









| Designator | Package | Designation | Quanti |
|-------------------------------|---|-----------------------|--------|
| C11,C10 | C_0603_1608Metric_Pad1.08x0.95mm_HandSolder | 22p | 2 |
| C12 | CP_Elec_6.3x7.7 | 220u | 1 |
| C13 | C_0603_1608Metric_Pad1.08x0.95mm_HandSolder | 4.3p | 1 |
| C15,C14,C39,C6,C5,C7,C3,C38,C | | | |
| 32,C42,C34,C40,C33,C48,C44,C8 | | | |
| | C_0603_1608Metric_Pad1.08x0.95mm_HandSolder | 100n | 21 |
| C18,C19 | CP Elec 4x5.4 | 10u | 2 |
| • | | | |
| C20,C16,C2,C21 | C_0603_1608Metric_Pad1.08x0.95mm_HandSolder | 10n | 4 |
| C25,C29,C1,C17,C36,C23,C22,C2 | | | |
| 4,C30,C9,C28,C27,C4 | C_0805_2012Metric_Pad1.18x1.45mm_HandSolder | 10u | 13 |
| C26 | CP_Elec_5x5.9 | 47u | 1 |
| C35,C31,C47,C37 | C_0603_1608Metric_Pad1.08x0.95mm_HandSolder | 1u | 4 |
| D1 | LED_D3.0mm_Horizontal_O1.27mm_Z6.0mm | LED Red | 1 |
| D2 | LED_D3.0mm_Horizontal_O1.27mm_Z6.0mm | LED Blue | 1 |
| D3 | LED_D3.0mm_Horizontal_O1.27mm_Z6.0mm | LED Green | 1 |
| | | _ | |
| D4,D6,D5 | D_SOD-123 | 1N4148W | 3 |
| F1 | Fuse_1812_4532Metric_Pad1.30x3.40mm_HandSolder | 0.5A | 1 |
| F2 | Fuse_1812_4532Metric_Pad1.30x3.40mm_HandSolder | 0.2A | 1 |
| | | Screw M3 dk=5mm | |
| H1,H2,H3,H4 | MountingHole_3.2mm_M3_dk5.2mm_Mask | L=4mm | 4 |
| J10 | PinHeader_1x03_P2.54mm_Vertical | PJ-392 | 1 |
| J11 | SD TE 2041021-mod | TE 041021-4 | 1 |
| | | | - |
| 11.2 | CCT NATINGOLE OO 100 01 A | NAENA20EE 00 400 04 4 | 1 |
| J12 | GCT-MEM2055-00-190-01-A | MEM2055-00-190-01-A | 1 |
| J13 | PinHeader_1x06_P2.54mm_Vertical | MH-M18 | 1 |
| J14 | PJ-320A_D | PJ-320 | 1 |
| | | | |
| J15 | PinHeader_2x07_P2.54mm_Vertical | Conn 02x07 Odd Even | 1 |
| J16 | USB Micro-B Molex-105017-0001 | USB B Micro | 1 |
| J1,J2 | MINI_DIN_6_33PRIMARY | Mini-DIN-6 | 2 |
| J3 | PinHeader 1x04 P2.54mm Vertical | Conn 01x04 | 1 |
| J3 | PinHeader_1x04_P2.54mm_Vertical | Conn_U1xU4 | 1 |
| | | | |
| J5,J6 | PinHeader_2x05_P2.54mm_Vertical | Conn_02x05_Odd_Even | 2 |
| | DSUB-15- | | |
| | HD_Female_Horizontal_P2.29x1.98mm_EdgePinOffset3.03mm_House | DB15_Female_HighDensi | |
| J7 | d MountingHolesOffset4.94mm | ty MountingHoles | 1 |
| | DSUB- | 7_ 0 | |
| | 9_Male_Horizontal_P2.77x2.84mm_EdgePinOffset4.94mm_Housed_ | | |
| 10.14 | | DD0 14 | 2 |
| J8,J4 | MountingHolesOffset7.48mm | DB9-M | 2 |
| J9 | PinHeader_2x02_P2.54mm_Vertical | Jumper | 1 |
| JP1 | PinHeader_1x02_P2.54mm_Vertical | Jumper | 1 |
| JP2 | PinHeader_1x03_P2.54mm_Vertical | Jumper | 1 |
| L1,L2 | L_0805_2012Metric_Pad1.15x1.40mm_HandSolder | 1u | 2 |
| LS1 | Buzzer 12x9.5RM7.6 | Speaker | 1 |
| Q3,Q1,Q4,Q2 | SOT-23 | BSS138 | 4 |
| Q5 | | | |
| | SOT-23 | BC856 | 1 |
| Q6,Q7 | SOT-23 | BC817 | 2 |
| R20 | R_0805_2012Metric_Pad1.20x1.40mm_HandSolder | 33 | 1 |
| R23 | R_0603_1608Metric_Pad0.98x0.95mm_HandSolder | 0 | 1 |
| R26,R21,R54,R34,R50,R30,R47 | R_0603_1608Metric_Pad0.98x0.95mm_HandSolder | 1k | 7 |
| R32,R17,R25,R38,R14,R35,R15, | | | |
| | R 0603 1608Metric Pad0.98x0.95mm HandSolder | 220 | 15 |
| R36,R73,R70,R31,R51,R71,R55, | | - | |
| | P 0602 1609Matric Dado 09v0 05mm Handsalder | 24 | 10 |
| R72,R48,R27 | R_0603_1608Metric_Pad0.98x0.95mm_HandSolder | 2k | 10 |
| R42,R41 | R_0603_1608Metric_Pad0.98x0.95mm_HandSolder | 100 | 2 |
| R49,R24,R29,R52,R33,R46 | R_0603_1608Metric_Pad0.98x0.95mm_HandSolder | 510 | 6 |
| R57,R56,R58,R53 | R_0603_1608Metric_Pad0.98x0.95mm_HandSolder | 75 | 4 |
| R63 | R_0603_1608Metric_Pad0.98x0.95mm_HandSolder | 470k | 1 |
| R64,R67,R68,R37,R59,R69,R65, | | | |
| R60,R62,R61 | R 0603 1608Metric Pad0.98x0.95mm HandSolder | 10k | 10 |
| | | | |
| R66 | R_0603_1608Metric_Pad0.98x0.95mm_HandSolder | 470 | 1 |
| R7,R9,R13,R10,R45,R5,R4,R12,R | | | |
| 11,R44,R6,R1,R3,R2 | R_0603_1608Metric_Pad0.98x0.95mm_HandSolder | 4.7k | 14 |
| SW3,SW1,SW2 | SW_Tactile_SPST_Angled_PTS645Vx58-2LFS | SW_Push | 3 |
| | | _ | 1 |
| SW4 | Molex_KK-254_AE-6410-02A_1x02_P2.54mm_Vertical | PB05A | I |

| U2 | TSOP-II-44_10.16x18.41mm_P0.8mm | IS61WV20488BLL-10 | 1 |
|-------|---|-------------------|---|
| U3 | LQFP-144_20x20mm_P0.5mm | XC6SLX9-TQG144 | 1 |
| U4,U5 | SOIC-8_5.23x5.23mm_P1.27mm-LONG | W25Q128 | 2 |
| U6 | QFN-48-1EP_6x6mm_P0.4mm_EP4.2x4.2mm | SAM2695 | 1 |
| U7 | SOIC-16W_7.5x10.3mm_P1.27mm | AD724 | 1 |
| U8 | SOT-223-3_TabPin2 | 1117-3.3 | 1 |
| U9 | SOT-223-3_TabPin2 | 1117-1.2 | 1 |
| | | | |
| X1 | Oscillator_SMD_SeikoEpson_SG8002CA-4Pin_7.0x5.0mm | 50 MHz | 1 |
| | | | |
| Y1 | Crystal_SMD_SeikoEpson_TSX3225-4Pin_3.2x2.5mm_HandSoldering | 12 MHz | 1 |
| Y2 | Crystal_HC49-U_Vertical | 3.58 MHz | 1 |
| Y3 | Crystal HC49-U Vertical | 4.43 MHz | 1 |