## N2ADR Filter Board E5 BOM

Assembly Build - March 10, 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	1000pF 1206NP0≥200V≤5%	GRM31B5C2J102JW01L	N	C8,C10	1206	2	2
		885342008003					
		C1206C102K2GACTU					
3	1800pF 1206NP0≥200V≤5%	C3216C0G2J182J115AA	N	C9,C21,C23	1206	2	3
		C3216C0G2J182K115AA					
		C1206C182JBGAC7800					
4	$3300 \text{pF} 1206 \text{NP0} \ge 200 \text{V} \le 5\%$	C1206C332JBGACTU	N	C22	1206	2	$\mid \qquad \qquad 1 \mid$
		C3216C0G2E332J085AA					
		CL31C332JHHNFNE					
5	$150 \text{pF} \ 1206 \text{NP} 0 \ge 200 \text{V} \le 5\%$	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	$180 \text{pF} \ 1206 \text{NP} 0 \ge 200 \text{V} \le 5\%$	GRM31A5C2J181JW01D	N	C34,C44	1206	2	2
		C3216C0G2J181K060AA					
		CL31C181JHFNNNE					
		C1206C181JGGAC7800					
9	$100 \text{pF} \ 1206 \text{NP} 0 \ge 200 \text{V} \le 5\%$	GRM31A5C2J101JW01D	N	C35	1206	2	$\mid \qquad \qquad 1 \mid$
		CC1206JKNPOZBN101					
		C3216C0G2J101J060AA					
10	$39 pF 1206 NP0 \ge 200 V \le 5\%$	GRM31A5C2J390JW01D		C36	1206	2	1
		GRM31A5C3A390JW01D					<u> </u>
11	$560 \text{pF } 1206 \text{NP} 0 \ge 200 \text{V} \le 5\%$	GRM31A5C2J561JW01D	N	C37	1206	2	1
		CC1206JRNPOBBN561					
		C3216C0G2J561J085AA					

Line	Description	Part Number	Sub OK	, 9	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	1
		CL31C680JHFNNNE					
		C1206C680J2GAC7800					
14	$1500 \text{pF} \ 0805 \text{NP0} \ge 50 \text{V} \le 5\%$	08055A152JAT2A	N	C47,C49	0805	2	2
		885012007064					
		CL21C152JBFNNNE					
15	$680 pF 0805 NP0 \ge 50 V \le 5\%$	08055A681JAT2A	N	C48	0805	2	1
		885012007062					
		CC0805JRNPO0BN681					
16	External PA Jack	AliExpress RCJ-041	Y	CN1	Custom	2	1
17	20 Pin Single Row 0.1in	PRPC020SAAN-RC	Y	CN2	Custom	20	1
18	SMA Straight	AliExpress 5-1814832-1	Y	CN3,CN4	Custom	5	2
19	Schottky Diode	BAS40-07,215	N	D1,D2	SOT-143	4	2
		${ m BAS4007E6327HTSA1}$					
20	SS Diode	1N4148W-7-F	Y	D3	SOD-123	2	1
21	FB $0805 \ge 600 R@100 MHz$	MPZ2012S102AT000	Y	FB1	0805	2	1
	$\leq 200 \text{mOhm@DC} \geq 1.5 \text{A}$	ILHB0805ER601V					
22	21cm Enameled Coopper Wire 24AWG	${ m AliExpress}$	Y	JP1	Custom	0	1
23	Relay	AliExpress EC2-3NU	N	K1,K2,K3,K4,K5,K6,	Custom	10	7
		EC2-3NJ		K7			
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	560nH	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	$22~0805 \le 1\% \ge 1/10 \text{W}$	m RC0805FR-0722RL	Y	R1	0805	2	1
	·	${ m ERJ} ext{-}6{ m ENF}22{ m R}0{ m V}$					
35	$2.2 \text{K} \ 0805 \le 1\% \ge 1/10 \text{W}$	RC0805FR-072K2L	Y	R2,R10,R13	0805	2	3
		CRG0805F2K2					

Line	Description	Part Number	Sub OK	Designators	Footprint	Pins	Quantity
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:6
Parts: SMT:81 Assembled TH:13
Pins: SMT:207 Assembled TH:107

Do Not Assemble: C12 C15 CN5 R16 RV1