





















| Comment  | Description   | Designator<br>C1, C3_MCP1,   | Footprint  | LibRef   | Quantity   |
|--|---|--|--|--|--|
|  |   | C3_MCP2, C5_HT1,   |  |  |  |
|  |   | C5_HT2, C6_HT1,<br>C6_HT2, C7_HT1,   |  |  |  |
|  |   | C7_HT2, C8_HT1,  |  |  |  |
| 10uF   |   | C8_HT2, C10, C11, C25,<br>C27, C30, C32, C34,  |  |  |  |
|  | Capacitor   | C42, C43, C45_HT1,<br>C45_HT2  | RAD-0.3  | Cap  | 22   |
| 100nF  | Capacitor   | C2, C4_MCP1,   | RAD-0.3  | Сар  | 22   |
|  |   | C4_MCP2, C9, C12, C26,   |  |  |  |
|  |   | C28, C29, C31, C33,<br>C35, C41, C44, C46_HT1,   |  |  |  |
|  | Capacitor   | C46_HT2  | RAD-0.3  | Cap  | 15   |
|  |   | C19_COD1, C19_COD2,<br>C19_COD3, C19_COD4,   |  |  |  |
|  |   | C19_COD5, C19_COD6,<br>C19_COD7, C19_COD8,   |  |  |  |
|  |   | C19_Designator,  |  |  |  |
|  |   | C20_COD1, C20_COD2,<br>C20_COD3, C20_COD4,   |  |  |  |
|  |   | C20_COD5, C20_COD6,  |  |  |  |
| 10nF   | Capacitor   | C20_COD7, C20_COD8,<br>C20_Designator  | RAD-0.3  | Cap  | 18   |
| 22pF   | Capacitor   | C36, C37   | RAD-0.3  | Сар  | 2  |
|  | ,   | Cod1, Cod2, Cod3,  |  |  |  |
| Switch   |   | Cod4, Cod5, Cod6,<br>Cod7, Cod8, Cod9  |  | Cod  | q  |
|  |   | Cod1_COD1,   |  | cou  | 3  |
|  |   | Cod1_COD2,   |  |  |  |
|  |   | Cod1_COD3,<br>Cod1_COD4,   |  |  |  |
|  |   | Cod1_COD5,   |  |  |  |
|  |   | Cod1_COD6,<br>Cod1_COD7,   |  |  |  |
|  |   | Cod1_COD8,   |  | c-4  | ]  |
| Cod  | 1   | Cod1_Designator<br>D1_LEDA1, D1_LEDA2,   |  | Cod  | 9  |
|  | 1   | D1_LEDA3, D1_LEDA4,  | 1  |  |  |
|  | 1   | D1_LEDB1, D1_LEDB2,<br>D1_LEDB3, D1_LEDB4,   | 1  |  |  |
|  | 1   | D2_LEDA1, D2_LEDA2,  | 1  |  |  |
|  |   | D2_LEDA3, D2_LEDA4,<br>D2_LEDB1, D2_LEDB2,   |  |  |  |
|  |   | D2_LEDB3, D2_LEDB4,  |  |  |  |
|  | 1   | D3_LEDA1, D3_LEDA2,<br>D3_LEDA3, D3_LEDA4,   | 1  |  |  |
|  |   | D3_LEDB1, D3_LEDB2,  |  |  |  |
|  |   | D3_LEDB3, D3_LEDB4,<br>D4_LEDA1, D4_LEDA2,   |  |  |  |
| LED  |   | D4_LEDA3, D4_LEDA4,  |  |  |  |
|  | Diffused Green 3mm<br>LED   | D4_LEDB1, D4_LEDB2,<br>D4_LEDB3, D4_LEDB4  | LED-0  | LED0   | 32   |
| ???  | Default Diode   | D5, D8, D9   | SMC  | Diode  | 3  |
| 1N4001   | Default Diode   | D6, D7, D37, D38   | SMC  | Diode  | 4  |
| 1191001  |   | D17, D18, D19, D20,  |  |  |  |
|  |   | D21, D22, D23, D24,<br>D25, D26, D27, D28,   |  |  |  |
|  |   | D29, D30, D31, D32,  |  |  |  |
|  |   | D33, D34, D35, D36,<br>D39_HT1, D39_HT2,   |  |  |  |
| 1N4148   | Default Diode   | D40_HT1, D40_HT2   | SMC  | Diode  | 24   |
| Power Input  | Header, 2-Pin   | P0   | HDR1X2   | Header 2   | 1  |
| MIDI   | Header, 5-Pin   | P1   | HDR1X5   | Header 5   | 1  |
| Program / Debug  | Header, 6-Pin   | P2   | HDR1X6   | Header 6   | 1  |
| SDAMB-01215BT00  |   | P3   |  | SDAMB-01215BT00  | 1  |
| Res1???  |   |  | AXIAL-0.3  | Res1   | 2  |
|  | Resistor  | R1, R2   |  |  |  |
| 10K  | Potentiometer   | R3   | VR5  | RPot   | 1  |
| 10K<br>100   | Potentiometer<br>Potentiometer  | R3<br>R4   | VR5  | RPot   | 1  |
| 10K<br>100<br>240  | Potentiometer<br>Potentiometer<br>Resistor  | R3<br>R4<br>R5, R48  | VR5<br>AXIAL-0.3   | RPot<br>Res1   | 1 2  |
| 10K<br>100<br>240<br>390   | Potentiometer Potentiometer Resistor Potentiometer  | R3<br>R4<br>R5, R48<br>R6  | VR5<br>AXIAL-0.3<br>VR5  | RPot<br>Res1<br>RPot   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3<br>R4<br>R5, R48<br>R6<br>R7  | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2  |
| 10K<br>100<br>240<br>390   | Potentiometer Potentiometer Resistor Potentiometer  | R3<br>R4<br>R5, R48<br>R6<br>R7  | VR5<br>AXIAL-0.3<br>VR5  | RPot<br>Res1<br>RPot   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3<br>R4<br>R5, R48<br>R6<br>R7<br>R8<br>R31_COD1, R31_COD2,   | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3<br>R4<br>R5, R48<br>R6<br>R7<br>R8<br>R31_COD1, R31_COD2,<br>R31_COD3, R31_COD4,<br>R31_COD5, R31_COD4,   | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3 R4 R5, R48 R6 R7 R8 R31_COD1, R31_COD2, R31_COD4, R31_COD5, R31_COD5, R31_COD6, R31_COD6, R31_COD6, R31_COD5, R31_COD6, R31_COD5, R31_COD6, R31_COD5, R31_COD6, R31_COD6, R31_COD5, R31_COD6, R31 | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3 R4 R5, R48 R6 R7 R8 R31_COD2, R31_COD4, R31_COD5, R31_COD6, R31_COD5, R31_COD6, R31_COD5, R31_COD6, R31_COD5, R31_COD6, R31 | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3 R4 R5, R48 R6 R7 R8 R31_COD1, R31_COD2, R31_COD4, R31_COD5, R31_COD6, R31_COD7, R31_COD8, R31_COD7, R34_COD7, R34_COD1, R34_COD1  | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3 R4 R5, R48 R6 R7 R8 R8 R8 R3, COD1, R31, COD2, R31, COD3, R31, COD4, R31, COD7, R31, COD8, R31, COD7, R31, COD8, R31, COD7, R31, COD8, R31, COD7, R34, COD7, R34, COD1, R34, COD7, R34, COD8, R34,  | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3<br>R4<br>R5, R48<br>R6<br>R7<br>R8<br>R31_COD1, R31_COD2,<br>R31_COD3, R31_COD4,<br>R31_COD7, R31_COD8,<br>R31_COD7, R31_COD8,<br>R31_COD7, R31_COD8,<br>R34_COD7, R34_COD8,<br>R34_COD7, R34_COD8,<br>R34_COD7, R34_COD8,<br>R34_COD7, R34_COD8,<br>R34_COD7, R34_COD8,  | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3 R4 R5, R48 R5, R48 R6 R7 R8 R8 R31_COD1, R31_COD2, R31_COD4, R31_COD3, R31_COD4, R31_COD7, R31_COD8, R31_COD7, R31_COD8, R34_COD7, R34_COD8, R34_COD7, R34_COD8, R34_COD7, R34_COD7, R34_COD7, R34_COD8, R34_COD7, R37_COD1, R37_COD2, R37_COD1, R37_CD2, R37_COD1, R37_CD2, R37_CD3, R37_C | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | 83 R4 R5, R48 R6 R6 R7 R8 R8 R6 R7 R8  | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | 83 R4 R5, R48 R6 R7 R8 R7 R8 R8 R6 R6 R7 R7 R8 R8 R7 R8 R7  | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3 R4 R5, R48 R6 R7 R8 R8 R3 (COD1, R31, COD2, R31, COD3, R31, COD4, R31, COD7, R31, COD8, R31, COD7, R31, COD8, R31, COD7, R34, COD1, R34, COD1, R34, COD1, R34, COD1, R34, COD8, R37, COD8, R38, COD1, R38, COD2, R38, COD | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | 83 R4 R5, R48 R6 R7 R8 R7 R8 R8 R6 R6 R7 R7 R8 R8 R7 R8 R7  | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K<br>100<br>240<br>390<br>330  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3 R4 R5, R48 R6 R7 R8 R8 R7 R8 R8 R31, COD1, R31, COD2, R31, COD4, R31, COD4, R31, COD4, R31, COD5, R31, COD6, R31, COD6, R31, COD6, R31, COD6, R31, COD6, R31, COD6, R31, COD7, R31, COD8, R31, COD8 | VR5<br>AXIAL-0.3<br>VR5<br>AXIAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1  |
| 10K 100 100 100 100 100 100 100 100 100  | Potentiometer Potentiometer Resistor Potentiometer Resistor   | R3 R4 R5, R48 R6 R7 R8 R8 R31, COD1, R31, COD2, R31, COD2, R31, COD3, R31, COD4, R31, COD3, R31, COD4, R31, COD7, R31, COD8, R31, COD7, R31, COD8, R34, COD7, R34, COD8, R34, COD7, R34, COD8, R34, COD7, R37, COD8, R38, CO | VRS AWAL-0.3 VRS AWAL-0.3 AWAL-0.3 AWAL-0.3 AWAL-0.3   | RPot<br>Res1<br>RPot<br>Res1   | 1 2 1 1 1 1 1 1 1  |
| 10K 100 100 100 100 100 100 100 100 100  | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor   | R3 R4 R5, R48 R6 R7 R8 R8 R8 R1 COD1, R31, COD2, R31, COD2, R31, COD3, R31, COD4, R31, COD5, R34, COD5, R37, COD6, R38, COD7, R38, COD8, R38, COD7, R38, COD7, R38, COD8, R38, C | VRS AWAL-0.3 VPS AWAL-0.3 AWAL | RPot Res1 RPot Res1 Res1 Res1  | 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K 100 100 100 100 100 100 100 100 100  | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor  | R3 R4 R5, R48 R6 R7 R8   | VRS AWAL-0.3 VRS AWAL-0.3 AWAL-0.3 AWAL-0.3 AWAL-0.3   | RPot<br>Res1<br>RPot<br>Res1<br>Res1   | 1 2 1 1 1 1 1 1 1  |
| 10K  | Potentiometer Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor   | R3 R4 R5, R48 R6 R7 R8 R8 R7 R8  | VRS AVAL-0.3 VRS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3  | RPot Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1   | 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K 100 100 100 100 100 100 100 100 100  | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor   | 83 R4 R5 R48 R6 R6 R7 R8 R7 R8 R8 R6 R6 R7 R8 R8 R6 R6 R7 R8 R8 R6 R7 R8 R8 R8 R6 R6 R7 R8 R8 R8 R6 R7 R8 R8 R8 R6 R8 R6 R8 R6 R8   | VRS AWAL-0.3 VPS AWAL-0.3 AWAL | RPot Res1 RPot Res1 Res1 Res1  | 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K  | Potentiometer Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor   | R3 R4 R5, R48 R6 R7 R8 R8 R7 R8  | VRS AVAL-0.3 VRS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3  | RPot Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1   | 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K  | Potentiometer Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor   | R3 R4 R5, R48 R6 R7 R8 R8 R31_COD1, R31_COD2, R31_COD3, R31_COD4, R31_COD3, R31_COD4, R31_COD5,  | VRS AVAL-0.3 VRS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3  | RPot Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1   | 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K  | Potentiometer Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor   | 83 R4 R8 R6 R7 R8 R8  | VRS AMAL-0.3 VYS AMAL-0.3 AMAL-0.3 AMAL-0.3 AMAL-0.3 AMAL-0.3 AMAL-0.3 AMAL-0.3  | RPot Res1 RPot Res1 Res1 Res1 Res1 Res1 Res1 Res1  | 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K<br>2220<br>47K   | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor | R3 R4 R5, R48 R6 R7 R8 R8 R31_COD1, R31_COD2, R31_COD3, R31_COD4, R31_COD3, R31_COD4, R31_COD5,  | VRS AVAL-0.3 VRS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3  | RPot Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1   | 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K<br>2220<br>47K<br>5W-PB<br>PIC32MX150F128B   | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor Resistor                   | R3 R4 R5, R48 R6 R7 R8   | VRS AVAL-0.3 VVS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 SPST-2 PC32MAVI50F1288-soic  | RPot Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1   | 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K<br>10K<br>10K<br>220<br>47K<br>5W-PB<br>PIC32MX150F128B<br>Optoisolator2   | Potentiometer Resistor Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor                        | 83 R4 R5 R48 R6 R6 R7 R8 R7 R8 R8 R6 R6 R7 R7 R8 R8 R6 R7 R8 R8 R6 R7 R7 R8 R8 R7   | VRS AVAL-0.3 VRS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3  | RPot Res1 Res1 Res1 Res1 Res1  Res1  Res1  Res1  Optoisolator2   | 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K 10K 10R 10R 10R 10R 10R 10R 220 47K 5W-PB PK32MX150F128B Optoisolator2 NL37WZ37USG   | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor Resistor                   | 83 R4 R8 R8 R6 R7 R8 R8 R6 R7 R8 R8 R6 R6 R7 R8 R8 R6 R6 R7 R8 R8 R6 R7 R8 R8 R6 R7 R8 R8 R9  | VRS AVAL-0.3 VVS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 SPST-2 PC32MAVI50F1288-soic  | RPot Res1 RPot Res1 Res1 Res1 Res1  Res1  Res1  Quinter Res1  SW-P8 PKC32MML50F1288  Quintsolator2 NL37WZ07U5G | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 10K 220 330 47K 5W-PB PIC32MX150F128B Optoisofard2 MCP23S17  | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor Resistor                   | R3 R4 R5, R48 R6 R6 R7 R8 R8 R81, COD1, R31, COD2, R31, COD2, R31, COD3, R31, COD4, R31, COD3, R31, COD4, R31, COD7, R31, COD8, R31, COD7, R31, COD8, R31, COD7, R32, COD8, R34, COD7, R34, COD8, R34, COD7, R37, COD8, R38, COD6, R38, COD6, R38, COD6, R38, COD6, R38, COD8, R38, | VRS AVAL-0.3 VVS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 SPST-2 PRC32MOL50F1288-soic SOP5(6)  | RPot Res1 Res1 Res1 Res1 SW-P8 P(C32MM150F1288 Optoisofr2 MCPZSST7   | 42<br>2<br>3<br>42<br>2<br>42<br>1<br>1<br>1<br>1<br>1<br>2                                  |
| 10K 220 390 330 680  10K 220 47K  5W-PB PIC32MXI50F128B Optoisolator2 NL37WX70VSG MCP23S17 HTI6K33                                   | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor Resistor                   | 83 R4 R5, R48 R6 R6 R7 R8 R7 R8 R7 R8 R7 R8 R7 R8 R8 R6 R6 R7 R8 R8 R6 R6 R7 R8 R8 R6 R7 R8 R7 R8 R8 R6 R7 R8 R7 R8 R7 R8 R7   | VRS AVAL-0.3 VVS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 SPST-2 PC32MAVI50F1288-soic  | RPot Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1   | 42<br>2<br>3<br>42<br>2<br>42<br>2<br>1<br>1<br>1<br>1<br>1<br>2<br>2<br>2                   |
| 10K 220 330 330 680  10K 2220  47K  SW-PB PIC32MX150F128B OptoIsolator2 AUS/W207USG MCP23S17 HTB6/33                                 | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor Resistor                   | R3 R4 R5, R48 R6 R6 R7 R8 R8 R81, COD1, R31, COD2, R31, COD2, R31, COD3, R31, COD4, R31, COD3, R31, COD4, R31, COD7, R31, COD8, R31, COD7, R31, COD8, R31, COD7, R32, COD8, R34, COD7, R34, COD8, R34, COD7, R37, COD8, R38, COD6, R38, COD6, R38, COD6, R38, COD6, R38, COD8, R38, | VRS AVAL-0.3 VVS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 SPST-2 PRC32MOL50F1288-soic SOP5(6)  | RPot Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1   | 42<br>2<br>3<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>2                          |
| 10K 220 330 331 680  10K 220 47K  5W-PB PIC32MX150F128B Optoisolator2 NL37W257U5G MCP232317 HTGIG33 SST25VF0208 MCC0G240I60C6W-PFIUW | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor Resistor                   | 83 R4 R5, R48 R6 R6 R7 R8 R8 R7 R8 R8 R6 R6 R7 R8 R8 R6 R6 R7 R8 R8 R7 R8 R8 R6 R6 R7 R8 R8 R7 R8 R8 R7 R8 R8 R7 R8 R7 R8 R8 R7 R8 R7 R7 R8 R7   | VRS AVAL-0.3 VVS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 SPST-2 PRC32MOL50F1288-soic SOP5(6)  | Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1  | 42<br>2<br>3<br>42<br>2<br>3<br>4<br>1<br>1<br>1<br>1<br>1<br>1<br>2<br>2<br>2               |
| 10K 240 390 330 680  10K 220 47K  5W-PB PIC32MXI50F128B Optoisolator2 NL37W27USG MCP23S17 HTI6K33 SST25VF0208 MCCGG240169CGW-        | Potentiometer Potentiometer Resistor Potentiometer Resistor Resistor Resistor Resistor Resistor Resistor Resistor                   | 83 R4 R5, R48 R6 R6 R7 R8 R7   | VRS AVAL-0.3 VVS AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 AVAL-0.3 SPST-2 PRC32MOL50F1288-soic SOP5(6)  | RPot Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1   | 42<br>2<br>3<br>1<br>1<br>1<br>1<br>1<br>2<br>2<br>3<br>1<br>1<br>1<br>1<br>2<br>2<br>2<br>1 |