



Bill of Materials for the NCP81296GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free?
C1,C9	2	Capacitors MLCC	2.2uF	10%	0805	Taiyo Yuden	TMK212ABJ225KD-T	Yes	Yes
C2,C3,C4,C6	4	Capacitors MLCC	0.1uF	10%	0603	AVX/MURATA	0603YC104KAT2A / GRM39X7R104K016AD	Yes	Yes
C5	1	Capacitors MLCC	1uF	10%	0603	TDK	C1608X5R1C105K	Yes	Yes
C7	1		DNP		0603	AVX/MURATA	0603YC104KAT2A / GRM39X7R104K016AD	Yes	Yes
C8	1		DNP		0805	-	DNP	Yes	Yes
C10,C11	2	Polymer Capacitors 35V	100uF	20%	MU_10	KEMET/Nichicon	A767MU107M1VLAE029 / PCV1V101MCL1GS	Yes	Yes
D1,D2	2	SMD Green LED	GRN		0805	Vishay/Vishay	VLMG21J2M1-GS08 / VLMG21K1L2-GS08	Yes	Yes
D3	1	SWITCHING DIODE	Switching Diode		SOD-923	ON Semiconductor	BAS16P2T5G	No	Yes
D4	1	TVS Diode	TVS Diodes		DO-214AB-2	Bourns	SMLJ13A	Yes	Yes
D5	1	SMD Red LED	RED		0805		VLMS21H2L1-GS08	Yes	Yes
D6	1	Schottky Diode	Schottky Diode		SO-8 FL	ON Semiconductor	NTS1045MFST1G	No	Yes
J3,J4,J8,J16,J18,J19,J20,J22	8	HEADER 2P Straight	2PIN 1ROW		2.54 mm	AMP/MOLEX	640452-2 / 22-03-2021	Yes	Yes
J5,J17,J24	3		2PIN 1ROW			DNP	DNP	Yes	Yes
J23	1		DNP			DNP	DNP	Yes	Yes
M1,M2,M3,M4	4	Mounting hole	MTH			Mounting hole	NA	Yes	Yes
M5,M6,M7,M8,M9,M10,M11,M12	8	Wire Hole	WH			Wire Hole	NA	Yes	Yes
Q1,Q2	2	N-Channel MOSFET	2N7002LT1		SOT-23-3	ON SEMICONDUCTOR	2N7002LT1G	No	Yes
R11,R12	2	Resistors - SMD	511	1%	0603	DALE/KOA	CRCW0603511RFKEA / RK73H1JTDD5110F	Yes	Yes
R13	1	Resistor - SMD	619	1%	0604	DALE/KOA	CRCW0603619RFKEA / RK73H1JTDD6190F	Yes	Yes
R14	1	Resistor - SMD	1	1%	0605	DALE/KOA	CRCW06031R00FKEA / RK73H1JTDD1R00F	Yes	Yes
R17,R24	2		DNP		DNP	DNP	DNP	DNP	Yes
R15	1	Resistor - SMD	10K	1%	0605	DALE/KOA	CRCW060310K0FKEA / RK73B1JTDD103J	Yes	Yes
R16,R18	2	Resistors - SMD	2.0k	1%	0606	DALE/KOA	CRCW06032K0FKEA / RK73H1JTDD2001F	Yes	Yes
R19	1	Resistor - SMD	121k	1%	0607	DALE/KOA	CRCW0603121KFKEA / RK73H1JTDD1213F	Yes	Yes
R20	1	Resistor - SMD	DNP		0608	DALE/KOA	CRCW060310K0FRT1E3 / RK73H1JT1002F	Yes	Yes
TP1,TP3,TP4,TP5,TP7,TP8,TP10,TP11,TP12,TP13,TP15,TP16,TP17,TP19,TP21,TP22,TP29,TP30,TP31,SDA	20	Test Pin	TP			MILL-MAX/MILL-MAX	2305-2-00-01-00-00-07-0 / 2305-2-00-50-00-00-07-0	Yes	Yes
S1	1	Pushbutton Switch	DNP		DNP	DNP	DNP	DNP	Yes
T1,T2,T3,T4,T5,T6,T7,T8	8	30A HVY DUTY PC TERM	4PIN			KEystone ELECTRONICS	8196	Yes	Yes
T9	1	2PIN/TERM BLK	2PIN/TERM BLK		3.81 mm	PHOENIX CONTACT	1727010	Yes	Yes
U1	1	SMART FUSE	NCP81296		LQFN-32	ON SEMICONDUCTOR	NCP81296	No	Yes
