



Bill of Materials for the NCD83591AS Evaluation Board

Designator(Main Board)	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C4	1	CAP CER 0.1UF 50V X7R	0.1uF	10%	0603	Kyocera AVX	06035C104JAT2A	Yes	Yes
4_C1 5_C1 6_C1 C2	4	CAP CER 0.1UF 100V X7R	0.1uF	10%	0603	Samsung Electro-Mechanics	CL10B104KC8NNNC	Yes	Yes
C5	1	CAP CER 0.22UF 100V X7R	0.22uF	10%	1206	TDK Corporation	C3216X7R2A224K115AA	Yes	Yes
C6	1	CAP CER 0.47UF 25V X7R	0.47uF	10%	0603	Samsung Electro-Mechanics	CL10B474KA8NFNC	Yes	Yes
4_C2 5_C2 6_C2	3	CAP CER 10UF 100V X7S	10uF	20%	2220	TDK Corporation	CGA9N3X7S2A106M230KB	Yes	Yes
C7	1	CAP CER 1UF 25V X7R	1uF	10%	0603	Samsung Electro-Mechanics	CL10B105KA8NNNC	Yes	Yes
C3	1	CAP CER 1UF 100V X7R	1uF	10%	1206	Murata Electronics	GCM31CR72A105KA03L	Yes	Yes
C1	1	CAP ALUM 330UF 20% 100V RADIAL	330uF	20%	Radial	Nichicon	UPW2A331MHD	Yes	Yes
R12 R13 R14 R15 R16 R17 R18 R19 R20 R21 R22 R23 R24 R25	14	RES 0 OHM JUMPER 1/10W	0 ohm		0603	Yageo	RC0603JR-070RL	Yes	Yes
R1	1	RES 100K OHM 1% 1/10W	100k ohm	1%	0603	Yageo	RC0603FR-07100KL	Yes	Yes
R11	1	RES 0.01 OHM 10W	10m ohm	1%	2959 Wide	Ohmite	FCSL150R010FER	Yes	Yes
R7 R8	2	RES 20K OHM 1% 1/10W	20k ohm	1%	0603	Yageo	RC0603FR-0720KL	Yes	Yes
R9 R10	2	RES 2K OHM 1% 1/10W	2k ohm	1%	0603	Yageo	RC0603FR-072KL	Yes	Yes
R2 R3 R4 R5 R6	4	RES SMD 50K OHM 0.1% 0.15W	50k ohm	0.1%	0603	Vishay Dale Thin Film	PNM0603E5002BST5	Yes	Yes
U2	1	IC DGTL POT 80KOHM 64TAP 8LFCSP	80k ohm	8%	8-UFDFN	Analog Devices Inc.	AD5116BCPZ80-500R7	Yes	Yes
4_J1 5_J1 6_J1 J1 J2 J3 J4 J5 J6 J7 J8 J9 J10 J11 J12 J13	16	CONN BIND POST KNURLED				Cinch Connectivity Solutions Johnson	111-2223-001	Yes	Yes
SW1 SW2 SW3	3	SWITCH TACTILE SPST-NO 0.02A 15V			Through Hole	Panasonic Electronic Components	EVQ-11G05R	Yes	Yes
J37 J38 J39 J40	4	Connector Header Through Hole 8 position 0.100"			Through Hole	Amphenol ICC	68001-208HLF	Yes	Yes
J41 J42	2	CONN HEADER VERT 18POS 2.54MM			Through Hole	Adam Tech	PH1-18-UA	Yes	Yes
J36	1	CONN HEADER VERT 6POS 2.54MM			Through Hole	Würth Electronik	61300611121	Yes	Yes
J14 J15 J16 J17 J18 J19 J20 J21 J22 J23 J24 J25 J26 J27 J28 J29 J30 J31 J32 J33 J34 J62 J63 J64 J65 J66	26	CONN HEADER VERT 2POS 2.54MM			Through Hole	Würth Electronik	61300211121	Yes	Yes
20	1	IC Motor Driver 60V			QFN_28_04mm	Onsemi	NCD83591AS	Yes	No
4_Q4 4_Q1 4_Q2 4_Q3 5_Q1 5_Q4 5_Q2 5_Q3 6_Q2 6_Q4 6_Q1 6_Q3	12	MOSFET N-CH 60V 287A 5DFN			5DFN	Onsemi	NVMFSSC604NLAFT1G	Yes	Yes
TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8 TP9 TP10 TP11 TP12 TP13 TP14 TP15 TP16 TP17 TP18 TP19 TP20 TP21 TP22 TP23 TP24 TP25 TP26 TP27 TP28 TP29 TP30 TP31 TP32	32	White test points			Through Hole	Keystone Electronics	5012	Yes	Yes