



## Bill of Materials for the NCV7694GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1,C VS	2	Ceramic Capacitor SMD	100NF, 50V, X7R	10%	CAP0603	KEMET	C0603C104K5RAC	YES	YES
C28, C29	2	Ceramic Capacitor SMD	10µF, 25V, X7R	10%	CAP1210	MULTICOMP	MC1210B106K250CT	YES	YES
C22	1	Ceramic Capacitor SMD	1µF, 16V, X7R	10%	CAP0603	MULTICOMP	MC0603B105K160CT	YES	YES
C20,C30	2	Electrolytic Capacitor SMD	470µF, 25V	20%	FC-G	NICHICON	UWT1E471MNL1GS	YES	YES
C21	1	Ceramic Capacitor SMD	10µF, 50V, X7R	10%	CAP1206	MURATA	GRM31CR61H106KA12L	YES	YES
C26	1	Ceramic Capacitor SMD	4.7µF, 50V, X7R	10%	CAP1206	MURATA	GRM31CR71H475KA12L	YES	YES
C27	1	Ceramic Capacitor SMD	120pF, 50V, NP0	5%	CAP0603	KEMET	C0805C121J5GAC	YES	YES
C25	1	Ceramic Capacitor SMD	1µF, 50V, X7R	10%	CAP1206	KEMET	C1206C105K5RAC	YES	YES
C24	1	Ceramic Capacitor SMD	1NF, 50V, X7R	10%	CAP0603	EPCOS	B37931K5102K60	YES	YES
C23	1	Ceramic Capacitor SMD	10NF, 50V, X7R	10%	CAP0603	MULTICOMP	U0603R103KCT	YES	YES
D11	1	LED diode SMD	20mA 80mcd, red	-	D0603	KINGBRIGHT	KP-1608SURCK	YES	YES
D12,D13	2	LED diode SMD	20mA 10mcd, green	-	D0603	OSRAM	LGQ971	YES	YES
D1w, D3w	2	POWER LED diode SMD	1.5A 6200K VF=2.8V	-	XPGBW	CREE	XPGBW-L1-0000-00G51	YES	YES
D1ir, D3ir	2	POWER LED diode SMD	1A, 3.4W 940nm	-	SFH4725S	OSRAM	SFH4725S	YES	YES
D2, D21	2	Schottky Power Rectifier SMD	5A/40V	-	SMC2	ON SEMICONDUCTOR	MBRS540T3G	YES	YES
R14, R27	2	SMD Resistor	26.7kΩ, 63mW	1%	R0603	VISHAY	CRCW060326K7FKEA	YES	YES
REMC1, REMC2	2	SMD Resistor	1kΩ, 63mW	1%	R0603	VISHAY	CRCW06031K00FKEA	YES	YES
REMC3, R13	1	SMD Resistor	200Ω, 63mW	1%	R0603	VISHAY	CRCW0603200RFKEA	YES	YES
REMC4	1	SMD Resistor	750Ω, 63mW	1%	R0603	VISHAY	CRCW0603750RFKEA	YES	YES
R11	1	SMD Resistor	2.4kΩ, 63mW	1%	R0603	VISHAY	CRCW06032K40FKEA	YES	YES
R8	1	SMD Resistor	51Ω, 63mW	1%	R0603	VISHAY	CRCW060351R0FKEA	YES	YES
R20	1	SMD Resistor	25mΩ, 125mW	1%	R0805	WELWYN	LRCS0805-0R025FT5	YES	YES
R1	1	SMD Resistor	100mΩ, 500mW	1%	R1206	BOURNS	CRM1206-FX-R100ELF	YES	YES
R29	1	SMD Resistor	3kΩ, 63mW	1%	R0603	MULTICOMP	MCMR06X3001FTL	YES	YES
R23	1	SMD Resistor	4.7kΩ, 63mW	1%	R0603	MULTICOMP	MCMR06X4701FTL	YES	YES
R24	1	SMD Resistor	2.4Ω, 250mW	1%	R1206	WALSIN	WR12W2R40FTL	YES	YES
R12, R15, R89	3	SMD Resistor	10kΩ, 63mW	5%	R0603	PHYCOMP	232270260103	YES	YES
R25	1	SMD Resistor	5.6Ω, 250mW	1%	R1206	PHYCOMP	232272465608	YES	YES
R22	1	SMD Resistor	16kΩ, 63mW	1%	R0603	MULTICOMP	MCMR06X1602FTL	YES	YES
PETL, PFRL	2	Trimmer	20kΩ, linear 23 turns	10%	T93YA	VISHAY	T93YA203KT20	YES	YES
FLASH_in	1	SMB jack angled	SMB 90°	-	SMB	TE CONNECTIVITY	1-1337481-0	YES	YES
GND1, GND2	2	Wire Bridge	SCOPEGND	-	D3082F05	HARVIN	D3082F05	YES	YES
SP1, SP2, SP3, SP4	4	Spacer 5mm	M3, 5mm, white	-	Spacer 3.0M	DURATOOL	D01487	YES	YES

SP5, SP6, SP7, SP8	4	Spacer 10mm	M3, 10mm, white	-	Spacer 3.0M	DURATOOL	D01489	YES	YES
CON1	1	DC socket	2.5mm, 2A, 12V	-	DC10AS	CLIFF	FC681465S + DCP2	YES	YES
L20	1	SMD Inductor	3.3µH / 9.3A / 20mΩ	30%	HM78D	BOURNS	SRF1260A-3R3Y	YES	YES
NUT1, NUT2, NUT3	3	Hex Full Nut with double chamfer	M3	-	NA	TR FASTENINGS	TR NNE 34814 M3	YES	YES
VBAT, VSTR	2	TESTPIN 200 SER.HOLE 1.0 RED	TP - RED	-	TESTPIN	VERO	20-313137	YES	YES
GN, GND	2	TESTPIN 200 SER.HOLE 1.0 BLACK	TP - BLACK	-	TESTPIN	VERO	20-2137	YES	YES
FLASH	1	TESTPIN 200 SER.HOLE 1.0 GREEN	TP - GREEN	-	TESTPIN	VERO	20-313138	YES	YES
DET, DIAG, FB, GATE, ETL, FRL	6	TESTPIN 200 SER.HOLE 1.0 WHITE	TP - WHITE	-	TESTPIN	VERO	20-313139	YES	YES
SC1, SC2, SC3, SC4	4	SCREW M3, 0.5mm p.	12mm White	-	NA	DURATOOL	119030012	YES	YES
SC5, SC6, SC7, SC8	4	SCREW M3, 0.5mm p.	10mm White	-	NA	DURATOOL	119030010	YES	YES
J_OPEN, JSC, J_SH-GND	3	Jumper SIL header	1x2	-	JUMPER2	AMP-TE	5-826629-0 M7686-05	YES	YES
J1	1	Jumper SIL header	1x3	-	JUMPER3	AMP-TE	5-826629-0 M7686-05	YES	YES
U20	1	Sepic DCDC controller	NCV898031	-	SOIC8	ON SEMICONDUCTOR	NCV898031D1R2G	NO	YES
U1	1	<b>IR LED FLASH driver</b>	<b>NCV7694</b>	-	<b>DFN10</b>	<b>ON SEMICONDUCTOR</b>	<b>NCV7694MW0R2G</b>	<b>NO</b>	<b>YES</b>
Q1	1	Power MOSFET N-channel	40V, 26A, 14mΩ	-	WDFN-8	ON SEMICONDUCTOR	NVTFS5C478NL	NO	YES
Q20	1	Power MOSFET N-channel	60V, 50A, 9.8mΩ	-	WDFN-8	ON SEMICONDUCTOR	NVTFS5C673NL	NO	YES
ZD1, ZD2	1	Zener Diode	3.3V 300mW, 10mA	-	SOD323 AK	ON SEMICONDUCTOR	SZMM3Z3V3T1G	NO	YES
Q12	1	Digital NPN Transistor	50V, 100mA, 250mW	-	SOT23	ON SEMICONDUCTOR	SMUN5213T1G	NO	YES
CON_LEDS	1	Connector Header	3.5mm 300V/8A, 2way	-	MCV3.5	PHOENIX CONTACT	1843606 + 1840366	YES	YES