



Bill of Materials for the NCP1096GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	Ceramic Capacitor (X7R), 100V	2.2u	±10%	1210 (3225M)	Murata	GRM32ER72A225KA35	Yes	Yes
C2	1	Ceramic Capacitor (C0G/NP0), 50V	1n	±2%	0603 (1608M)	Murata	GRM1885C1H102GA01D	Yes	Yes
C3	1	Ceramic Capacitor (X7R), 100V	100n	±10%	0805 (2012M)	Walsin	0805B104K101CT	Yes	Yes
C4	1	2kV Ceramic Capacitor (X7R)	1n	±10%	1206 (3216M)	Kemet	C1206C102KGRACU	Yes	Yes
C5, C6, C7, C8, C13	5	Ceramic Capacitor (X7R), 100V	10n	±10%	0603 (1608M)	Murata	GCM188R72A103KA37D	Yes	Yes
C9	1	3kV Ceramic Capacitor (X7R)	1n	±10%	1808 (4520M)	Wuerth	885342210004	Yes	Yes
C10	1	Ceramic Capacitor (C0G/NP0), 25V	47p	±5%	0603 (1608M)	Yageo	CC0603JRNPO8BN470	Yes	Yes
C11	1	Electrolytic Capacitor, 80V	10µ	±20%	SMD 6.3x5.8	Panasonic	EEEFK1K100XP	Yes	Yes
C17, C18	2	Ceramic Capacitor (X7R), 100V	470p	±10%	0603 (1608M)	Murata	GRM188R72A471KA01D	Yes	Yes
D1	1	Transient Voltage Suppressor			SMB	ON Semiconductor	1SMB58AT3G	Yes	Yes
D2	1	LED, Green			0603 (1608M)	Kingbright	KP-1608CGCK	Yes	Yes
D3, D4	2	LED, Yellow			0603 (1608M)	Kingbright	KPT-1608YC	Yes	Yes
D5	1	LED, Red			0603 (1608M)	Kingbright	KPT-1608EC	Yes	Yes
D6	1	Zener			SOD-323-2	ON Semiconductor	MM3Z18VT1G	No	Yes
D7	1	Schottky Rectifier, 8A/60V			SO-8FL/DFN-5	ON Semiconductor	NRVTS860EMFS	No	Yes
D8, D9	2	Dual Common Anode Zeners			SOT-23-3	ON Semiconductor	MMBZ27VALT1G	No	Yes
J1, J3	2	8P8C Modular Jack				Würth Elektronik	61500814221	Yes	Yes
J2	1	Screwless Connector, 3p				Würth Elektronik	691412120003B	Yes	Yes
J6	1	DC Power Connector				Cliff	DC10A	Yes	Yes
Q2	1	PNP Transistor			SOT-23-3	ON Semiconductor	BC856BLT1G	No	Yes
Q3	1	N-Channel MOSFET			SOT-23-3	ON Semiconductor	2N7002LT1G	No	Yes
Q4, Q5, Q6, Q7	4	NPN & PNP Transistors			SOT-363-6	ON Semiconductor	BC846BPDW1T1	No	Yes
R1, R2, R3, R4, R5, R34, R35, R36	8	Resistor	15k	±1%	0603 (1608M)	Panasonic	ERJ3EKF1502V	Yes	Yes
R6	1	Resistor	26k1	±1%	0603 (1608M)	Panasonic	ERJ3EKF2612V	Yes	Yes
R7	1	Resistor	232E	±1%	1206 (3216M)	Panasonic	ERJ8ENF2320V	Yes	Yes
R8	1	Resistor	332E	±1%	0805 (2012M)	Panasonic	ERJ6ENF3320V	Yes	Yes
R9	1	Resistor	0E		0603 (1608M)	Panasonic	ERJ3GEY0R00V	Yes	Yes
R11, R12, R13, R14, R16, R17, R18, R19	8	Resistor	75E	±1%	0603 (1608M)	Panasonic	ERJ3EKF75R0V	Yes	Yes
R15	1	Resistor	3k6	±1%	1812 (4532M)	Panasonic	ERJU12F3601U	Yes	Yes
R20, R21, R37	3	Resistor	62k	±1%	0603 (1608M)	Panasonic	ERJ3EKF6202V	Yes	Yes

R22	1	Resistor	47k	±1%	0603 (1608M)	Panasonic	ERJ3EKF4702V	Yes	Yes
R23	1	Resistor	7k5	±1%	0603 (1608M)	Panasonic	ERJ3EKF7501V	Yes	Yes
R25, R26	2	Resistor	162k	±1%	0603 (1608M)	Yageo	RC0603FR-07162KL	Yes	Yes
T1	1	PoE 1000Base-T Transformer				Würth Elektronik	7490220123	Yes	Yes
						Coilcraft	WA8704-AL		
U1, U3	2	GreenBridge2 Bridge Rectifiers			WDFN-12	ON Semiconductor	FDMQ8205A	No	Yes
U2	1	PoE-PD Interface Controller			TSSOP-16 EP	ON Semiconductor	NCP1096	No	Yes
U4	1	Surge and ESD Protector			SOIC-8	ON Semiconductor	NSP5804	No	Yes