## N2ADR Filter Board E5 BOM

Assembly Build - February 23, 2019

Line	Description	Part Number	Sub OK	Designators	Footprint	Pins	Quantity
1	$0.1 \text{uF} \ 0805 \ge \text{X5R} \ge 25 \text{V} \le 20\%$	08055C104JAT2A	Y	C1,C2,C3,C4,C5,C6,	0805	2	19
		C0805C104M3RACTU		C7,C11,C13,C14,C20,			
		885012207128		C27,C28,C29,C30,C31,			
				C45,C46,C50			
2	$1000 \text{pF} \ 1206 \text{NP0} \ge 200 \text{V} \le 5\%$	GRM31B5C2J102JW01L	N	C8,C10	1206	2	2
		885342008003					
		C1206C102K2GACTU					
3	$1800 \text{pF} \ 1206 \text{NPO} \ge 200 \text{V} \le 5\%$	C3216C0G2J182J115AA	N	C9,C21,C23	1206	2	3
		C3216C0G2J182K115AA					
		C1206C182JBGAC7800					
4	$3300 \text{pF} 1206 \text{NPO} \ge 200 \text{V} \le 5\%$	C1206C332JBGACTU	N	C22	1206	2	1
		C3216C0G2E332J085AA					
		CL31C332JHHNFNE					
5	$150 \text{pF} \ 1206 \text{NP0} \ge 200 \text{V} \le 5\%$	GRM31A5C2J151JW01D	N	C24,C26,C33	1206	2	3
		12067A151JAT2A					
		CC1206JKNPOZBN151					
		C3216C0G2J151K060AA					
6	$330 \text{pF} 1206 \text{NP} 0 \ge 200 \text{V} \le 5\%$	GRM31A5C2J331JW01D	N	C25,C39	1206	2	2
		C3216C0G2J331J060AA					
		CL31C331JHFNNNE					
7	270pF 1206NP0≥200V≤5%	GRM31A5C2J271JW01D	N	C32,C38,C40	1206	2	3
		C3216C0G2J271J060AA					
		CL31C271JIHNNNE					
8	180pF 1206NP0≥200V≤5%	GRM31A5C2J181JW01D	N	C34,C44	1206	2	2
		C3216C0G2J181K060AA					
		CL31C181JHFNNNE					
		C1206C181JGGAC7800					
9	$100 \text{pF} \ 1206 \text{NP0} \ge 200 \text{V} \le 5\%$	GRM31A5C2J101JW01D	N	C35	1206	2	1
		CC1206JKNPOZBN101					
		C3216C0G2J101J060AA					
10	$39 \text{pF} 1206 \text{NPO} \ge 200 \text{V} \le 5\%$	GRM31A5C2J390JW01D		C36	1206	2	1
		GRM31A5C3A390JW01D					
11	$560 pF 1206 NP0 \ge 200 V \le 5\%$	GRM31A5C2J561JW01D	N	C37	1206	2	1
		CC1206JRNPOBBN561					
		C3216C0G2J561J085AA					

Line	Description	Part Number	Sub OK		Footprint	Pins	Quantity
12	$220 pF 1206 NP0 \ge 200 V \le 5\%$	GRM31A5C2J221JW01D	N	C41,C42	1206	2	2
		C3216C0G2J221J060AA					
		CL31C221JGFNNNE					
13	$68 pF 1206 NP0 \ge 200 V \le 5\%$	GRM31A5C2J680JW01D	N	C43	1206	2	$oxed{1}$
		CL31C680JHFNNNE					
		C1206C680J2GAC7800					_
14	1500pF 0805NP0≥50V≤5%	08055A152JAT2A	N	C47,C49	0805	2	2
		885012007064					
1.5	and E coornings Followly	CL21C152JBFNNNE	3.7	G40	0005	2	-
15	$680 \text{pF} \ 0805 \text{NP} 0 \ge 50 \text{V} \le 5\%$	08055A681JAT2A	N	C48	0805	2	$oxed{1}$
		885012007062					
16	External PA Jack	CC0805JRNPO0BN681 AliExpress RCJ-041	Y	CN1	Custom	2	1
		PRPC020SAAN-RC	Y	CN2		$\frac{2}{20}$	1 1
17	20 Pin Single Row 0.1in		Y	CN3,CN4	Custom	l	$\frac{1}{2}$
18	SMA Straight	AliExpress 5-1814832-1		1 /	Custom	5	$\frac{2}{2}$
19	Schottky Diode	BAS40-07,215 BAS4007E6327HTSA1	N	D1,D2	SOT-143	4	
20	CC D: 1		37	De	COD 100	9	-
20	SS Diode FB 0805 >600R@100MHz	1N4148W-7-F	Y	D3	SOD-123	2	1
21		MPZ2012S102AT000	Y	FB1	0805	2	1
00	≤200mOhm@DC ≥1.5A	ILHB0805ER601V	3.7	ID1		-	-
22	21cm PFTE silver plated 24to30AWG	AliExpress	Y	JP1	Custom	5	1
23	wire	AliExpress EC2-3NU	N	V1 V9 V9 V4 VE VC	C	10	7
23	Relay	AliExpress EC2-3NU EC2-3NJ	IN IN	K1,K2,K3,K4,K5,K6, K7	Custom	10	(
24	1.8uH	CC453232-1R8KL	N	L1,L2	1812	2	2
25	T37 Toroid	5977000211	N	L3	Custom	5	1
26	1.8uH	LBM2016T1R8J	N	L4,L15	0805	2	2
27	3.9uH	7447669039	N	L5,L6	1812	2	2
28	220nH	AISC-1210-R22J-T	N	L7,L8	1210	2	2
29	1000nH	CC453232-1R0KL	N	L9	1812	2	1
30	$560\mathrm{nH}$	AISC-1210-R56J-T	N	L10	1210	2	1
31	390nH	AISC-1210-R39J-T	N	L11,L14	1210	2	2
32	680nH	AISC-1210-R68J-T	N	L12	1210	2	1
33	270nH	AISC-1210-R27J-T	N	L13	1210	2	1
34	$22~0805 \le 1\% \ge 1/10W$	RC0805FR-0722RL	Y	R1	0805	2	1
		ERJ-6ENF22R0V					
35	$2.2 \text{K} \ 0805 \le 1\% \ge 1/10 \text{W}$	RC0805FR-072K2L	Y	R2,R10,R13	0805	2	3
		CRG0805F2K2					

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36	56 0805≤1%≥1/10W	RC0805FR-0756RL	Y	R3	0805	2	1
		ERJ-6ENF56R0V					
		CRGCQ0805F56R					
37	$4.7 \text{K} \ 0805 \le 1\% \ge 1/10 \text{W}$	RC0805JR-074K7L	Y	R4,R5,R8,R9	0805	2	4
		CRG0805F4K7					
		RC2012F472CS					
38	18 0805≤1%≥1/10W	RC0805FR-0718RL	Y	R6,R7	0805	2	2
		CRG0805F18R					
39	$6.2 \text{K} \ 0805 \le 1\% \ge 1/10 \text{W}$	RC0805FR-076K2L	Y	R11,R14	0805	2	2
		ERJ-6ENF6201V					
40	$330~0805 \le 1\% \ge 1/10W$	RC0805JR-07330RL	Y	R12,R15	0805	2	2
		RC2012F331CS					
		CRG0805F330R					
41	I2C Bus Expander	m MCP23008T-E/SS	N	U1	SSOP-20	20	1
42	Relay Driver	ULN2003LVPWR	N	U2	TSSOP-16	16	1
43	AD8692 Op Amp	AD8692ARMZ-R7	N	U3	MSOP-8	8	1
44	NAND Gate	SN74LVC1G00DBVR	N	U5	SOT-23-5	5	1

Line Items: SMT:38 Assembled TH:5
Parts: SMT:81 Assembled TH:12
Pins: SMT:207 Assembled TH:107

Do Not Assemble: C12 C15 CN5 R16 RV1