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<td>Samtec Connector Solu</td>
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<td>Connector, Receptacle, 40-Pin 0.100x10, 50x50 mil Pitch, SMT</td>
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<td>Will add component to BOM. Useful for cables, nuts, etc. not in libraries</td>
<td>B&amp;F Fastener Supply</td>
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<td>Used in PnP output</td>
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<td>Samtec, Inc.</td>
<td>TSW-104-07-G-S</td>
<td>TSW-104-07-G-S</td>
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<td>L1, L27, L28, L29, L30, L31, L32, L33, L34</td>
<td>1000 ohm 0.25A Ferrite Bead, 1000 ohm @ 100MHz, SMD</td>
<td>MuRata</td>
<td>BLM151H0102SN1D</td>
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<td>L2, L3, L4, L5, L19, L21, L22, L23</td>
<td>330 ohm 1.5A Ferrite Bead, 330 ohm @ 100MHz, SMD</td>
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<td>L4, L5, L16, L17, L18, L26</td>
<td>26 ohm 3A Ferrite Bead, 26 ohm @ 100MHz, SMD</td>
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<td>L7, L14, L20, L24, L25</td>
<td>120 ohm 3A Ferrite Bead, 120 ohm @ 100MHz, SMD</td>
<td>MuRata</td>
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<td>64</td>
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<td>L8</td>
<td>3uH Inductor, Shielded Drum Core, Ferrite, 3uH, 3A, 0.024 ohm, SMD</td>
<td>Sumida</td>
<td>CDHR6D28NP-3R0NC</td>
<td>CDHR6D28</td>
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<td>L11</td>
<td>7uH Inductor, Shielded Drum Core, Ferrite, 7uH, 4.35A, 0.03 ohm, SMD</td>
<td>Coilcraft</td>
<td>MSS1038-702NLB</td>
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<td>L12</td>
<td>5.5uH Inductor, Shielded Drum Core, Superflux, 5.5uH, 10A, 0.0112 ohm, SMD</td>
<td>Wurth Elektronik eSos</td>
<td>74325550</td>
<td>WE-HC6</td>
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| 67 | 1 | LBL1  
Thermal Transfer Printable Labels, 0.650” W x 0.200” H - 10,000 per roll  
Brady  
THT-14-423-10 |
| 68 | 1 | LF1  
3900pF  
CAP, CERM, 3900pF, 25V, +/-5%,  
C0G/NP0, 0603  
TDK  
C1608CG01E392J |
| 69 | 1 | LF2  
47pF  
CAP, CERM, 47pF, 50V, +/-5%,  
C0G/NP0, 0603  
AVX  
0603A470JAT2A |
| 70 | 1 | LF3  
619  
RES, 619 ohm, 1%, 0.1W, 0603  
Yageo America  
RC0603FR-07619RL |
| 71 | 1 | LF7  
μH  
Coupled inductor, 5A, 0.01 ohm,  
SMD  
TDK  
ACM0606-301-2PL-TL |
| 72 | 1 | NCO  
Header, TH, 100mil, 3x2, Gold plated, 230 mil above insulator  
Samtec, Inc.  
TSW-103-07-G-D |
| 73 | 2 | OR_T0, OR_T1  
Orange  
LED, Orange, SMD  
Lite-On  
LTST-C190KFT |
| 74 | 1 | R1  
8.06k  
RES, 8.06k ohm, 1%, 0.063W,  
0402  
Vishay-Dale  
CRCW04028K06FKED |
| 75 | 2 | R2, R10  
1.2k  
RES, 1.2k ohm, 5%, 0.063W,  
0402  
Vishay-Dale  
CRCW04021K20JNED |
| 76 | 3 | R3, R11, R150  
1.0Meg  
RES, 1.0Meg ohm, 5%, 0.063W,  
0402  
Vishay-Dale  
CRCW04021M00JNED |
| 77 | 12 | R4, R5, R6, R14, R15, R16, R155, R106, R107, R123, R130, R131  
10.0k  
RES, 10.0k ohm, 1%, 0.1W, 0603  
Vishay-Dale  
CRCW060310K0FKEA |
| 78 | 1 | R12  
1.33k  
RES, 1.33k ohm, 1%, 0.063W,  
0402  
Vishay-Dale  
CRCW04021K33FKED |
| 79 | 1 | R13  
3.30k  
RES, 3.30k ohm, 0.1%, 0.1W, 0603  
Susumu Co Ltd  
RG1608P-332-B-T5 |
| 80 | 1 | R17  
750  
RES, 750 ohm, 5%, 0.1W, 0603  
Yageo America  
RC0603JR-07750RL |
| 81 | 2 | R19, R20  
0  
RES, 0 ohm, 5%, 0.05W, 0201  
Panasonic  
ERJ-1GE0R00C |
| 82 | 6 | R25, R28, R145, R147, R148, R149  
0  
RES, 0 ohm, 5%, 0.063W, 0402  
Panasonic  
ERJ-2GE0R00X |
| 83 | 4 | R27, R28, R34, R35  
100  
RES, 100 ohm, 1%, 0.063W, 0402  
Vishay-Dale  
CRCW0402100RFKED |
| 84 | 3 | R31, R32, R122  
1.3k  
RES, 1.3k ohm, 5%, 0.1W, 0603  
Yageo America  
RC0603JR-071KL |
| 85 | 2 | R33, R37  
3.3k  
RES, 3.3k ohm, 5%, 0.063W, 0402  
Vishay-Dale  
CRCW04023K30JNED |
| 86 | 4 | R39, R71, R80, R134  
1.0k  
RES, 1.0k ohm, 5%, 0.1W, 0603  
Yageo America  
RC0603JR-071KL |
| 87 | 2 | R41, R74  
10.7k  
RES, 10.7k ohm, 1%, 0.1W, 0603  
Vishay-Dale  
CRCW060310K7FKEA |
| 88 | 11 | R43, R44, R46, R58, R60, R61, R62, R63, R64, R160, R161  
0  
RES, 0 ohm, 5%, 0.063W, 0402  
Vishay-Dale  
CRCW04020000Z0ED [NoValue], [NoValue], Eqv |
| 89 | 3 | R45, R56, R112  
270  
RES, 270 ohm, 5%, 0.1W, 0603  
Vishay-Dale  
CRCW0603270JRJNEA |
| 90 | 1 | R47  
2.32k  
RES, 2.32k ohm, 1%, 0.1W, 0603  
Yageo America  
RC0603FR-072K32L |
| 91 | 2 | R49, R77  
4.62k  
RES, 4.64k ohm, 1%, 0.1W, 0603  
Yageo America  
RC0603FR-074K64L |
| 92 | 1 | R51  
51  
RES, 51 ohm, 5%, 0.063W, 0402  
Vishay-Dale  
CRCW040251JRUJNED |
| 93 | 2 | R52, R53  
10  
RES, 10 ohm, 5%, 0.1W, 0603  
Yageo America  
RC060310JRJNEA |
| 94 | 12 | R65, R68, R108, R110, R111, R113, R114, R115, R117, R118, R124, R125  
100  
RES, 100 ohm, 5%, 0.1W, 0603  
Vishay-Dale  
CRCW060310JRJNEA |
| 95 | 1 | R66  
1.00k  
RES, 1.00k ohm, 1%, 0.1W, 0603  
Vishay-Dale  
CRCW06031K00FKEA |
| 96 | 1 | R67  
12.0k  
RES, 12.0k ohm, 1%, 0.1W, 0603  
Yageo America  
RC0603FR-0712KL |
| 97 | 1 | R70  
10k  
RES, 10k ohm, 5%, 0.1W, 0603  
Yageo America  
RC0603JR-0710KL |
| 98 | 1 | R72  
82.5k  
RES, 82.5k ohm, 1%, 0.1W, 0603  
Vishay-Dale  
CRCW060382K5FKEA |
| 99 | 1 | R76  
22.1k  
RES, 22.1k ohm, 1%, 0.1W, 0603  
Vishay-Dale  
CRCW060322K1FKEA |
| 100 | 1 | R78  
10.0  
RES, 10.0 ohm, 1%, 0.1W, 0603  
Yageo America  
RC0603FR-0710RL |
| 101 | 1 | R79  
732  
RES, 732 ohm, 1%, 0.1W, 0603  
Vishay-Dale  
CRCW0603732RFKEA |
| 102 | 1 | R81  
16.2k  
RES, 16.2k ohm, 1%, 0.1W, 0603  
Vishay-Dale  
CRCW060316K2FKEA |
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<th>No.</th>
<th>Ref.</th>
<th>Value</th>
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<tr>
<td>103</td>
<td>R82</td>
<td>7.87k</td>
<td>RES, 7.87k ohm, 1%, 0.1W, 0603</td>
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<td>R88, R89</td>
<td>4.99k</td>
<td>RES, 4.99k ohm, 1%, 0.1W, 0603</td>
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<td>R91</td>
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<td>RES, 1.0k ohm, 5%, 0.25W, 1206</td>
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<td>R97, R101, R102</td>
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<td>RES, 12.4k ohm, 1%, 0.1W, 0603</td>
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<td>R98, R100, R143, R107</td>
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<td>R103, R132, R152</td>
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<td>R104</td>
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<td>116</td>
<td>R135</td>
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<td>R144</td>
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<td>R154</td>
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<td>R156, R157</td>
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<td>R163, R164</td>
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<td>R166, R167</td>
<td>560</td>
<td>RES, 560, 5%, 0.063 W, 0402</td>
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<td>S1</td>
<td>SW1CH SLIDE SPST 4A PCB, TH</td>
<td>C&amp;K Components</td>
<td>L101011MS02Q</td>
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<td>SH2ADC_INT_1_2, SH2ADC_LDO_1_2, SH1V9ADC_INT_1_2, SH1V9INT_1_2, SH5V_12V_INT_1_2, SHFTO3SP3V1_2, SH-J2_1_2, SH-LMJK_INT_1_2, SH-LMJK_LDO_1_2, SLHMK_INT_1_2, SLHMK_LDO_1_2, SH-LMV_1_2</td>
<td>1x2</td>
<td>Shunt, 100mil, Gold plated, Black</td>
<td>Samtec, Inc.</td>
<td>SNT-100-BK-G</td>
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<td>SH-SRV_1_2, SH-Ty, ADD1_1_2</td>
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<td>TMST+, TMST-, VIN</td>
<td>50 Ohm</td>
<td>Connector, SMT, End launch SMA 50 ohm</td>
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<td>134</td>
<td>U1</td>
<td>Dual Micro-Power Rail-to-Rail Input CMOS Comparator with Push-Pull Output, 8-pin Narrow SOIC</td>
<td>National Semiconducto</td>
<td>LMC6762AIX/NOPB M08A</td>
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<td>ADC12J4000NKE Ultra-Wideband RF Sampling Subsystem, NKE0068A</td>
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<td>136</td>
<td>U3</td>
<td>Dual Remote Diode and Local Temperature Sensor with SMBus Interface and TruTherm Technology, 14-pin LLP, Pb-Free</td>
<td>National Semiconducto</td>
<td>LM95233CISD/NOPB SDA14B</td>
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<td>137</td>
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<td>Integer-N/Fractional-N PLL with Integrated VCO, RHB0032E</td>
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<td>TRF3765RH-B RHB0032E</td>
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<td>138</td>
<td>U5, U8</td>
<td>Micropower 800mA Low Noise &quot;Ceramic Stable&quot; Adjustable Voltage Regulator for 1V to 5V Applications, 8-pin PSOP, Pb-Free</td>
<td>National Semiconducto</td>
<td>LP3878MR-ADJ/NOPB MRA08A</td>
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<td>Low-Noise Clock jitter Cleaner with Dual Loop PLLs, NKD0064A</td>
<td>Texas Instruments</td>
<td>LMK04828BISQ/NOPB NKD0064A</td>
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<td>3-A OUTPUT SINGLE SYNCHRONOUS STEP DOWN SWITCHER WITH INTEGRATED FET(SWIFT), DDA0008B</td>
<td>Texas Instruments</td>
<td>TPS54327DDA DDA0008B</td>
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<td>Dual 2A, 36V Wide Input Range Buck Regulator, 16-pin LLP, Pb-Free</td>
<td>National Semiconducto</td>
<td>LM26400Y5DE/NOPB SDA16A</td>
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<td>4-1A Low Dropout Linear Regulator with Programmable Soft-Start, RWG0020A</td>
<td>Texas Instruments</td>
<td>TPS74901RGW RGW0020A</td>
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<td>143</td>
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<td>3A Fast-Transient Response Adjustable Low-Dropout Linear Voltage Regulator, 5-pin TO-263 Thin, Pb-Free</td>
<td>National Semiconducto</td>
<td>LP38513TJ-ADJ/NOPB TJA5</td>
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<td>144</td>
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<td>4-BIT DUAL-SUPPLY BUS TRANSCEIVER WITH CONFIGURABLE VOLTAGE TRANSLATION AND 3-STATE OUTPUTS, PW0016A</td>
<td>Texas Instruments</td>
<td>SN74AVC4T774PW PW0016A</td>
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<td>U13</td>
<td>Quad High Speed USB to Multipurpose UART/MPSSE IC</td>
<td>FTDI</td>
<td>FT4232HL 10x10mm</td>
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<td>300-mA, Low-Rq, Low-Dropout Regulator, RWG0020A</td>
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<td>TLP70233DBV DBV0005A</td>
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<td>147</td>
<td>U15</td>
<td>10µF, 16V, 2.5V Microwire Serial EEPROM, 8-Pin MSOP, Industrial Temperature</td>
<td>Microchip Technology</td>
<td>91LC46B-1MS MSOP-MS8</td>
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<td>148</td>
<td>U17</td>
<td>Divide-by-2 Divider</td>
<td>ON Semiconductor</td>
<td>MC10EP32DD 7S5-06</td>
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<td>U18</td>
<td>SN74LVC1G125DBV IC, Single Bus Buffer Gate With 3-States Output</td>
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<td>SN74LVC1G125DBV DBV</td>
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<td>150</td>
<td>U19</td>
<td>MINI USB 2.0 SM TYPE AB 5 CONTACTS A.UA, SMD</td>
<td>Wurth Elektronik</td>
<td>651-305-142-821 9.2x9.4 mm</td>
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<td>151</td>
<td>uWIRE</td>
<td>Connector, 100mil Shrouded, 52, High-Temperature, Gold, TH</td>
<td>3M</td>
<td>N2510-6002-DB 62 Shrouded header 7x1.3x5mm</td>
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<tr>
<td>152</td>
<td>Y1</td>
<td>OSC-100.0000MHZ 3.3V +/- 5PPM SMD</td>
<td>Connor-Winfield</td>
<td>CWX813-100.0M 5x2.5x1.5mm</td>
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<tr>
<td>153</td>
<td>Y2</td>
<td>Crystal, 12MHz, 18pf, SMD</td>
<td>Abracon Corporation</td>
<td>ABM3-12.000MHZ BZ-2-T ABM3</td>
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<tr>
<td>154</td>
<td>C1, C6</td>
<td>100pF CAP, CERMM, 1000pF, 16V, +/-10%, X7R, 0201</td>
<td>MuRata</td>
<td>GRM033R71C101KA01D 201</td>
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<tr>
<td>155</td>
<td>C30, C36</td>
<td>0.22uF CAP, CERMM, 0.22uF, 6.3V, +/- 20%, X5R, 0201</td>
<td>TDK</td>
<td>C0603X5R0J224M 201</td>
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<tr>
<td>156</td>
<td>C48, C46, C47, C114, C123, C231, C235, C250, C251</td>
<td>0.1uF CAP, CERMM, 0.1uF, 10V, +/-10%, X5R, 0402</td>
<td>TDK</td>
<td>C1005XR1A04K - 402</td>
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<tr>
<td>157</td>
<td>C90, C91, C92, C93, C262, C263</td>
<td>4700pF CAP, CERMM, 4700pF, 10V, +/- 10%, X5R, 0201</td>
<td>MuRata</td>
<td>GRM033R515A472KA01D - 201</td>
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<tr>
<td>158</td>
<td>C230, C234</td>
<td>47pF</td>
<td>CAP, CERM, 47pF, 50V, +/-5%, C0G/NP0, 0603</td>
<td>MuRata</td>
<td>GRM1885C1H470J0A1D</td>
<td>603</td>
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<tr>
<td>159</td>
<td>C247</td>
<td>2.2pF</td>
<td>CAP, CERM, 2.2pF, 50V, +/-5%, C0G/NP0, 0402</td>
<td>MuRata</td>
<td>GRM1555CTR2R2CA01</td>
<td>402</td>
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<tr>
<td>160</td>
<td>R01, R02, R03</td>
<td>Fiducial mark. There is nothing to buy or mount.</td>
<td>N/A</td>
<td>N/A</td>
<td>Fiducial</td>
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<tr>
<td>161</td>
<td>R7, R8, R16, R21, R22, R23</td>
<td>0</td>
<td>RES, 0 ohm, 5%, 0.05W, 0201</td>
<td>Panasonic</td>
<td>ERJ-1GE0R00C</td>
<td>201</td>
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<tr>
<td>162</td>
<td>R24</td>
<td>10.0k</td>
<td>RES, 10.0k ohm, 1%, 0.063W, 0402</td>
<td>Vishay-Dale</td>
<td>CRCW040210K0FKED</td>
<td>402</td>
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<tr>
<td>163</td>
<td>R26, R29, R36, R146</td>
<td>0</td>
<td>RES, 0 ohm, 5%, 0.063W, 0402</td>
<td>Panasonic</td>
<td>ERJ-2GE0R00X</td>
<td>402</td>
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<tr>
<td>164</td>
<td>R30, R153</td>
<td>49.9</td>
<td>RES, 49.9 ohm, 1%, 0.063W, 0402</td>
<td>Vishay-Dale</td>
<td>CRCW040249R9FKED</td>
<td>402</td>
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<tr>
<td>165</td>
<td>R40, R42, R73, R75, R83, R84, R92, R95</td>
<td>0.002</td>
<td>RES, 0.002 ohm, 1%, 1W, 1206</td>
<td>Stackpole Electronics</td>
<td>CSNL1206FT2L00</td>
<td>1206</td>
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<tr>
<td>166</td>
<td>R50</td>
<td>N/A</td>
<td>RES, xxx ohm, x%, xW, [PackageReference]</td>
<td>Used in BOM report</td>
<td>Used in BOM report</td>
<td>-</td>
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<td>167</td>
<td>R54, R55, R57, R58, R69, R119, R120, R121, R126, R127</td>
<td>100</td>
<td>RES, 100 ohm, 5%, 0.1W, 0603</td>
<td>Vishay-Dale</td>
<td>CRCW0603100RJNEA</td>
<td>603</td>
</tr>
<tr>
<td>168</td>
<td>R90</td>
<td>402</td>
<td>RES, 402 ohm, 1%, 0.1W, 0603</td>
<td>Yageo America</td>
<td>RC0603FR-07402RL</td>
<td>603</td>
</tr>
<tr>
<td>169</td>
<td>R104, R116, R128, R129</td>
<td>24k</td>
<td>RES, 24k ohm, 5%, 0.063W, 0402</td>
<td>Vishay-Dale</td>
<td>CRCW040224K0JNED</td>
<td>402</td>
</tr>
<tr>
<td>170</td>
<td>R139, R140, R141</td>
<td>2.0k</td>
<td>RES, 2.0k ohm, 5%, 0.1W, 0603</td>
<td>Vishay-Dale</td>
<td>CRCW06032R00JNEA</td>
<td>603</td>
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<tr>
<td>171</td>
<td>R142</td>
<td>0</td>
<td>RES, 0 ohm, 5%, 0.1W, 0603</td>
<td>Panasonic</td>
<td>ERJ-3GE0Y00V</td>
<td>603</td>
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<tr>
<td>172</td>
<td>R151</td>
<td>0</td>
<td>RES, 0 ohm, 5%, 0.1W, 0603</td>
<td>Vishay-Dale</td>
<td>CRCW06030000JNEA</td>
<td>603</td>
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<tr>
<td>173</td>
<td>R165</td>
<td>51</td>
<td>RES, 51 ohm, 5%, 0.063W, 0402</td>
<td>Vishay-Dale</td>
<td>CRCW040251R0JNED</td>
<td>Equivalent</td>
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<tr>
<td>174</td>
<td>U16</td>
<td>64Kbit, 400kHz, 4.5V, I2C Serial EEPROM, 8-Pin SOIC 208mil, Commercial Temperature, Tape and Reel</td>
<td>SOU-SMB</td>
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