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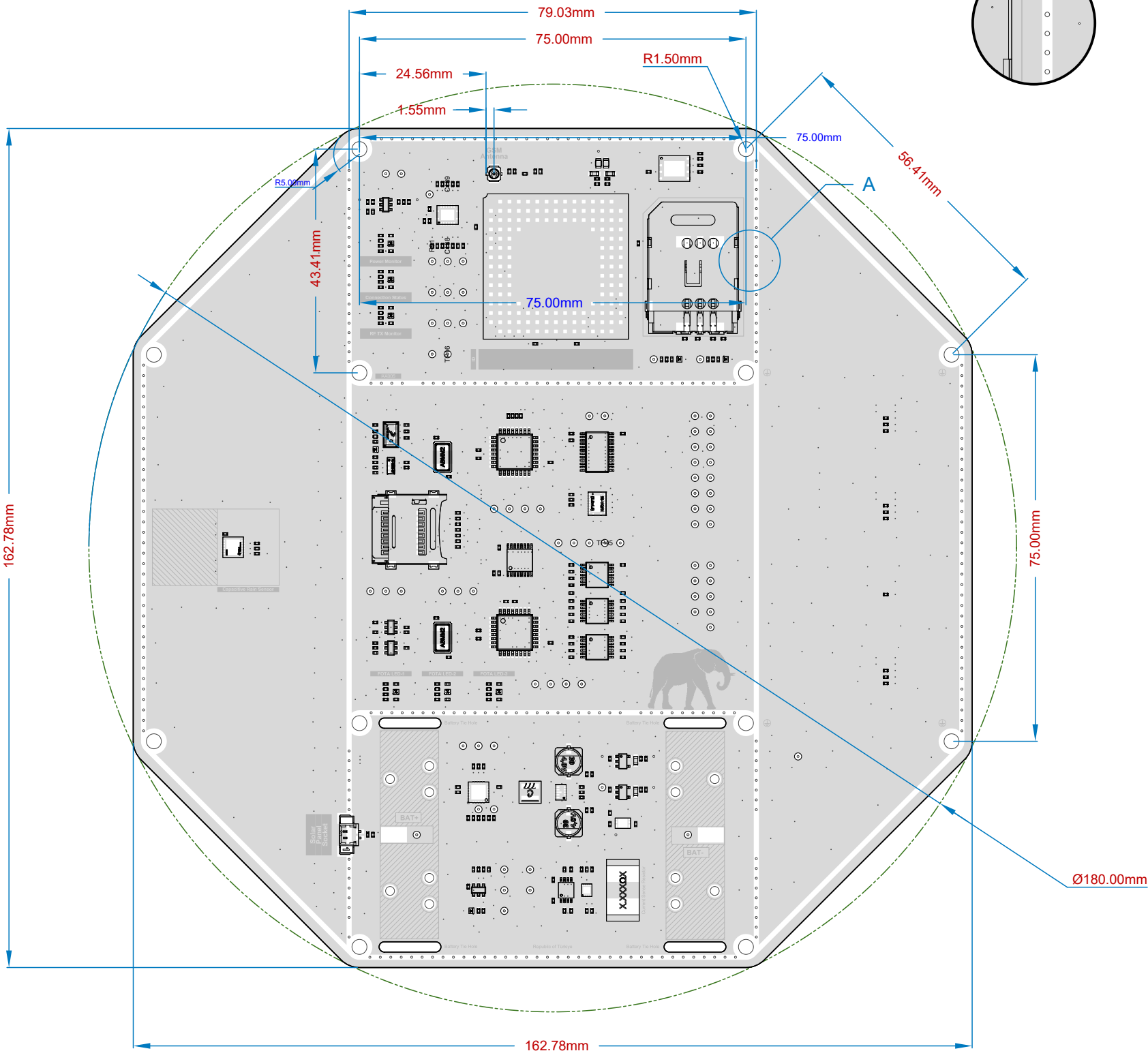
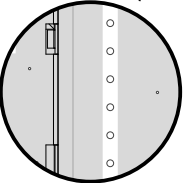
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DETAIL A (Scale 2:1)



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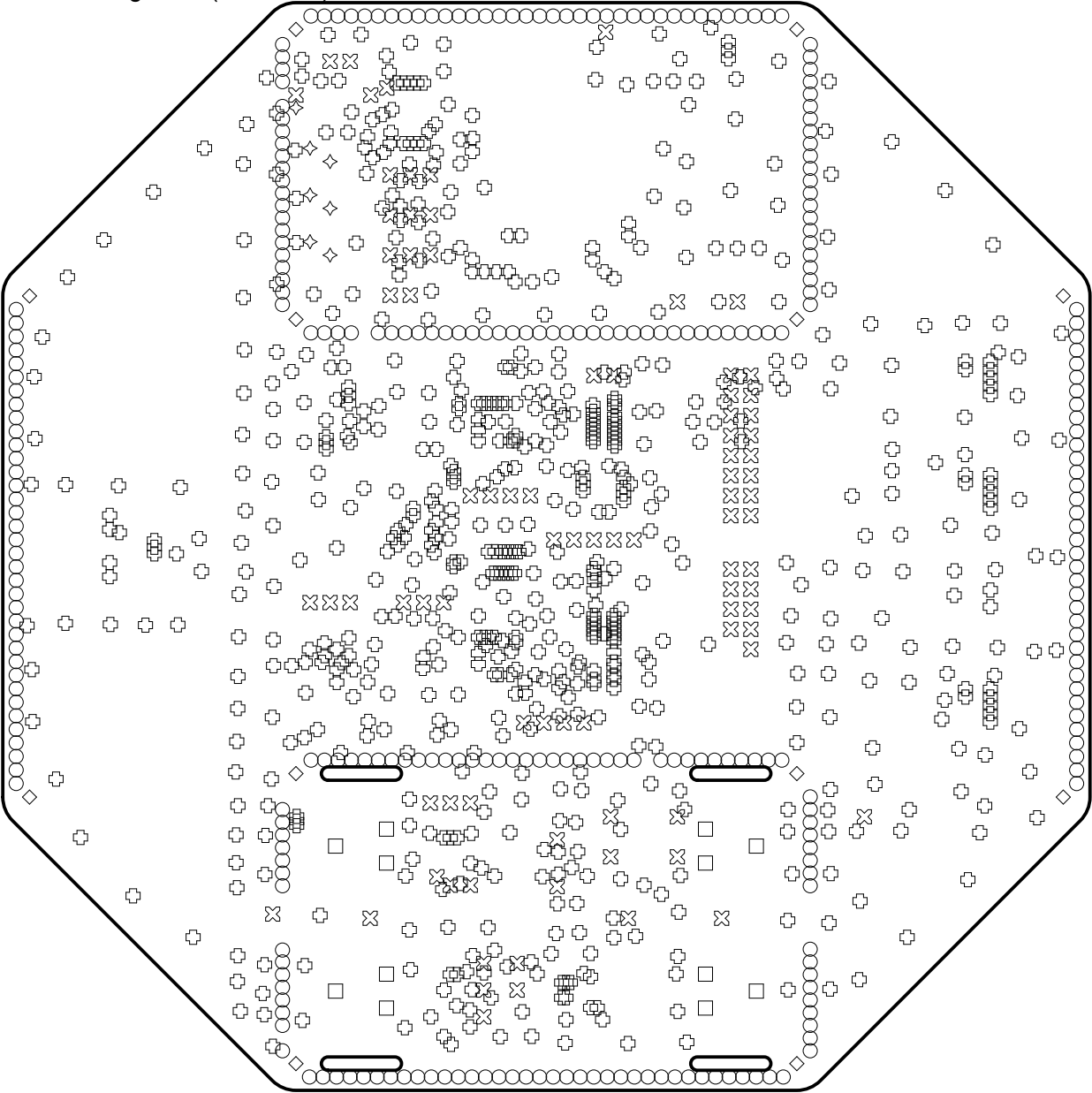
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Drill Drawing View (Scale 1:1)



Drill Table

| Symbol     | Count | Hole Size | Plated | Hole Tolerance |
|------------|-------|-----------|--------|----------------|
| ⊕          | 748   | 0.20mm    | Plated | None           |
| ◇          | 7     | 0.25mm    | Plated | +/-0.01mm      |
| ○          | 289   | 0.50mm    | Plated | +/-0.05mm      |
| ⊗          | 87    | 0.50mm    | Plated | None           |
| □          | 12    | 1.83mm    | Plated | None           |
| ◇          | 12    | 3.00mm    | Plated | None           |
| 1155 Total |       |           |        |                |

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|   | A   | B        | C                            | D                        | E | F | G | H          |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
|---|---|----------|------------------------------|--------------------------|---|---|---|------------|---------|----------|-------------------|--------------------------|----|------------------------|---|-------|------------|----|------------------------|---|-------|------------|----|------------------------|---|-------|------------|----|--------------------|---|-------|------------|--------|--------------------|---|-------|------------|--------|------------|---|---------|----------------------|----------|-----------------------|---|------------------------------|---------------|----------|--------------------------------------|---|-----------|------------|---------------|---------|---|--|--|----|-----------------|---|-----------|------------------|---------|---------------------------------|---|----------------------|-----|-----|---------------------------------|---|----------------------|--------|-----|---------------|---|------------------|---------------|-----|-----------------------|---|---------------------|------------------|----------------------------|-------------------------|---|----------|-----------|-------------|-------------------------|---|----------|-----------|----|------------------------------|---|--------------------|-------------|-----|----------------------|---|-------------------|--------------|----|-------------------|---|-------------------|----------------|-----|------------------------|---|----------------|---------------|---------------------------------------|-----------------|---|------------------|---------------|-------------------|-----------------|---|------------------|---------------|----------|--------------|---|--------------------|----------------|--------|----------------|---|--------------------|----------------|--------|----------------|---|-------------|-------------|----|----------------|---|-----------|----------------|-----|---------------------|---|--|--|-----|------------------|---|-------------------|--------------|-----|------------------|---|-------------------|-------------|-----|---------------|---|-------------------|-------------|----------|-----------------------|---|-------------------|----------------|-----|-------------------|---|-------------------|--------------|-----|------------------|---|-------------------|-------------------|-----|-----------------|---|-------------------|--------------|----|------------------------|---|-------|------------|-----|---------------|---|--|--|----------|------------------------------|---|-----|----------------|-----------------|------------------------------|---|--------------------|--------------------|---|------------------------------|----|-------|--------------------|---|------------------------------|----|-------|--------------------|--|------------------------------|----|-----|----------------|---------------|-------------------------------|---|-------|------------------|--------------------|-------------------------------|---|-------|----------------|-----------|-------------------------------|---|-----|----------------|------|-------------------------------|---|-----|----------------|------------|-------------------------------|---|--------|--------------------|--------|--------------------|---|-------------------|--|--------|--------------|---|-------------------|--------------|----|-----------------|---|---------------|------------|----|-----------------|---|-------|------------|----------------------------|----------------|---|--------------------|---------------|-----|---------------|---|-------------------|--------------|-----------------|--------------------|---|-----|----------------|------|--------------------|---|-----|------------------|-----------------------------------|---------------------|---|--------|------------------|-----|---------------------|---|--------|------------------|-----|---------------------|---|--------|------------------|---|---------------------|----|--------|------------------|--|---------------------|----|--------|------------------|------------------------------|---------------------|---|--------|------------------|-----|---------------------|---|--------|------------------|-----|---------------------|---|--------|------------------|--------------|---------------------|---|--------|------------------|---------------------------------|---------------------|---|--------|------------------|---------------|---------------------|---|--------|------------------|-----|---------------------|---|--------|------------------|----|-----------------------|---|-------------------|-------------------|---|
| 1   | <div>Bill Of Materials</div> <table><tr><th>Designator</th><th>Comment</th><th>Quantity</th><th>Manufacturer Name</th><th>Manufacturer Part Number</th></tr><tr><td>J1</td><td>2P SMD Tunic Connector</td><td>1</td><td>Molex</td><td>53261-0271</td></tr><tr><td>J8</td><td>2P SMD Tunic Connector</td><td>1</td><td>Molex</td><td>53261-0271</td></tr><tr><td>J6</td><td>4P SMD Tunic Connector</td><td>1</td><td>Molex</td><td>53261-0471</td></tr><tr><td>J4</td><td>6P Tunic Connector</td><td>1</td><td>Molex</td><td>53261-0671</td></tr><tr><td>J5, J7</td><td>6P Tunic Connector</td><td>2</td><td>Molex</td><td>53261-0671</td></tr><tr><td>X1, X2</td><td>7.3728 MHz</td><td>2</td><td>ABRACON</td><td>ABMM2-7.3728MHZ-E2-T</td></tr><tr><td>U12, U13</td><td>8-bit MicroController</td><td>2</td><td>Microchip Technology / Atmel</td><td>ATMEGA328P-AU</td></tr><tr><td>C86, C87</td><td>Aluminium Organic Polymer Capacitors</td><td>2</td><td>Panasonic</td><td>16SVPC39MV</td></tr><tr><td>RF1, RF2, RF3</td><td>Antenna</td><td>3</td><td></td><td></td></tr><tr><td>U8</td><td>Battery Charger</td><td>1</td><td>Microchip</td><td>MCP73871-2AAI/ML</td></tr><tr><td>J9, J10</td><td>Battery Clip Holder and Battery</td><td>2</td><td>Keystone Electronics</td><td>254</td></tr><tr><td>J11</td><td>Battery Clip Holder and Battery</td><td>1</td><td>Keystone Electronics</td><td>1070TR</td></tr><tr><td>U21</td><td>Battery Gauge</td><td>1</td><td>Maxim Integrated</td><td>MAX17055ETB+T</td></tr><tr><td>U25</td><td>Battery Management IC</td><td>1</td><td>Diodes Incorporated</td><td>AP9211S-AE-HAC-7</td></tr><tr><td>Q1, Q2, Q3, Q4, Q5, Q6, Q8</td><td>Bipolar NPN Transistors</td><td>7</td><td>Nexperia</td><td>BC847AQAZ</td></tr><tr><td>Q7, Q9, Q10</td><td>Bipolar NPN Transistors</td><td>3</td><td>Nexperia</td><td>BC847AQAZ</td></tr><tr><td>U5</td><td>Board Mount Pressure Sensors</td><td>1</td><td>NXP Semiconductors</td><td>MPL3115A2R1</td></tr><tr><td>U15</td><td>Buck-Boost Converter</td><td>1</td><td>Texas Instruments</td><td>TPS63802DLAT</td></tr><tr><td>U1</td><td>Capacitive Sensor</td><td>1</td><td>Texas Instruments</td><td>FDC2112QDNTRQ1</td></tr><tr><td>R73</td><td>Current Sense Resistor</td><td>1</td><td>TT Electronics</td><td>OARSXPR010FLF</td></tr><tr><td>D1, D12, D13, D14, D15, D16, D17, D18</td><td>ESD Suppressors</td><td>8</td><td>Bussmann / Eaton</td><td>0402ESDA-MLP1</td></tr><tr><td>D9, D10, D11, D19</td><td>ESD Suppressors</td><td>4</td><td>Bussmann / Eaton</td><td>0402ESDA-MLP1</td></tr><tr><td>FB1, FB2</td><td>Ferrite Bead</td><td>2</td><td>Murata Electronics</td><td>BLM18EG101T21D</td></tr><tr><td>L2, L3</td><td>Fixed Inductor</td><td>2</td><td>Murata Electronics</td><td>LQG15HN1N0S02D</td></tr><tr><td>L4, L5</td><td>Fixed Inductor</td><td>2</td><td>Taiyo Yuden</td><td>CB2518T102K</td></tr><tr><td>L1</td><td>Fixed Inductor</td><td>1</td><td>Coilcraft</td><td>XFL4015-471MEB</td></tr><tr><td>U10</td><td>GE910 2G GSM Module</td><td>1</td><td></td><td></td></tr><tr><td>U16</td><td>I2C Bus Repeater</td><td>1</td><td>Texas Instruments</td><td>TCA9517ADGKR</td></tr><tr><td>U22</td><td>I2C I/O Expander</td><td>1</td><td>Texas Instruments</td><td>PCF8574RGYR</td></tr><tr><td>U17</td><td>I2C Switch IC</td><td>1</td><td>Texas Instruments</td><td>TCA9548APWR</td></tr><tr><td>U23, U24</td><td>LDO Voltage Regulator</td><td>2</td><td>Texas Instruments</td><td>TPS7A0533PDBVR</td></tr><tr><td>U20</td><td>Logic Gate (NAND)</td><td>1</td><td>Texas Instruments</td><td>SN74HCS00PWR</td></tr><tr><td>U18</td><td>Logic Gate (NOR)</td><td>1</td><td>Texas Instruments</td><td>SN74HCS7002QPWRQ1</td></tr><tr><td>U19</td><td>Logic Gate (OR)</td><td>1</td><td>Texas Instruments</td><td>SN74HCS32PWR</td></tr><tr><td>J2</td><td>Memory Card Connectors</td><td>1</td><td>Molex</td><td>47219-2001</td></tr><tr><td>U11</td><td>MFF2 SIM Chip</td><td>1</td><td></td><td></td></tr><tr><td>C56, C57</td><td>Multilayer Ceramic Capacitor</td><td>2</td><td>AVX</td><td>04026C102MAT2A</td></tr><tr><td>C34, C101, C103</td><td>Multilayer Ceramic Capacitor</td><td>3</td><td>Murata Electronics</td><td>GRM153R60J105ME95D</td></tr><tr><td>C2, C3, C4, C6, C10, C13, C27, C30, C31, C47, C59, C60, C63, C64, C69, C73, C74, C75, C76, C77, C78, C81, C82, C92, C93, C94, C95, C96, C97, C102, C104, C109, C111, C112, C118, C119, C124, C128, C129, C130, C131, C132, C133, C134, C135, C138, C139</td><td>Multilayer Ceramic Capacitor</td><td>47</td><td>Kemet</td><td>C0402C330J9RACAUTO</td></tr><tr><td>C9, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C37, C38, C39, C46, C51, C52, C53, C54, C65, C66, C67, C120, C121, C123, C125, C126, C127</td><td>Multilayer Ceramic Capacitor</td><td>30</td><td>Kemet</td><td>C0402C330J9RACAUTO</td></tr><tr><td>C1, C5, C7, C8, C11, C12, C26, C28, C29, C32, C33, C42, C43, C44, C48, C49, C50, C58, C61, C70, C71, C72, C79, C80, C83, C84, C85, C88, C89, C90, C91, C98, C106, C107, C108, C110, C115, C116, C117</td><td>Multilayer Ceramic Capacitor</td><td>39</td><td>AVX</td><td>04026D104KAT4A</td></tr><tr><td>C45, C62, C68</td><td>Multilayer Ceramic Capacitors</td><td>3</td><td>Kemet</td><td>C0402C475M9PACTU</td></tr><tr><td>C35, C36, C40, C41</td><td>Multilayer Ceramic Capacitors</td><td>4</td><td>Kemet</td><td>CBR04C130F5GAC</td></tr><tr><td>C55, C122</td><td>Multilayer Ceramic Capacitors</td><td>2</td><td>AVX</td><td>04026C474KAT2A</td></tr><tr><td>C100</td><td>Multilayer Ceramic Capacitors</td><td>1</td><td>AVX</td><td>04026C474KAT2A</td></tr><tr><td>C136, C137</td><td>Multilayer Ceramic Capacitors</td><td>2</td><td>Vishay</td><td>VJ0402Y332KXQCW1BC</td></tr><tr><td>U3, U9</td><td>Nanopower Timer IC</td><td>2</td><td>Texas Instruments</td><td></td></tr><tr><td>U2, U4</td><td>Power Switch</td><td>2</td><td>Texas Instruments</td><td>TPS22917DBVR</td></tr><tr><td>U6</td><td>Real Time Clock</td><td>1</td><td>Micro Crystal</td><td>RV-3028-C7</td></tr><tr><td>J3</td><td>SIM Holder Tray</td><td>1</td><td>Molex</td><td>47388-2001</td></tr><tr><td>D2, D3, D4, D5, D6, D7, D8</td><td>SMD LED (Blue)</td><td>7</td><td>ROHM Semiconductor</td><td>SMLP13BC8TT86</td></tr><tr><td>U14</td><td>SPI Switch IC</td><td>1</td><td>Texas Instruments</td><td>SN3257QPWRQ1</td></tr><tr><td>C99, C113, C114</td><td>Tantalum Capacitor</td><td>3</td><td>AVX</td><td>F380J106MMAAH3</td></tr><tr><td>C105</td><td>Tantalum Capacitor</td><td>1</td><td>AVX</td><td>F380J476MMAAXEH3</td></tr><tr><td>R23, R25, R28, R30, R34, R48, R64</td><td>Thick Film Resistor</td><td>7</td><td>Vishay</td><td>CRCW04020000Z0ED</td></tr><tr><td>R32</td><td>Thick Film Resistor</td><td>1</td><td>Vishay</td><td>CRCW04021K00FKED</td></tr><tr><td>R74</td><td>Thick Film Resistor</td><td>1</td><td>Vishay</td><td>CRCW04022K70FKED</td></tr><tr><td>R1, R2, R5, R6, R18, R19, R31, R40, R45, R46, R47, R49, R51, R52, R53, R54, R63, R65, R71, R72, R83, R85, R86, R87, R88, R89, R90</td><td>Thick Film Resistor</td><td>27</td><td>Vishay</td><td>CRCW040210K0FKED</td></tr><tr><td>R3, R8, R20, R26, R27, R29, R33, R37, R41, R42, R43, R44, R50, R55, R56, R57, R58, R59, R60, R61, R62, R67, R70, R75, R76, R77, R78, R79, R80, R81, R84, R91</td><td>Thick Film Resistor</td><td>32</td><td>Vishay</td><td>CRCW040247K0FKED</td></tr><tr><td>R10, R12, R14, R16, R24, R39</td><td>Thick Film Resistor</td><td>6</td><td>Vishay</td><td>CRCW040247K0FKED</td></tr><tr><td>R68</td><td>Thick Film Resistor</td><td>1</td><td>Vishay</td><td>CRCW040291K0FKED</td></tr><tr><td>R66</td><td>Thick Film Resistor</td><td>1</td><td>Vishay</td><td>CRCW0402100KFKED</td></tr><tr><td>R7, R35, R36</td><td>Thick Film Resistor</td><td>3</td><td>Vishay</td><td>CRCW0402249KFKED</td></tr><tr><td>R4, R9, R11, R13, R15, R22, R38</td><td>Thick Film Resistor</td><td>7</td><td>Vishay</td><td>CRCW0402330RFKED</td></tr><tr><td>R17, R21, R82</td><td>Thick Film Resistor</td><td>3</td><td>Vishay</td><td>CRCW0402330RFKED</td></tr><tr><td>R69</td><td>Thick Film Resistor</td><td>1</td><td>Vishay</td><td>CRCW0402604KFKED</td></tr><tr><td>U7</td><td>Voltage Level Shifter</td><td>1</td><td>Texas Instruments</td><td>SN74AVCH4T245RGYR</td></tr></table> |          |                              |                          |   |   |   | Designator | Comment | Quantity | Manufacturer Name | Manufacturer Part Number | J1 | 2P SMD Tunic Connector | 1 | Molex | 53261-0271 | J8 | 2P SMD Tunic Connector | 1 | Molex | 53261-0271 | J6 | 4P SMD Tunic Connector | 1 | Molex | 53261-0471 | J4 | 6P Tunic Connector | 1 | Molex | 53261-0671 | J5, J7 | 6P Tunic Connector | 2 | Molex | 53261-0671 | X1, X2 | 7.3728 MHz | 2 | ABRACON | ABMM2-7.3728MHZ-E2-T | U12, U13 | 8-bit MicroController | 2 | Microchip Technology / Atmel | ATMEGA328P-AU | C86, C87 | Aluminium Organic Polymer Capacitors | 2 | Panasonic | 16SVPC39MV | RF1, RF2, RF3 | Antenna | 3 |  |  | U8 | Battery Charger | 1 | Microchip | MCP73871-2AAI/ML | J9, J10 | Battery Clip Holder and Battery | 2 | Keystone Electronics | 254 | J11 | Battery Clip Holder and Battery | 1 | Keystone Electronics | 1070TR | U21 | Battery Gauge | 1 | Maxim Integrated | MAX17055ETB+T | U25 | Battery Management IC | 1 | Diodes Incorporated | AP9211S-AE-HAC-7 | Q1, Q2, Q3, Q4, Q5, Q6, Q8 | Bipolar NPN Transistors | 7 | Nexperia | BC847AQAZ | Q7, Q9, Q10 | Bipolar NPN Transistors | 3 | Nexperia | BC847AQAZ | U5 | Board Mount Pressure Sensors | 1 | NXP Semiconductors | MPL3115A2R1 | U15 | Buck-Boost Converter | 1 | Texas Instruments | TPS63802DLAT | U1 | Capacitive Sensor | 1 | Texas Instruments | FDC2112QDNTRQ1 | R73 | Current Sense Resistor | 1 | TT Electronics | OARSXPR010FLF | D1, D12, D13, D14, D15, D16, D17, D18 | ESD Suppressors | 8 | Bussmann / Eaton | 0402ESDA-MLP1 | D9, D10, D11, D19 | ESD Suppressors | 4 | Bussmann / Eaton | 0402ESDA-MLP1 | FB1, FB2 | Ferrite Bead | 2 | Murata Electronics | BLM18EG101T21D | L2, L3 | Fixed Inductor | 2 | Murata Electronics | LQG15HN1N0S02D | L4, L5 | Fixed Inductor | 2 | Taiyo Yuden | CB2518T102K | L1 | Fixed Inductor | 1 | Coilcraft | XFL4015-471MEB | U10 | GE910 2G GSM Module | 1 |  |  | U16 | I2C Bus Repeater | 1 | Texas Instruments | TCA9517ADGKR | U22 | I2C I/O Expander | 1 | Texas Instruments | PCF8574RGYR | U17 | I2C Switch IC | 1 | Texas Instruments | TCA9548APWR | U23, U24 | LDO Voltage Regulator | 2 | Texas Instruments | TPS7A0533PDBVR | U20 | Logic Gate (NAND) | 1 | Texas Instruments | SN74HCS00PWR | U18 | Logic Gate (NOR) | 1 | Texas Instruments | SN74HCS7002QPWRQ1 | U19 | Logic Gate (OR) | 1 | Texas Instruments | SN74HCS32PWR | J2 | Memory Card Connectors | 1 | Molex | 47219-2001 | U11 | MFF2 SIM Chip | 1 |  |  | C56, C57 | Multilayer Ceramic Capacitor | 2 | AVX | 04026C102MAT2A | C34, C101, C103 | Multilayer Ceramic Capacitor | 3 | Murata Electronics | GRM153R60J105ME95D | C2, C3, C4, C6, C10, C13, C27, C30, C31, C47, C59, C60, C63, C64, C69, C73, C74, C75, C76, C77, C78, C81, C82, C92, C93, C94, C95, C96, C97, C102, C104, C109, C111, C112, C118, C119, C124, C128, C129, C130, C131, C132, C133, C134, C135, C138, C139 | Multilayer Ceramic Capacitor | 47 | Kemet | C0402C330J9RACAUTO | C9, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C37, C38, C39, C46, C51, C52, C53, C54, C65, C66, C67, C120, C121, C123, C125, C126, C127 | Multilayer Ceramic Capacitor | 30 | Kemet | C0402C330J9RACAUTO | C1, C5, C7, C8, C11, C12, C26, C28, C29, C32, C33, C42, C43, C44, C48, C49, C50, C58, C61, C70, C71, C72, C79, C80, C83, C84, C85, C88, C89, C90, C91, C98, C106, C107, C108, C110, C115, C116, C117 | Multilayer Ceramic Capacitor | 39 | AVX | 04026D104KAT4A | C45, C62, C68 | Multilayer Ceramic Capacitors | 3 | Kemet | C0402C475M9PACTU | C35, C36, C40, C41 | Multilayer Ceramic Capacitors | 4 | Kemet | CBR04C130F5GAC | C55, C122 | Multilayer Ceramic Capacitors | 2 | AVX | 04026C474KAT2A | C100 | Multilayer Ceramic Capacitors | 1 | AVX | 04026C474KAT2A | C136, C137 | Multilayer Ceramic Capacitors | 2 | Vishay | VJ0402Y332KXQCW1BC | U3, U9 | Nanopower Timer IC | 2 | Texas Instruments |  | U2, U4 | Power Switch | 2 | Texas Instruments | TPS22917DBVR | U6 | Real Time Clock | 1 | Micro Crystal | RV-3028-C7 | J3 | SIM Holder Tray | 1 | Molex | 47388-2001 | D2, D3, D4, D5, D6, D7, D8 | SMD LED (Blue) | 7 | ROHM Semiconductor | SMLP13BC8TT86 | U14 | SPI Switch IC | 1 | Texas Instruments | SN3257QPWRQ1 | C99, C113, C114 | Tantalum Capacitor | 3 | AVX | F380J106MMAAH3 | C105 | Tantalum Capacitor | 1 | AVX | F380J476MMAAXEH3 | R23, R25, R28, R30, R34, R48, R64 | Thick Film Resistor | 7 | Vishay | CRCW04020000Z0ED | R32 | Thick Film Resistor | 1 | Vishay | CRCW04021K00FKED | R74 | Thick Film Resistor | 1 | Vishay | CRCW04022K70FKED | R1, R2, R5, R6, R18, R19, R31, R40, R45, R46, R47, R49, R51, R52, R53, R54, R63, R65, R71, R72, R83, R85, R86, R87, R88, R89, R90 | Thick Film Resistor | 27 | Vishay | CRCW040210K0FKED | R3, R8, R20, R26, R27, R29, R33, R37, R41, R42, R43, R44, R50, R55, R56, R57, R58, R59, R60, R61, R62, R67, R70, R75, R76, R77, R78, R79, R80, R81, R84, R91 | Thick Film Resistor | 32 | Vishay | CRCW040247K0FKED | R10, R12, R14, R16, R24, R39 | Thick Film Resistor | 6 | Vishay | CRCW040247K0FKED | R68 | Thick Film Resistor | 1 | Vishay | CRCW040291K0FKED | R66 | Thick Film Resistor | 1 | Vishay | CRCW0402100KFKED | R7, R35, R36 | Thick Film Resistor | 3 | Vishay | CRCW0402249KFKED | R4, R9, R11, R13, R15, R22, R38 | Thick Film Resistor | 7 | Vishay | CRCW0402330RFKED | R17, R21, R82 | Thick Film Resistor | 3 | Vishay | CRCW0402330RFKED | R69 | Thick Film Resistor | 1 | Vishay | CRCW0402604KFKED | U7 | Voltage Level Shifter | 1 | Texas Instruments | SN74AVCH4T245RGYR | 1 |
| Designator  | Comment   | Quantity | Manufacturer Name            | Manufacturer Part Number |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| J1  | 2P SMD Tunic Connector  | 1        | Molex                        | 53261-0271               |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| J8  | 2P SMD Tunic Connector  | 1        | Molex                        | 53261-0271               |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| J6  | 4P SMD Tunic Connector  | 1        | Molex                        | 53261-0471               |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| J4  | 6P Tunic Connector  | 1        | Molex                        | 53261-0671               |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| J5, J7  | 6P Tunic Connector  | 2        | Molex                        | 53261-0671               |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| X1, X2  | 7.3728 MHz  | 2        | ABRACON                      | ABMM2-7.3728MHZ-E2-T     |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U12, U13  | 8-bit MicroController   | 2        | Microchip Technology / Atmel | ATMEGA328P-AU            |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C86, C87  | Aluminium Organic Polymer Capacitors  | 2        | Panasonic                    | 16SVPC39MV               |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| RF1, RF2, RF3   | Antenna   | 3        |                              |                          |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U8  | Battery Charger   | 1        | Microchip                    | MCP73871-2AAI/ML         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| J9, J10   | Battery Clip Holder and Battery   | 2        | Keystone Electronics         | 254                      |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| J11   | Battery Clip Holder and Battery   | 1        | Keystone Electronics         | 1070TR                   |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U21   | Battery Gauge   | 1        | Maxim Integrated             | MAX17055ETB+T            |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U25   | Battery Management IC   | 1        | Diodes Incorporated          | AP9211S-AE-HAC-7         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| Q1, Q2, Q3, Q4, Q5, Q6, Q8  | Bipolar NPN Transistors   | 7        | Nexperia                     | BC847AQAZ                |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| Q7, Q9, Q10   | Bipolar NPN Transistors   | 3        | Nexperia                     | BC847AQAZ                |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U5  | Board Mount Pressure Sensors  | 1        | NXP Semiconductors           | MPL3115A2R1              |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U15   | Buck-Boost Converter  | 1        | Texas Instruments            | TPS63802DLAT             |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U1  | Capacitive Sensor   | 1        | Texas Instruments            | FDC2112QDNTRQ1           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R73   | Current Sense Resistor  | 1        | TT Electronics               | OARSXPR010FLF            |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| D1, D12, D13, D14, D15, D16, D17, D18   | ESD Suppressors   | 8        | Bussmann / Eaton             | 0402ESDA-MLP1            |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| D9, D10, D11, D19   | ESD Suppressors   | 4        | Bussmann / Eaton             | 0402ESDA-MLP1            |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| FB1, FB2  | Ferrite Bead  | 2        | Murata Electronics           | BLM18EG101T21D           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| L2, L3  | Fixed Inductor  | 2        | Murata Electronics           | LQG15HN1N0S02D           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| L4, L5  | Fixed Inductor  | 2        | Taiyo Yuden                  | CB2518T102K              |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| L1  | Fixed Inductor  | 1        | Coilcraft                    | XFL4015-471MEB           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U10   | GE910 2G GSM Module   | 1        |                              |                          |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U16   | I2C Bus Repeater  | 1        | Texas Instruments            | TCA9517ADGKR             |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U22   | I2C I/O Expander  | 1        | Texas Instruments            | PCF8574RGYR              |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U17   | I2C Switch IC   | 1        | Texas Instruments            | TCA9548APWR              |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U23, U24  | LDO Voltage Regulator   | 2        | Texas Instruments            | TPS7A0533PDBVR           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U20   | Logic Gate (NAND)   | 1        | Texas Instruments            | SN74HCS00PWR             |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U18   | Logic Gate (NOR)  | 1        | Texas Instruments            | SN74HCS7002QPWRQ1        |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U19   | Logic Gate (OR)   | 1        | Texas Instruments            | SN74HCS32PWR             |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| J2  | Memory Card Connectors  | 1        | Molex                        | 47219-2001               |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U11   | MFF2 SIM Chip   | 1        |                              |                          |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C56, C57  | Multilayer Ceramic Capacitor  | 2        | AVX                          | 04026C102MAT2A           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C34, C101, C103   | Multilayer Ceramic Capacitor  | 3        | Murata Electronics           | GRM153R60J105ME95D       |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C2, C3, C4, C6, C10, C13, C27, C30, C31, C47, C59, C60, C63, C64, C69, C73, C74, C75, C76, C77, C78, C81, C82, C92, C93, C94, C95, C96, C97, C102, C104, C109, C111, C112, C118, C119, C124, C128, C129, C130, C131, C132, C133, C134, C135, C138, C139 | Multilayer Ceramic Capacitor  | 47       | Kemet                        | C0402C330J9RACAUTO       |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C9, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C37, C38, C39, C46, C51, C52, C53, C54, C65, C66, C67, C120, C121, C123, C125, C126, C127   | Multilayer Ceramic Capacitor  | 30       | Kemet                        | C0402C330J9RACAUTO       |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C1, C5, C7, C8, C11, C12, C26, C28, C29, C32, C33, C42, C43, C44, C48, C49, C50, C58, C61, C70, C71, C72, C79, C80, C83, C84, C85, C88, C89, C90, C91, C98, C106, C107, C108, C110, C115, C116, C117  | Multilayer Ceramic Capacitor  | 39       | AVX                          | 04026D104KAT4A           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C45, C62, C68   | Multilayer Ceramic Capacitors   | 3        | Kemet                        | C0402C475M9PACTU         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C35, C36, C40, C41  | Multilayer Ceramic Capacitors   | 4        | Kemet                        | CBR04C130F5GAC           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C55, C122   | Multilayer Ceramic Capacitors   | 2        | AVX                          | 04026C474KAT2A           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C100  | Multilayer Ceramic Capacitors   | 1        | AVX                          | 04026C474KAT2A           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C136, C137  | Multilayer Ceramic Capacitors   | 2        | Vishay                       | VJ0402Y332KXQCW1BC       |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U3, U9  | Nanopower Timer IC  | 2        | Texas Instruments            |                          |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U2, U4  | Power Switch  | 2        | Texas Instruments            | TPS22917DBVR             |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U6  | Real Time Clock   | 1        | Micro Crystal                | RV-3028-C7               |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| J3  | SIM Holder Tray   | 1        | Molex                        | 47388-2001               |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| D2, D3, D4, D5, D6, D7, D8  | SMD LED (Blue)  | 7        | ROHM Semiconductor           | SMLP13BC8TT86            |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U14   | SPI Switch IC   | 1        | Texas Instruments            | SN3257QPWRQ1             |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C99, C113, C114   | Tantalum Capacitor  | 3        | AVX                          | F380J106MMAAH3           |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| C105  | Tantalum Capacitor  | 1        | AVX                          | F380J476MMAAXEH3         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R23, R25, R28, R30, R34, R48, R64   | Thick Film Resistor   | 7        | Vishay                       | CRCW04020000Z0ED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R32   | Thick Film Resistor   | 1        | Vishay                       | CRCW04021K00FKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R74   | Thick Film Resistor   | 1        | Vishay                       | CRCW04022K70FKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R1, R2, R5, R6, R18, R19, R31, R40, R45, R46, R47, R49, R51, R52, R53, R54, R63, R65, R71, R72, R83, R85, R86, R87, R88, R89, R90   | Thick Film Resistor   | 27       | Vishay                       | CRCW040210K0FKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R3, R8, R20, R26, R27, R29, R33, R37, R41, R42, R43, R44, R50, R55, R56, R57, R58, R59, R60, R61, R62, R67, R70, R75, R76, R77, R78, R79, R80, R81, R84, R91  | Thick Film Resistor   | 32       | Vishay                       | CRCW040247K0FKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R10, R12, R14, R16, R24, R39  | Thick Film Resistor   | 6        | Vishay                       | CRCW040247K0FKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R68   | Thick Film Resistor   | 1        | Vishay                       | CRCW040291K0FKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R66   | Thick Film Resistor   | 1        | Vishay                       | CRCW0402100KFKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R7, R35, R36  | Thick Film Resistor   | 3        | Vishay                       | CRCW0402249KFKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R4, R9, R11, R13, R15, R22, R38   | Thick Film Resistor   | 7        | Vishay                       | CRCW0402330RFKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R17, R21, R82   | Thick Film Resistor   | 3        | Vishay                       | CRCW0402330RFKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| R69   | Thick Film Resistor   | 1        | Vishay                       | CRCW0402604KFKED         |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| U7  | Voltage Level Shifter   | 1        | Texas Instruments            | SN74AVCH4T245RGYR        |   |   |   |            |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| 2   |   |          |                              |                          |   |   |   | 2          |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| 3   |   |          |                              |                          |   |   |   | 3          |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| 4   |   |          |                              |                          |   |   |   | 4          |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| 5   |   |          |                              |                          |   |   |   | 5          |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
| 6   |   |          |                              |                          |   |   |   | 6          |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |
|   | A   | B        | C                            | D                        | E | F | G | H          |         |          |                   |                          |    |                        |   |       |            |    |                        |   |       |            |    |                        |   |       |            |    |                    |   |       |            |        |                    |   |       |            |        |            |   |         |                      |          |                       |   |                              |               |          |                                      |   |           |            |               |         |   |  |  |    |                 |   |           |                  |         |                                 |   |                      |     |     |                                 |   |                      |        |     |               |   |                  |               |     |                       |   |                     |                  |                            |                         |   |          |           |             |                         |   |          |           |    |                              |   |                    |             |     |                      |   |                   |              |    |                   |   |                   |                |     |                        |   |                |               |                                       |                 |   |                  |               |                   |                 |   |                  |               |          |              |   |                    |                |        |                |   |                    |                |        |                |   |             |             |    |                |   |           |                |     |                     |   |  |  |     |                  |   |                   |              |     |                  |   |                   |             |     |               |   |                   |             |          |                       |   |                   |                |     |                   |   |                   |              |     |                  |   |                   |                   |     |                 |   |                   |              |    |                        |   |       |            |     |               |   |  |  |          |                              |   |     |                |                 |                              |   |                    |                    |   |                              |    |       |                    |   |                              |    |       |                    |  |                              |    |     |                |               |                               |   |       |                  |                    |                               |   |       |                |           |                               |   |     |                |      |                               |   |     |                |            |                               |   |        |                    |        |                    |   |                   |  |        |              |   |                   |              |    |                 |   |               |            |    |                 |   |       |            |                            |                |   |                    |               |     |               |   |                   |              |                 |                    |   |     |                |      |                    |   |     |                  |                                   |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |   |                     |    |        |                  |  |                     |    |        |                  |                              |                     |   |        |                  |     |                     |   |        |                  |     |                     |   |        |                  |              |                     |   |        |                  |                                 |                     |   |        |                  |               |                     |   |        |                  |     |                     |   |        |                  |    |                       |   |                   |                   |   |

