



## Bill of Materials for the LC89091JAGEVK Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free	
C1	1	ChipCapacitor	0.01µF, 50V	±10%	1608	Murata	GRM188B11H103K	Yes	Yes	
C2, C3, C6, C9, C12, C14, C17, C18, C21, C22, C24, C25, C28	13	Chip Capacitor	0.1µF, 50V	±10%	1608	Murata	GRM188B11E104K	Yes	Yes	
C4, C5	2	Chip Electrolytic Capacitor	2.2µF, 50V	±20%	4.3mmx 4.3mm	Japan Chemi Con	EMVA500ADA2R2MD55G	Yes	Yes	
C7	1	Film Capacitor	0.1µF, 50V	±10%	5.08mm	Nissei	AMZ50V104K	Yes	Yes	
C8	1	Film Capacitor	0.022µF, 50V	±10%	5.08mm	Nissei	AMZ50V223K	Yes	Yes	
C10, C11	2	Chip Capacitor	15pF, 50V	±5%	1608	Murata	GRM1882C1H150J	Yes	Yes	
C13, C15	2	Chip Tantalum Capacitor	10µF, 16V	±20%	3.2mm x 1.6mm	Nichicon	F931C106MAA	Yes	Yes	
C16	1	Chip Electrolytic Capacitor	47µF, 16V	±20%	5.3mm x 5.3mm	Japan Chemi Con	EMVA160ADA470ME55G	Yes	Yes	
C19, C20	2	Chip Capacitor	47pF, 50V	±5%	1608	Murata	GRM1882C1H470J	Yes	Yes	
C23	1	Chip Capacitor	0.033µF, 50V	±10%	1608	Murata	GRM188B11H333K	Yes	Yes	
C26, C27	2	Not Implemented	—	—	—	—	—	Yes	Yes	
CN1, CN5, CN7	4	Pin Header	—	—	2.54mm	Hirosugi Keiki	PGS 410166 02	Yes	Yes	
CN2, CN3	2	Pin Header	—	—	7.62mm	Hirosugi Keiki	PGS 410166 04	Yes	Yes	
CN6	1	Pin Header	—	—	12.7mm	Hirosugi Keiki	PGS 410166 06	Yes	Yes	
CN8	1	USBConnector (miniUSB)	—	—	9.9mm x 9.0mm	HRS	UX60A MB 5ST	Yes	Yes	
D2, D5	2	ChipLED	(Green)	6.3mcd	—	1608	Rohm	SML D12P8W	Yes	Yes
D3	1	ChipLED (Red)	63mcd	—	1608	Rohm	SML D12U8W	Yes	Yes	
D4	1	ChipLED (Yellow)	63mcd	—	1608	Rohm	SML D12Y8W	Yes	Yes	
F1, F2	2	Ferrite Beads	330Ω, 1500mA	±25%	2012	Murata	BLM21PG331SN	Yes	Yes	
J1	1	RCA	—	—	14mm x 10mm	Marushin	MR 551L	Yes	Yes	
JP1, JP2, JP5, JP7, JP8	5	Short Plug	—	—	2.54mm	KEL	DSP 02 002 431G	Yes	Yes	
JP3	1	Short Plug	—	—	2.54mm x 2.54mm	KEL	DSP 02 004 431G	Yes	Yes	
JP4	1	Short Plug	—	—	2.54mm x 5.08mm	KEL	DSP 02 006 431G	Yes	Yes	
JP6, JP9	2	Short Plug	—	—	5.08mm	KEL	DSP 03 003 432G	Yes	Yes	
P1	1	PTC (Positive Temperature Coefficient)	500mA	—	3225	Tyco Electronics	microSMD050F	Yes	Yes	
R1	1	Chip Resistor	75Ω, 1/8W	±5%	2012	KOA	RK73B2ATTD750J	Yes	Yes	
R2	1	Chip Resistor	100kΩ, 1/8W	±1%	2012	KOA	RK73H2ATTD1003F	Yes	Yes	
R4, R6, R24	3	Chip Resistor	1kΩ, 1/8W	±1%	2012	KOA	RK73H2ATTD1001F	Yes	Yes	
R5, R8, R10, R18, R19, R20, R21, R23	8	Chip Resistor	0Ω, 2A	—	2012	KOA	RK73Z2ATTD	Yes	Yes	
R7, R27	2	Chip Resistor	10kΩ, 1/8W	±1%	2012	KOA	RK73H2ATTD1002F	Yes	Yes	
R9, R11	2	Chip Resistor	2.2kΩ, 1/8W	±1%	2012	KOA	RK73H2ATTD2201F	Yes	Yes	
R12, R15	2	Chip Resistor	5.6kΩ, 1/8W	±1%	2012	KOA	RK73H2ATTD5601F	Yes	Yes	
R14	1	Lead Resistor	100Ω, 1/4W	±5%	5.08mm	KOA	CF1/4C101J	Yes	Yes	
R17	1	Chip Resistor	1MΩ, 1/8W	±1%	2012	KOA	RK73H2ATTD1004F	Yes	Yes	
R22	1	Chip Resistor	220Ω, 1/8W	±5%	2012	KOA	RK73B2ATTD221J	Yes	Yes	
R25, R26	2	Chip Resistor	27Ω, 1/8W	±5%	2012	KOA	RK73B2ATTD270J	Yes	Yes	
R28	1	Chip Resistor	4.7kΩ, 1/8W	±1%	2012	KOA	RK73H2ATTD4701F	Yes	Yes	
R29	1	Chip Resistor	1.5kΩ, 1/8W	±5%	2012	KOA	RK73B2ATTD152J	Yes	Yes	
R30	1	Chip Resistor	470Ω, 1/8W	±1%	2012	KOA	RK73H2ATTD4700F	Yes	Yes	
TOS1, TOS2	2	Optical	Module	—	—	13.5mm x 11.5mm	Toshiba	TORX147	Yes	Yes
TP1, TP6, TP7, TP8, TP9, TP10, TP11, TP14, TP16, TP18, TP20, TP22	12	Test Pin	—	—	—	MAC8	LC 2 G Olive Green	Yes	Yes	
TP12, TP13	2	Test Pin	—	—	—	MAC8	LC 2 G White	Yes	Yes	
TP17, TP23, TP25, TP27, TP28, TP29	6	Test Pin	—	—	—	MAC8	LC 2 G Black	Yes	Yes	
U1	1	Inverter Logic	—	—	TSSOP 14	Toshiba	TC74HCU04AFT	Yes	Yes	
U2	1	Digital audio Interface Receiver	—	—	SSOP 16	ON Semiconductor	LC89091JA H	No	Yes	
U3	1	Regulator	3.3V	±1%	SOT223	ST Micro	LD1117S33CTR	Yes	Yes	
U4	1	USB Controller	—	—	LQFP 48	FTDI	FT2322D	Yes	Yes	
X1	1	Quartz Resonator	24.576MHz	±30ppm	11.05mm x 4.65mm	KDS	HC 49/U	Yes	Yes	
X2	1	Ceramic Resonator	6MHz	±0.5%	8.0mm x 3.0mm	Murata	CSTLS6M00G53 B0	Yes	Yes	