chip Resistor	82K	±1%	RES_1005	ROHM	MCR01EZPFL8202	Yes	Yes
R69	1	Chip Resistor	390K	±1%	RES_1005	ROHM	MCR01EZPFL3903	Yes	Yes
R43	1	Chip Resistor	910K	±1%	RES_1005	ROHM	MCR01EZPFL9103	Yes	Yes
R9, R10, R13, R14, R64, R65, R72, R89, R95	9	Chip Resistor	0	±5%	RES_1005	ROHM	MCR01EZPJ000	Yes	Yes
R38, R73, R96, R97	DNP	Chip Resistor	0(DNP)	±5%	RES_1005	ROHM	MCR01EZPJ000	Yes	Yes
R11, R23, R25, R28, R30, R31, R32	7	Chip Resistor	100	±5%	RES_1005	ROHM	MCR01EZPJ101	Yes	Yes
R17	DNP	Chip Resistor	100(DNP)	±5%	RES_1005	ROHM	MCR01EZPJ101	Yes	Yes
R26	0	Chip Resistor	1K(DNP)	±5%	RES_1005	ROHM	MCR01EZPJ102	Yes	Yes
R36, R37	2	Chip Resistor	1K	±5%	RES_1005	ROHM	MCR01EZPJ102	Yes	Yes
R8	0	Chip Resistor	10K(DNP)	±5%	RES_1005	ROHM	MCR01EZPJ103	Yes	Yes

R29, R49, R50, R51, R52, R53	6	Chip Resistor	10K	±5%	RES_1005	ROHM	MCR01EZPJ103	Yes	Yes
R54, R55, R56	3	Chip Resistor	10m	±1%	RES_3216	Panasonic	ERJ8BWFR010V	Yes	Yes
R57	DNP	Chip Resistor	10m(DNP)	±1%	RES_3216	Panasonic	ERJ8BWFR010V	Yes	Yes
R58, R61	2	Chip Resistor	20m	±1%	RES_3216	Panasonic	ERJ8BWFR020V	Yes	Yes
R3, R4, R33, R94	4	Chip Resistor	100K	±5%	RES_1005	ROHM	MCR01EZPJ104	Yes	Yes
R2	1	Chip Resistor	47K	±5%	RES_1005	ROHM	MCR01EZPJ473	Yes	Yes
R45, R46, R47, R48	4	Chip Resistor	330	±5%	RES_1005	ROHM	MCR01EZPJ331	Yes	Yes
R27	1	Chip Resistor	2.2K	±5%	RES_1005	ROHM	MCR01EZPJ222	Yes	Yes
R90, R91	DNP	Chip Resistor	43K(DNP)	±5%	RES_1005	ROHM	MCR01EZPJ432	Yes	Yes
R92, R93	DNP	Chip Resistor	50K(DNP)	±5%	RES_1005	ROHM	MCR01EZPJ502	Yes	Yes
R20, R22, R81	3	Chip Resistor	51K	±5%	RES_1005	ROHM	MCR01EZPJ513	Yes	Yes
R21	DNP	Chip Resistor	51K(DNP)	±5%	RES_1005	ROHM	MCR01EZPJ513	Yes	Yes
R5, R7	2	Chip Resistor	510K	±5%	RES_1005	ROHM	MCR01EZPJ514	Yes	Yes
R34, R35	2	Chip Resistor	680	±5%	RES_1005	ROHM	MCR01EZPJ681	Yes	Yes
S1	1	Charge SW			EVQPF206K	Panasonic	EVQPF206K	Yes	Yes
J5	1	USB Type-A (1port)			USB_676430910	Molex	67643-0910	Yes	Yes
J2	1	USB Type-C			DX07S024JJ2	JAE	DX07S024JJ2	Yes	Yes
J6	1	Debug port	3pin	-	ILG3PS3T2SA	JAE	ILG3PS3T2SA	Yes	Yes
J7	0	LOG port	3pin(DNP)	-				Yes	Yes