

Ceiling FAN Inverter Board with RX13T BOM List

| Ver. | Content | Board Name | Schematic No | DATE |
|------|---------------|--|--------------|----------|
| 1.00 | First edition | Ceiling FAN Inverter Board with RX13T(APINUV003-RX13T-CEILING) | R12TU0153EJ | 2021/9/9 |

| No. | Name of articles | Model | Part number | Manufacture | QTY FOR 1 MODULE |
|-----|--|----------------------|---|---------------------|------------------|
| 1 | DIODE GEN PURP 75V 150MA SOD523 | 1N4148X-TP | D8,D9,D10,D11,D12,D13,D14,D15,D16,D17,D18,D19,D20 | Micro | 13 |
| 2 | CAP ALUM 100UF 20% 450V RADIAL | 450QXW100MEFR16X35 | C1 | Rubycon | 1 |
| 3 | FUSE BRD MNT 3.15A 300VAC RADIAL | 36913150000 | F1 | Littelfuse Inc. | 1 |
| 4 | Diode Array 1 Pair Common Cathode Standard 100V 175mA (DC) Surface Mount SC-70 | BAV70W.115 | D6,D7 | NXP | 2 |
| 5 | CAP CER 10UF 16V X5R 0603 | GRT188R61C106KE13D | C26 | Murata | 1 |
| 6 | CAP CER 4.7UF 16V X5R 0603 | GRM188R61C475KAAJD | C14 | Murata | 1 |
| 7 | CAP CER 0.47UF 25V 10% X7R 0603 | CL10B474KA8NFNC | C22,C65 | Samsung | 2 |
| 8 | CAP CER C1608 50V 5% | GRM1882C1H101J | C36,C44,C48,C53,C57 | MURATA | 5 |
| 9 | CAP CER C1608 50V 5% | GRM1882C1H102J | C15,C18,C19,C23,C25,C29,C30,C31,C33,C35,C38,C39,C40,C43,C56 | MURATA | 15 |
| 10 | CAP CER C1608 50V 10% | GRM188B31H104K | C11,C16,C17,C21,C24,C27,C28,C34,C45,C51,C59,C62,C69 | MURATA | 13 |
| 11 | CAP CER 1UF 50V X5R 0603 | GRT188R61H105KE13D | C20,C67 | MURATA | 2 |
| 12 | CAP CER C1608 50V 5% | GRM1882C1H222J | C42,C46,C55,C58,C60,C61,C64 | MURATA | 7 |
| 13 | CAP CER NC | ***** | C9,C10,C12,C13,C32,C37,C47,C49 | ***** | 8 |
| 14 | CAP CER 10UF 35V X5R 1206 | GMK316BJ106KL-T | C41,C52,C54,C68 | Taiyo Yuden | 4 |
| 15 | CAP CER 0.1UF 500V X7T 1210 | CGJ6L4X7T2H104K160AA | C50,C63,C66,C70 | TDK Corporation | 4 |
| 16 | CAP CER 1000PF 250V RAD | DE2E3SA102MN3AT02F | C4,C6,C7 | Murata Electronics | 3 |
| 17 | CAP ALUM 100UF 20% 35V RADIAL | ECA-1VHG101B | C2 | Panasonic | 1 |
| 18 | CAP FILM 0.47UF 10% 450VDC RAD | ECQ-E2W474KH | C3 | Panasonic | 1 |
| 19 | DIODE GEN PURP 600V 1A SMA | ES1J | D21,D22 | ON Semiconductor | 2 |
| 20 | IC GATE DRIVER HALF BRIDG 20SOIC | FAN7388MX | U6 | ON Semiconductor | 1 |
| 21 | Nch Single Power Mosfet 600V 5A 1600Mohm To-220Fpa | RJK6006DPP-A0 | Q1 | Renesas | 1 |
| 22 | DIODE GEN PURP 600V 8A TO220F | FFPF08S60SNTU | D1 | ON Semiconductor | 1 |
| 23 | IC DRVR MOSFET DUAL-CH 8-SOIC | ISL89410IBZ | U7 | Renesas | 1 |
| 24 | ジャンパ線(2.54mm) | JR-1 | JP3,JP55 | MAC8 | 2 |
| 25 | ジャンパ線(5.08mm) | JR-2 | JP4,JP5,JP6,JP7,JP8,JP16,JP18,JP19,JP26,JP27,JP28,JP32,JP34,JP47,JP49,JP53,JP54,JP57,JP58,JP59,JP65,JP66,JP68 | MAC8 | 23 |
| 26 | ジャンパ線(7.62mm) | JR-3 | JP12,JP17,JP21,JP22,JP23,JP24,JP25,JP29,JP31,JP51,JP52,JP60,JP61,JP63,JP64 | MAC8 | 15 |
| 27 | ジャンパ線(10.16mm) | JR-4 | JP1,JP10,JP11,JP20,JP36,JP44,JP48,JP50,JP56 | MAC8 | 9 |
| 28 | ジャンパ線(12.7mm) | JR-5 | JP14,JP33,JP35 | MAC8 | 3 |
| 29 | ジャンパ線(15.24mm) | JR-6 | JP2,JP13,JP45,JP46,JP62 | MAC8 | 5 |
| 30 | ジャンパ線(17.78mm) | JR-7 | JP15 | MAC8 | 1 |
| 31 | ジャンパ線(20.32mm) | JR-8 | JP37,JP38,JP39,JP40,JP41,JP42,JP43 | MAC8 | 7 |
| 32 | ジャンパ線(22.86mm) | JR-9 | JP9 | MAC8 | 1 |
| 33 | IC REGULATOR POS 5V SOT-89 | L78L05ABUTR | U8 | STMicroelectronics | 1 |
| 34 | TEST POINT PC MINI 0.8D BLACK | LC-33-G BLACK | TPG1,TPG2,TPG3,TPG4,TPG5,TPG6,TPG7,TPG8 | MAC8 | 8 |
| 35 | TEST POINT PC MINI 0.8D RED | LC-33-G RED | TP2,TP4,TP10,TP11 | MAC8 | 4 |
| 36 | IC OFFLINE SWIT OCP 8DIP | LNK304PN | U1 | Power Integrations | 1 |
| 37 | FIXED IND 4.7MH 70MA 27.3 OHM | LQH666SN472M03L | L3 | Murata | 1 |
| 38 | CONN HEADER VERT 6POS 2.54MM | M20-9990645 | CN1 | Harwin | 1 |
| 39 | ICL 8 OHM 20% 3A 13MM | MF72-008D11 | R11 | Cantherm | 1 |
| 40 | VARIATOR 510V 1.2KA DISC 7MM | MOV-07D511K | ZNR1 | Bourns Inc. | 1 |
| 41 | DIODE GEN PURP 600V 1A AXIAL | MUR160G | D3,D4 | ON Semiconductor | 2 |
| 42 | DIODE GEN PURP 600V 1A AXIAL | MUR160G | D5 | ON Semiconductor | 1 |
| 43 | IGBT 600V 10A TO220F3 | NGTB10N60FG | Q2,Q3,Q4,Q5,Q6,Q7 | ON Semiconductor | 6 |
| 44 | CAP FILM 0.1UF 560VDC RADIAL | R46KF310000P1M | C5,C8 | Kemet | 2 |
| 45 | RES SMD R1608 0/1A | RK73Z1JTTD | R3,R7,R10,R11,R15,R16,R18,R20,R29,R80,R103 | KOA | 11 |
| 46 | RES SMD R1608 0.1W 1% | RK73H1JTTD4R70F | R33 | KOA | 1 |
| 47 | RES SMD R1608 0.1W 1% | RK73H1JTTD10R0F | R34,R39,R45,R53,R57,R60,R85 | KOA | 7 |
| 48 | RES SMD R1608 0.1W 1% | RK73H1JTTD47R0F | R65,R71,R87,R93,R96,R98,R100 | KOA | 7 |
| 49 | RES SMD R1608 0.1W 1% | RK73H1JTTD1000F | R50,R59,R61,R82,R89 | KOA | 5 |
| 50 | RES SMD R1608 0.1W 1% | RK73H1JTTD1001F | R6,R8,R12,R17,R21,R27,R35,R38,R67 | KOA | 9 |
| 51 | RES SMD R1608 0.1W 1% | RK73H1JTTD1002F | R13,R14,R19,R26,R28,R51,R63,R66,R72,R76,R86,R88,R92,R95,R99,R101 | KOA | 16 |
| 52 | RES SMD R1608 0.1W 1% | RK73H1JTTD1003F | R62 | KOA | 1 |
| 53 | RES SMD R1608 0.1W 1% | RK73H1JTTD1801F | R75,R79,R90 | KOA | 3 |
| 54 | RES SMD R1608 0.1W 1% | RK73H1JTTD2000F | R68,R84,R91 | KOA | 3 |
| 55 | RES SMD R1608 0.1W 1% | RK73H1JTTD2001F | R77,R78 | KOA | 2 |
| 56 | RES SMD R1608 0.1W 1% | RK73H1JTTD2002F | R40,R41,R73,R74 | KOA | 4 |
| 57 | RES SMD R1608 0.1W 1% | RK73H1JTTD2202F | R105 | KOA | 1 |
| 58 | RES SMD R1608 0.1W 1% | RK73H1JTTD2701F | R110 | KOA | 1 |
| 59 | RES SMD R1608 0.1W 1% | RK73H1JTTD3301F | R104,R108 | KOA | 2 |
| 60 | RES SMD R1608 0.1W 1% | RK73H1JTTD4700F | R9 | KOA | 1 |
| 61 | RES SMD R1608 0.1W 1% | RK73H1JTTD4701F | R25 | KOA | 1 |
| 62 | RES SMD R1608 0.1W 1% | RK73H1JTTD4702F | R64 | KOA | 1 |
| 63 | RES SMD R1608 0.1W 1% | RK73H1JTTD5101F | R1,R2,R4,R5 | KOA | 4 |
| 64 | RES NC | ***** | R70,R81,R97 | ***** | 3 |
| 65 | RES SMD R2125 2A | RK73Z2ATTD | R106,R107 | KOA | 2 |
| 66 | RES 0.27 OHM 1% 1/2W 0805 | ERJ-6DQFR27V | R69,R83,R94,R102 | Panasonic | 4 |
| 67 | RES 510K OHM 0.125W 1% 0805 SMD | ERJ-6ENF5103V | R22,R23,R24,R30,R31,R32,R36,R37,R42,R43,R44,R52 | Panasonic - ECG | 12 |
| 68 | RES SMD 750K OHM 1/8W 0805 | RC0805FR-07750KL | R46,R47,R48,R49,R54,R55,R56,R58 | Yageo | 8 |
| 69 | RES SMD R3216 0/2A | RK73Z2BTDD | JP30,JP67 | KOA | 2 |
| 70 | RES 150K OHM 0.25W 5% 1206 SMD | ERJ-8GEYJ154V | R109,R111,R112 | Panasonic | 3 |
| 71 | MSIG CMOS DUAL OPAMP HI-SPEED TS | READ2302GSP#GC3 | U2,U4,U5 | Renesas | 3 |
| 72 | CMC 3MH 1A 2LN TH | RN102-1-02-3M0 | LF1 | Schaffner | 1 |
| 73 | IC MCU 32BIT 128KB FLASH 48LQFP | R5F513T5ADFL | U3 | Renesas | 1 |
| 74 | Toroidal coil | TCV-402K-1.5A-8026 | L1 | DTL | 1 |
| 75 | TH FAI1.7mm | *** | TP3,TP5,TP6,TP7,TP8,TP9 | *** | 6 |
| 76 | Test Land | *** | TP1 | *** | 1 |
| 77 | BRIDGE RECT 1PHASE 600V 3A D3K | UG3KB60GTB | D2 | SMC Diode Solutions | 1 |