

LC823455XGEVK BOM (1/4)

Comment	Description	Designator	Qty.	manufacture / Vender	Parts Number / Required Spec.	Size
22uF		C101, C103	2	Murata	GRM188R61A226ME15	1608
NP_1608		C104, C105, C405, C411, R425	5			1608
2.2uF		C106, C107, C108, C109, C110, C111, C112, C113, C216, C217, C422, C424, C430, C434, C501, C504, C505	17	Murata	GRM188C81C225KA12D	1608
18pF		C1, C2	2	Murata	GQM1885C1H180JB01D	1608
100uF 10V		C203	1	TAIYO YUDEN	LMK325ABJ107MM-P	3225
220uF 6V3 KO		C21	1	KEMET	T520B227M006ATE070	3528
10pF		C27, C28	2	Samsung	CL10C100JB81PNC	1608
1nF		C29, C30, C31, C210, C211, C212, C213, C624, C625	9	Samsung	CL10B102KA8NNNC	1608
100nF		C3, C5, C6, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C24, C25, C26, C33, C38, C42, C43, C45, C46, C47, C48, C49, C54, C205, C206, C208, C209, C214, C215, C301, C302, C303, C304, C408, C412, C423, C425, C429, C432, C438, C502, C503, C506, C507, C508, C509, C510, C512, C601, C603, C604, C605, C606, C607, C616, C617, C622, C623, C626, C627, C628, C701, C702, C801, C802, C803, C804, C805, C806, C807, C808, C809, C810, C811, C812, C815, C816, C817, C818, C819, C820, C821, C822, C910	90	Yageo	CC0603KRX7R8BB104	1608
100nF	For U1 Socket	C35, C65, C85, C105, C135, C145, C155, C165, C175, C245, C255, C265, C465, C475	14	Yageo	CC0603KRX7R8BB104	1608
10uF		C32, C37, C40, C102, C202, C218, C219, C407, C410, C413, C414, C415, C416, C426, C427, C428, C433, C439, C444, C445, C446, C447, C901, C903, C906, C907, C908	27	Murata	GRM188C81C106MA73D	1608
1uF		C34, C36, C50, C51, C52, C201, C409, C417, C448, C449, C450, C609, C610, C611, C612, C613, C614, C615, C618, C619, C703, C704, C902, C909, C911	25	Yageo	CC0603KRX5R8BB105	1608
10nF		C35, C39, C44, C55, C418, C419, C420, C421, C442, C443	10	Samsung	CL10B103KB8NCNC	1608
47uF		C4, C7, C813, C814	4	TAIYO YUDEN	AMK107BBJ476MA-RE	1608
0.22uF X7R		C401, C402	2	Murata	GJ188R71H224KA01D	1608
220uF 4V MUSE-F95		C403, C404	2	AVX	F950G227MSAAM1Q2	
0.47uF X7R		C405L, C405R	2	Murata	GRM188R71C474KA88D	1608
4.7uF		C41, C53	2	Samsung	CL10A475KO8NNNC	1608
2.2nF		C431, C436	2	Murata	GRM1885C1H222JA01D	1608
0.47uF		C435, C437, C440, C441	4	Murata	GRM188R71C474KA88D	1608
100uF 4V		C511	1	murata	GRM31CR60J227ME11	3216
NP_100nF		C608	1			1608
100pF		C904	1	TDK	C1608COG1H101J080AE	1608
NP_10nF		C905	1			1608
ZX62D-B-5PA8	micro USB CN, Type B	CN1, CN2	2	Hirose	ZX62D-B-5PA8	
MJ-179P	DC Jack, 5.5mm, 2.1mm	CN201	1	Marushin	MJ-179P	
B2B-XH-A	Header, 2-Pin	CN202	1	JST	B2B-XH-A	
B4B-XH-A	Header, 4-Pin	CN401	1	JST	B4B-XH-A	
SJ-3524-SMT-TR-GR	3.5mm Stereo Jack, Green	CN402	1	CUI	SJ-3524-SMT-TR-GR	
SJ-3524-SMT-TR	3.5mm Stereo Jack, Black	CN403	1	CUI	SJ-3524-SMT-TR	
NP_PH-1x04SG	Header, 4-Pin	CN404, CN406, CN407	3	Akiduki	PH-1x04SG	
SJ-3524-SMT-TR-PI	3.5mm Stereo Jack, Pink	CN405	1	CUI	SJ-3524-SMT-TR-PI	
DM3AT-SF-PEJM5	Micro SD Slot	CN501	1	Hirose	DM3AT-SF-PEJM5	
HIF3FC-20PA-2.54DSA	Header, 10-Pin, Dual row	CN601	1	Hirose	HIF3FC-20PA-2.54DSA	
NP_HIF3FC-20PA-2.54DSA	Header, 10-Pin, Dual row	CN602	1	Hirose	HIF3FC-20PA-2.54DSA	
FHU-1x08SG	Header, 8-Pin	CN701, CN704	2	Akiduki	FHU-1x08SG	
FHU-1x06SG	Header, 6-Pin	CN702	1	Akiduki	FHU-1x06SG	
FHU-1x10SG	Header, 10-Pin	CN703	1	Akiduki	FHU-1x10SG	
NP_2214R-12SG-85	Header, 6-Pin, Dual row	CN705	1	Akiduki	2214R-12SG-85	
MDT420E01001	M.2 Type Key-E Socket	CN801	1	Amphenol	MDT420E01001	
AVR-M1608C120MT6AB	ESD Protection	D1, D2	2	TDK	AVR-M1608C120MT6AB	
MBRAF440	Schottky Diode	D201, D202, D204, D205, D206	5	On Semiconductor	MBRAF440	
S-501T	CRD, 0.5mA, SMD	D203	1	Semitec	S-501T	

LC823455XGEVK BOM (2/4)

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AVR-M1005C080MTACB	ESD Protection	D401, D402, D601, D602, D603, D606, D607, D608, D609, D610, D611	11	TDK	AVR-M1005C080MTACB	
MMD100-001	DMIC, Top Port	DM1, DM2	2	Merry	MMD100-001	
BLM18RK102SN1	Bead	FB1, FB4, FB5, FB6	4	Murata	BLM18RK102SN1	1608
BLM21PG331SN1	Bead	FB2, FB401, FB402	3	Murata	BLM21PG331SN1	2012
BLM18RK121SN1	Bead	FB3, FB101, FB102, FB103, FB104, FB105, FB106, FB107, FB108, FB109, FB901	11	Murata	BLM18RK121SN1	1608
PH-2x02SG	Header, 2-Pin, Dual row	JP1	1	Akiduki	PH-2x02SG	
PH-2x05SG	Header, 5-Pin, Dual row	JP15, JP22	2	Akiduki	PH-2x05SG	
PH-2x08SG	Header, 8-Pin, Dual row	JP2, JP8, JP9, JP11, JP14	5	Akiduki	PH-2x08SG	
PH-1x03SG	Header, 3-Pin	JP21, JP26, JP101, JP102, JP103, JP104, JP105, JP106, JP107, JP108, JP109, JP110, JP111, JP112, JP113, JP114, JP201, JP202, JP214, JP215, JP216, JP217, JP218, JP401, JP402, JP501, JP502, JP503, JP504, JP505, JP506, JP507, JP508, JP509, JP603, JP801, JP901, JP902	38	Akiduki	PH-1x03SG	
PH-2x01SG	Header, 2-Pin	JP23, JP24, JP25, JP203, JP204, JP205, JP206, JP207, JP208, JP209, JP210, JP211, JP212, JP213, JP219, JP405, JP406, JP903	18	Akiduki	PH-2x01SG	
PH-2x06SG	Header, 6-Pin, Dual row	JP3, JP13, JP19	3	Akiduki	PH-2x06SG	
NP_PH-2x01SG	Header, 2-Pin	JP403, JP404	2	Akiduki	PH-2x01SG	
PH-2x03SG	Header, 3-Pin, Dual row	JP5, JP7	2	Akiduki	PH-2x03SG	
PH-2x04SG	Header, 4-Pin, Dual row	JP6, JP10, JP16, JP17, JP18, JP20	6	Akiduki	PH-2x04SG	
MPZ1608S102ATA00	Inductor	L1, L3	2	TDK	MPZ1608S102ATA00	
LQH44PN1RONPOL	Inductor	L4, L101, L102, L201, L202	5	Murata	LQH44PN1RONPOL	
LQH44NN101K03L	Magnetic-Core Inductor	L401, L402	2	Murata	LQH44NN101K03L	
LQH5BPN470M38L	Magnetic-Core Inductor	L403, L404	2	Murata	LQH5BPN470M38L	
DFE201610E-R47M	Inductor	L901	1	Murata	DFE201610E-R47M	
AQM1248A_RN	LCD Module	LCD601	1	Akiduki	AQM1248A_RN	
HSMC-C191	LED, Red	LED1, LED201, LED602	3	Broadcom	HSMC-C191	
HSME-C191	LED, Green	LED2, LED601	2	Broadcom	HSME-C191	
VLMB1310-GS08	LED, Blue	LED3, LED202	2	Vishay	VLMB1310-GS08	
CPH3448-TL-W	MOS FET	Q101	1	On Semiconductor	CPH3448-TL-W	
NP_2SD2704K	Muting Transistor	Q401, Q402	2	Rohm	2SD2704K	
DTC114EE	Digital Tr	Q601, Q602	2	On Semiconductor or Rohm	DTC114EE	
OR	Resistor	R1, R3, R4, R5, R17, R20, R21, R23, R24, R28, R30, R109, R110, R111, R113, R116, R117, R118, R119, R120, R121, R124, R201, R207, R213, R215, R216, R218, R301, R302, R303, R304, R305, R306, R307, R308, R309, R310, R312, R313, R314, R315, R316, R317, R318, R319, R320, R321, R322, R323, R324, R409, R410, R415, R416, R417, R418, R423, R424, R427, R430, R433, R436, R438, R444, R445, R446, R501, R502, R503, R504, R509, R510, R513, R515, R601, R604, R610, R618, R619, R622, R623, R639, R640, R651, R652, R653, R654, R701, R702, R703, R704, R705, R706, R707, R708, R709, R710, R711, R712, R713, R714, R715, R801, R802, R803, R804, R805, R806, R807, R808, R809, R810, R811, R812, R813, R814, R815, R816, R817, R818, R819, R820, R821, R822, R823, R824, R825, R827, R828, R829, R831, R832, R833, R834, R835, R836, R838, R839, R840, R841, R842, R843, R844, R901, R902, R903, R904, R911, R912, R913, R914, R916, RDM1L, RDM2H	155	KOA	RK73Z1JTTD	1608
100k	Resistor	R101, R105, R107, R108, R122, R435, R437, R514, R620, R905, R906	11	KOA	RK73H1JTTD1003F	1608
620k	Resistor	R102	1	KOA	RK73H1JTTD6203F	1608
NP_100k	Resistor	R103	1			1608
150k	Resistor	R104, R114	2	KOA	RK73H1JTTD1503F	1608
NP_10k	Resistor	R106, R519, R613	3			1608

LC823455XGEVK BOM (3/4)

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300k	Resistor	R112	1	KOA	RK73H1JTTD3003F	1608
NP_470k	Resistor	R115	1			1608
22R	Resistor	R12, R13, R14, R15, R641, R642	6	KOA	RK73H1JTTD22R0F	1608
NP_OR	Resistor	R123, R125, R208, R217, R411, R413, R434, R443, R826, RDM1H, RDM2L	11			1608
NP_1M	Resistor	R19	1			1608
10M	Resistor	R2	1	KOA	RK73H1JTTD1005F	1608
1M	Resistor	R203, R621	2	KOA	RK73H1JTTD1004F	1608
470k	Resistor	R204, R412, R643, R644, R647, R648	6	KOA	RK73H1JTTD4703F	1608
150k 1%	Resistor	R205	1	KOA	RK73H1JTTD1503F	1608
160k 1%	Resistor	R206	1	KOA	RK73H1JTTD1603F	1608
NP	Resistor	R214, R432, R638	3			1608
39k 1%	Resistor	R22	1	KOA	RK73H1JTTD3902F	1608
10k 1%	Resistor	R25	1	KOA	RK73H1JTTD1002F	1608
200R 1%	Resistor	R27	1	KOA	RK73H1JTTD2000F	1608
47k	Resistor	R29, R31, R32, R311, R505, R506, R507, R508, R511, R512, R516, R655, R656, R657	14	KOA	RK73H1JTTD4702F	1608
68m	Current Sens. Resistor	R33	1	Susumu	RL0816T-R068-F	1608
6k8	Resistor	R37	1	KOA	RK73H1JTTD6801F	1608
3k9	Resistor	R38	1	KOA	RK73H1JTTD3901F	1608
0R Z16	Resistor	R401, R402, R403, R404	4	KOA	Z16	Axial
NP_1k	Resistor	R405L, R405R	2			1608
100R 1%	Resistor	R419, R420, R421, R422	4	KOA	RK73H1JTTD1000F	1608
470R 1%	Resistor	R428, R429	2	KOA	RK73H1JTTD4700F	1608
2k7 1%	Resistor	R428A, R429A	2	KOA	RK73H1JTTD2701F	1608
10R	Resistor	R431	1	KOA	RK73H1JTTD10R0F	1608
47R 1%	Resistor	R439, R440, R441, R442	4	KOA	RK73H1JTTD47R0F	1608
10k	Resistor	R6, R7, R34, R35, R209, R210, R407, R408, R414, R426, R517, R518, R602, R603, R614, R615, R626, R629, R632, R633, R634, R635, R636, R637, R716, R830, R837	27	KOA	RK73H1JTTD1002F	1608
1k	Resistor	R605, R606, R624, R645, R646, R649, R650	7	KOA	RK73H1JTTD1001F	1608
4k7	Resistor	R611, R612	2	KOA	RK73H1JTTD4701F	1608
22k	Resistor	R616, R617	2	KOA	RK73H1JTTD2202F	1608
3k3	Resistor	R625	1	KOA	RK73H1JTTD3301F	1608
1M 1%	Resistor	R627	1	KOA	RK73H1JTTD1004F	1608
300k 1%	Resistor	R628	1	KOA	RK73H1JTTD3003F	1608
750k 1%	Resistor	R630	1	KOA	RK73H1JTTD7503F	1608
120k 1%	Resistor	R631, R908	2	KOA	RK73H1JTTD1203F	1608
2k2	Resistor	R8, R10, R16, R18, R36, R202, R608, R609	8	KOA	RK73H1JTTD2201F	1608
560k 1%	Resistor	R907	1	KOA	RK73H1JTTD5603F	1608
47k 1%	Resistor	R909	1	KOA	RK73H1JTTD4702F	1608
15k 1%	Resistor	R910	1	KOA	RK73H1JTTD1502F	1608
10m, 1%, 0.5W	Current Sens. Resistor	R915	1	KOA	UR73D2BTTD10L0F	3216
SM3ZS067U410-NUT-R1200	Standoff for M.2 Module	S801	1	JAE	SM3ZS067U410-NUT-R1200	
MHS221	Slide Switch	SW101	1	Nidec Copal Electronics	MHS221	
SKHMQKE010	Tactile Switch	SW601, SW602, SW603, SW604, SW605, SW606, SW607, SW608	8	ALPS	SKHMQKE010	
SKQYPAE010	Tactile Switch	SW610	1	ALPS	SKQYPAE010	
CS-7-14TB	Rotary SW	SW611, SW612	2	Nidec Copal Electronics	CS-7-14TB	
LC-2-G-BLK	Test Pin	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP205, TP206, TP207, TP303, TP304, TP407, TP408, TP501, TP502	17	MAC8	LC-2-G-BLK	
NP_LC-3-G	Test Pin	TP9, TP201, TP202, TP203, TP204, TP301, TP302, TP401, TP402, TP403, TP404, TP405, TP406, TP801, TP802, TP803, TP804, TP805, TP806, TP807, TP808, TP809, TP810, TP811, TP812, TP813, TP814, TP815, TP901, TP902	30	MAC8	LC-3-G	
LC823455-WLCSP120	Low-Power Audio Processor	U1	1	On Semiconductor	LC823455-WLCSP120	
NCP1532MUAATXG	Dual Output DCDC, 1.6A	U101	1	On Semiconductor	NCP1532MUAATXG	
NCP110AMX100TBG	LDO, 0.2A, 1.0V	U102	1	On Semiconductor	NCP110AMX100TBG	
NCP163AMX330TBG	LDO, 0.25A, 3.3V	U103	1	On Semiconductor	NCP163AMX330TBG	
NCP163AMX180TBG	LDO, 0.25A, 1.8V	U104, U401, U903	3	On Semiconductor	NCP163AMX180TBG	
NCP177AMX150TCG	LDO, 0.5A, 1.5V	U105	1	On Semiconductor	NCP177AMX150TCG	
FT232RQ	USB UART IC	U2	1	FTDI Chip	FT232RQ	
NCP349MNAE	Pos. OVP (5.7V)	U201	1	On Semiconductor	NCP349MNAE	
NCP571SN08T1G	0.8V, 0.15A LDO, TSOP-5	U203	1	On Semiconductor	NCP571SN08T1G	

LC823455XGEVK BOM (4/4)

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NCP571SN10T1G	1.0V, 0.15A LDO, TSOP-5	U204	1	On Semiconductor	NCP571SN10T1G	
NCP308SN090T1G	Supervisor, 0.9V	U205	1	On Semiconductor	NCP308SN090T1G	
NCP308SNADJT1G	Supervisor, ADJ	U206, U603	2	On Semiconductor	NCP308SNADJT1G	
FAN53610AUC33X	3.3V, 1A, DCDC, 3MHz	U207	1	On Semiconductor	FAN53610AUC33X	
FAN53600AUC28X	2.8V, 0.6A, DCDC, 3MHz	U208	1	On Semiconductor	FAN53600AUC28X	
FAN54005UCX	USB CHG with OTG Boost REG	U3	1	On Semiconductor	FAN54005UCX	
TCA6416APW	I2C IO Exp. with RST	U301	1	TI	TCA6416APW	
SN74AVC1T45DCKR	Single Translator	U302, U602, U701, U807, U809	5	TI	SN74AVC1T45DCKR	
FPF1321UCX	2:1 Power MUX	U4	1	On Semiconductor	FPF1321UCX	
PCM5102APW	Audio DAC, 112dB	U402	1	TI	PCM5102APW	
PCM1863DBT	Audio ADC, 110dB, SW Mode	U403	1	TI	PCM1863DBT	
TPA6133A2RTJR	Stereo HPA, 138mW, DirectPath	U404	1	TI	TPA6133A2RTJR	
THGBMBG5D1KBAIT	eMMC, 4GB	U501	1	Toshiba	THGBMBG5D1KBAIT	
MX25R6435FM2IL0	Serial Flash	U502	1	Macronix	MX25R6435FM2IL0	
NCP331SNT1G	Load SW, 1.8-5.5V	U503, U504	2	On Semiconductor	NCP331SNT1G	
SN74AVC4T245PW	2x Dual Translator	U601	1	TI	SN74AVC4T245PW	
SN74AUP1G04DCKR	Single Inverter, Low Voltage	U604	1	TI	SN74AUP1G04DCKR	
MC33275ST-3.3T3G	LDO, 0.3A, 3.3V	U702	1	On Semiconductor	MC33275ST-3.3T3G	
SN74AVC2T245RSW	2DIR, Dual Translator	U801, U802, U803, U804, U805, U808	6	TI	SN74AVC2T245RSW	
TXS0206YFP	SDIO Translator with ESD/EMI	U806	1	TI	TXS0206YFP	
TPS62823DLC	DCDC, 0.4-4V Out	U901	1	TI	TPS62823DLC	
NCP59748MN1ADJTBG	1.5A LDO, Low Noise, Low Dropout	U902	1	On Semiconductor	NCP59748MN1ADJTBG	
RK0971220-F15-C0-A103	VR, 9mm, ALPS	VR401	1	ALPS	RK0971220-F15-C0-A103	
TFX-03	Xtal Resonator, 32.768kHz	X1	1	River Eletec	TFX-03	
FCX-07L	Xtal Resonator, 24MHz	X2	1	River Eletec	FCX-07L	
FCXO-07D_3.3V	Xtal Oscilator, 32.768kHz	X901	1	River Eletec	FCXO-07D_3.3V	