## N2ADR Filter Board E5 BOM

Assembly Build - July 5, 2018

| 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,  |           |      |          |
|      |  |                     |        | C27,C28,C29,C30,C31, |           |      |          |
|      |  |                     |        | C45,C46,C50          |           |      |          |
| 2    | $1000 \text{pF} \ 1206 \text{NPO} \ge 200 \text{V} \le 5\%$    | 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    | $3300 pF 1206 NP0 \ge 200 V \le 5\%$                           | C1206C332JBGACTU    | N      | C22                  | 1206      | 2    | 1        |
|      |  | C3216C0G2E332J085AA |        |                      |           |      |          |
|      |  | CL31C332JHHNFNE     |        |                      |           |      |          |
| 5    | 150pF 1206NP0≥200V≤5%  | GRM31A5C2J151JW01D  | N      | C24,C26,C33          | 1206      | 2    | 3        |
|      |  | 12067A151JAT2A      |        |                      |           |      |          |
|      |  | CC1206JKNPOZBN151   |        |                      |           |      |          |
|      |  | C3216C0G2J151K060AA |        |                      |           |      |          |
| 6    | $330 \text{pF} \ 1206 \text{NP0} \ge 200 \text{V} \le 5\%$     | 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   | 39pF 1206NP0≥200V≤5%   | GRM31A5C2J390JW01D  |        | C36                  | 1206      | 2    | 1        |
|      |  | GRM31A5C3A390JW01D  |        |                      |           |      |          |
| 11   | $560 \text{pF} \ 1206 \text{NP0} \ge 200 \text{V} \le 5\%$     | GRM31A5C2J561JW01D  | N      | C37                  | 1206      | 2    | 1        |
|      |  | CC1206JRNPOBBN561   |        |                      |           |      |          |
|      |  | C3216C0G2J561J085AA |        |                      |           |      |          |

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| 12   | 220pF 1206NP0≥200V≤5%                                     | GRM31A5C2J221JW01D  | N      | C41,C42     | 1206      | 2    | 2        |
|      |   | C3216C0G2J221J060AA |        |             |           |      |          |
|      |   | CL31C221JGFNNNE     |        |             |           |      |          |
| 13   | 68pF 1206NP0≥200V≤5%                                      | GRM31A5C2J680JW01D  | N      | C43         | 1206      | 2    | 1        |
|      |   | CL31C680JHFNNNE     |        |             |           |      |          |
|      |   | C1206C680J2GAC7800  |        |             |           |      |          |
| 14   | 1500pF 0805NP0≥50V≤5%                                     | 08055A152JAT2A      | N      | C47,C49     | 0805      | 2    | 2        |
|      |   | 885012007064        |        |             |           |      |          |
|      |   | CL21C152JBFNNNE     |        |             |           |      |          |
| 15   | $680 \text{pF} \ 0805 \text{NP0} \ge 50 \text{V} \le 5\%$ | 08055A681JAT2A      | N      | C48         | 0805      | 2    | 1        |
|      |   | 885012007062        |        |             |           |      |          |
|      |   | CC0805JRNPO0BN681   |        |             |           |      |          |
| 16   | Schottky Diode  | BAS40-07,215        | N      | D1,D2       | SOT-143   | 4    | 2        |
|      |   | BAS4007E6327HTSA1   |        |             |           |      |          |
| 17   | SS Diode  | 1N4148W-7-F         | Y      | D3          | SOD-123   | 2    | 1        |
| 18   | FB 0805 ≥600R@100MHz                                      | MPZ2012S102AT000    | Y      | FB1         | 0805      | 2    | 1        |
|      | ≤200mOhm@DC ≥1.5A   | ILHB0805ER601V      |        |             |           |      |          |
| 19   | 1.8uH   | CC453232-1R8KL      | N      | L1,L2       | 1812      | 2    | 2        |
| 20   | 1.8uH   | LBM2016T1R8J        | N      | L4,L15      | 0805      | 2    | 2        |
| 21   | 3.9uH   | 7447669039          | N      | L5,L6       | 1812      | 2    | 2        |
| 22   | 220nH   | AISC-1210-R22J-T    | N      | L7,L8       | 1210      | 2    | 2        |
| 23   | $1000 \mathrm{nH}$  | CC453232-1R0KL      | N      | L9          | 1812      | 2    | 1        |
| 24   | 560nH   | AISC-1210-R56J-T    | N      | L10         | 1210      | 2    | 1        |
| 25   | 390nH   | AISC-1210-R39J-T    | N      | L11,L14     | 1210      | 2    | 2        |
| 26   | 680nH   | AISC-1210-R68J-T    | N      | L12         | 1210      | 2    | 1        |
| 27   | 270nH   | AISC-1210-R27J-T    | N      | L13         | 1210      | 2    | 1        |
| 28   | $22~0805 \le 1\% \ge 1/10W$                               | RC0805FR-0722RL     | Y      | R1          | 0805      | 2    | 1        |
|      |   | ERJ-6ENF22R0V       |        |             |           |      |          |
| 29   | $2.2 \text{K} \ 0805 \le 1\% \ge 1/10 \text{W}$           | RC0805FR-072K2L     | Y      | R2,R10,R13  | 0805      | 2    | 3        |
|      |   | CRG0805F2K2         |        |             |           |      |          |
| 30   | $56~0805 \le 1\% \ge 1/10W$                               | RC0805FR-0756RL     | Y      | R3          | 0805      | 2    | 1        |
|      |   | ERJ-6ENF56R0V       |        |             |           |      |          |
|      |   | CRGCQ0805F56R       |        |             |           |      |          |
| 31   | $4.7 \text{K} \ 0805 \le 1\% \ge 1/10 \text{W}$           | RC0805JR-074K7L     | Y      | R4,R5,R8,R9 | 0805      | 2    | 4        |
|      |   | CRG0805F4K7         |        |             |           |      |          |
|      |   | RC2012F472CS        |        |             |           |      |          |
| 32   | 18 0805≤1%≥1/10W  | RC0805FR-0718RL     | Y      | R6,R7       | 0805      | 2    | 2        |
|      |   | CRG0805F18R         |        |             |           |      |          |

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| 33   | 6.2K 0805≤1%≥1/10W | RC0805FR-076K2L  | Y      | R11,R14     | 0805      | 2    | 2        |
|      |                    | ERJ-6ENF6201V    |        |             |           |      |          |
| 34   | 330 0805≤1%≥1/10W  | RC0805JR-07330RL | Y      | R12,R15     | 0805      | 2    | 2        |
|      |                    | RC2012F331CS     |        |             |           |      |          |
|      |                    | CRG0805F330R     |        |             |           |      |          |
| 35   | I2C Bus Expander   | MCP23008T-E/SS   | N      | U1          | SSOP-20   | 20   | 1        |
| 36   | Relay Driver       | ULN2003LVPWR     | N      | U2          | TSSOP-16  | 16   | 1        |
| 37   | AD8692 Op Amp      | AD8692ARMZ       | N      | U3          | MSOP-8    | 8    | 1        |
| 38   | NAND Gate          | SN74LVC1G00DBVR  | N      | U5          | SOT-23-5  | 5    | 1        |

Line Items: SMT:38 Assembled TH:0
Parts: SMT:81 Assembled TH:0
Pins: SMT:207 Assembled TH:0

**Do Not Assemble:** C12 C15 CN1 CN2 CN3 CN4 CN5 JP1 K1 K2 K3 K4 K5 K6 K7 L3 R16 RV1