



Bill of Materials for the NCV7685GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1,C2	2	Cap	220nF		Thru-Hole	Wurth	890334024002	Yes	Yes
C3	1	Cap	330nF		Thru-Hole	Wurth	890334024003CS	Yes	Yes
C4,C28	2	Cap	4.7nF Y1		Thru-Hole	Murata	DE1E3KX472MB4BP01F	Yes	Yes
C5,C41,C49	3	Cap	100nF		0402	Samsung	CL05B104KO5NNNC	Yes	Yes
C6	1	Cap	220pF		1206	Yageo	CC1206JKNPOCBN221	Yes	Yes
C7	1	Cap	22nF 1kV		Thru-Hole	Epcos	B32683A0223K000	Yes	Yes
C8,C45	2	Cap	22nF		0402	Wurth	885012205052	Yes	Yes
C9,C10	2	Cap	470uF 63V		Thru-Hole	Nichicon	UHE1J471MHD6	Yes	Yes
C12	1	Cap	10nF		0402	Samsung	1276-1028-1-ND	Yes	Yes
C13	1	Cap	150nF		Thru-Hole	Wurth	890303325008CS	Yes	Yes
C14	1	Cap	100uF 500V		Thru-Hole	Rubycon	500LXW100MEFR18X45	Yes	Yes
C15,C22	2	Cap	1uF		0805	Yageo	CC0805KKX7R9BB105	Yes	Yes
C16,C17,C27,C29,C30,C31	6	Cap	1nF		0402	Wurth	885012205044	Yes	Yes
C18	1	Cap	330nF		0603	Wurth	885012206049	Yes	Yes
C19	1	Cap	2.2uF		0805	Wurth	885012207052	Yes	Yes
C20	1	Cap	2.2uF 100V		1206	TDK	CGA5L3X7S2A225M160AB	Yes	Yes
C21,C48	2	Cap	10uF 50V		Thru-Hole	Nichicon	UMV1H100MFD	Yes	Yes
C24,C38,C46,C47	4	Cap	10uF		1206	Samsung	CL31B106MOHNNNE	Yes	Yes
C26,C40	2	Cap	4.7nF		0402	Yageo	AC0402KRX7R8BB472	Yes	Yes
C32,C36	2	Cap	22uF		0603	Samsung	CL10A226MO7JZNC	Yes	Yes
C37	1	Cap	1uF		0603	Samsung	CL10B105KA8NFNC	Yes	Yes
C39	1	Cap	33pF		0402	Yageo	CC0402JRNPO9BN330	Yes	Yes
C42,C43	2	Cap	100pF		0402	Wurth	885012205038	Yes	Yes
C44	1	Cap	100uF25V		Thru-Hole	Nichicon	UHE1E101MED	Yes	Yes
D1	1	Diode	GBU6J			On Semiconductor	GBU6J	No	Yes
D2,D3,D7,D8,D17	5	Diode	ES1JFL			On Semiconductor	ES1JFL	No	Yes
D4	1	Diode	MBRF20100CTG			On Semiconductor	MBRF20100CTG	No	Yes
D5,D6	2	Diode	RURD660S9A			On Semiconductor	RURD660S9A	No	Yes
D9	1	Diode	MMSZ30T1G			On Semiconductor	MMSZ30T1G	No	Yes
D10	1	Diode	MMSZ5248CT1G			On Semiconductor	MMSZ5248CT1G	No	Yes
D11,D12	2	Diode	SS13HE			On Semiconductor	SS13HE	No	Yes
D13	1	Diode	MBRS4201T3G			On Semiconductor	MBRS4201T3G	No	Yes

D16	1	Diode	MMSZ56T1G			On Semiconductor	MMSZ56T1G	No	Yes
F1	1		3A15 SIp		Thru-Hole	Littelfuse	36913150440	Yes	Yes
HS1	1		HS388			Aavid	581102B02500G	No	Yes
HS2,HS3	2		CSM222-30AE			Ohmite	CSM222-30AE	No	Yes
HS4	1		V5074B-T			Assman	V5074B-T	No	Yes
J1	1		CON3		Thru-Hole	Würth	691101710003	Yes	Yes
J6	1		OSTTC062162		Thru-Hole	On Shore Technology Inc.	OSTTC062162	Yes	Yes
L1	1	Inductor	10mH		Thru-Hole	Würth	744824310	Yes	Yes
L2,L3	2	Inductor	390uH		Thru-Hole	Würth	7447071	Yes	Yes
L4	1	Inductor	100uH			Würth	750317957	Yes	Yes
L5	1	Inductor	22uH	0.472" L x 0.472" W		Würth	744771122	Yes	Yes
L6	1	Inductor	150uH	0.157" L x 0.157" W		Würth	74404043151A	Yes	Yes
Q1,Q2	2		FCD9N60NTM			ON Semiconductor	FCD9N60NTM	No	Yes
Q3	1		NTD24N06LT4G			ON Semiconductor	NTD24N06LT4G	No	Yes
Q4	1		FCPF190N65S3L1			ON Semiconductor	FCPF190N65S3L1	No	Yes
Q5,Q7	2		MMBTA06LT1G			ON Semiconductor	MMBTA06LT1G	No	Yes
RTV-162	1		RTV-162			MG Chemicals	RTV162-300ML	No	Yes
R1	1		320 V		Thru-Hole	Littelfuse	V320LA10P	Yes	Yes
R2,R5,R69	3	Resistor	10	0603		Yageo	RC0603FR-0710RL	Yes	Yes
R3,R35,R37,R60,R72	5	Resistor	100	0402		Yageo	RC0402FR-07100RL	Yes	Yes
R4	1	Resistor	2.4k	0603		Yageo	RC0603FR-072K4L	Yes	Yes
R9,R13,R81	3	Resistor	4.99k	0402		Yageo	RC0402FR-074K99L	Yes	Yes
R10,R36,R57,R59,R61,R66,R78	7	Resistor	10k	0402		Yageo	RC0402FR-0710KL	Yes	Yes
R12	1	Resistor	50m	1206		Susumu	PRL1632-R050-F-T1	Yes	Yes
R14,R15,R16,R18	4	Resistor	1.5 Meg	0805		Rohm	KTR10EZPF1504	Yes	Yes
R17	1	Resistor	56k	0805		Yageo	RC0805FR-0756KL	Yes	Yes
R19,R21	2	Resistor	20k	0402		Yageo	RC0402FR-0720KL	Yes	Yes
R22	1	Resistor	150	0402		Yageo	RC0402FR-07150RL	Yes	Yes
R23,R24	2	Resistor	0.27	0612		Panasonic	RCWE0612R909FKEA	Yes	Yes
R25,R46,R47,R48,R74	5	Resistor	56k	0402		Yageo	RC0402FR-0756KL	Yes	Yes
R26	1	Resistor	15k	0402		Yageo	RC0402FR-0715KL	Yes	Yes
R27	1	Resistor	56k	0805		Yageo	RC0805FR-0756KL	Yes	Yes
R28,R29	2	Resistor	1	0603		Yageo	RC0603FR-071RL	Yes	Yes
R30,R55	2	Resistor	11k	0402		Yageo	RC0402FR-0711KL	Yes	Yes
R31	1	Resistor	0.4	2512		Yageo	PT2512FK-070R4L	Yes	Yes
R41	1	Resistor	158k	0402		Yageo	RC0402FR-07158KL	Yes	Yes
R42	1	Resistor	4.7Meg	0402		Stackpole	RMCF0402FT4M70	Yes	Yes
R54	1	Resistor	100k	0402		Yageo	RC0402FR-07100KL	Yes	Yes
R56	1	Resistor	430k	0402		Yageo	RC0402FR-07430KL	Yes	Yes
R58,R75	2	Resistor	7.15k	0402		Yageo	RC0402FR-077K15L	Yes	Yes
R62	1	Resistor	1k	0402		Yageo	RC0402FR-071KL	Yes	Yes
R63,R64	2	Resistor	205k	0402		Yageo	RC0402FR-07205KL	Yes	Yes
R65	1	Resistor	1.2M	0402		Yageo	AC0402FR-071M2L	Yes	Yes
R67	1	Resistor	8.45k	0402		Yageo	RC0402FR-078K45L	Yes	Yes
R68	1	Resistor	332k	0402		Yageo	RC0402FR-07332KL	Yes	Yes
R70,R71	2	Resistor	2.7k	2010		TE	CRGQQ2010F2K7	Yes	Yes
R73	1	Resistor	1k	0603		Yageo	RC0603FR-071KL	Yes	Yes
R77	1	Resistor	10Meg	0402		Yageo	RC0402FR-0710ML	Yes	Yes
R79	1	Resistor	24k	0402		Yageo	RC0402FR-0724KL	Yes	Yes
R80	1	Resistor	160k	0805		Yageo	RC0805FR-07160KL	Yes	Yes
R82	1	Resistor	1k	0402		Yageo	RC0402FR-071KL	Yes	Yes
TX1	1		180uH			Würth	750317956	Yes	Yes
Thermal Grease	1		Aavid 249G			Aavid	249G	No	Yes
T1	1		750318211			Würth	750318211	Yes	Yes
U1	1		NCP13992			On Semiconductor	NCP13992AADR2G	No	Yes
U2	1		FODM1007R2			On Semiconductor	FODM1007R2	No	Yes
U4	1		NCL2801CDA			On Semiconductor	NCL2801CDA	No	Yes
U5	1		S-1212BA0-M5T1U	SOT-23-5		ABLIC	S-1212BA0-M5T1U	Yes	Yes
U6	1		TLV1805-Q1	SOT-23		TI	TLV1805-Q1	Yes	Yes
U9,U10,U12	3		TLV271SN2T1G			On Semiconductor	TLV271SN2T1G	No	Yes
U11	1		SI8735BC-ISR	8-SOIC		Silicon Labs	SI8735BC-ISR	Yes	Yes
U14	1		MP4569GN-Z	8-SOIC		MPS	MP4569GN-Z	Yes	Yes
U15	1		NCP715SQ50T2G			ON Semiconductor	NCP715SQ50T2G	No	Yes
Z3	1		Screw 6-32 X 5/16"			*****	*****	Yes	Yes
Z4,Z5,Z6	3		Screw M3X 8			*****	*****	Yes	Yes