Detector Board Rev-B Partlist

<table>
<thead>
<tr>
<th>Part</th>
<th>Value</th>
<th>Package</th>
<th>Description</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
<td>R1</td>
<td>N/A</td>
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<td>(Generic Thick Film resistor)</td>
</tr>
<tr>
<td>R2</td>
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</tr>
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<td>R3</td>
<td>47</td>
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<td>(Generic Thick Film resistor)</td>
</tr>
<tr>
<td>R4</td>
<td>100 1%</td>
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<td>(Generic Thick Film resistor)</td>
</tr>
<tr>
<td>R5</td>
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<td>(Generic Thick Film resistor)</td>
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<td>470</td>
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<tr>
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<td>1206</td>
<td>(Generic Thick Film resistor)</td>
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<tr>
<td>R10</td>
<td>2K2</td>
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<td>R28</td>
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<tr>
<td>R30</td>
<td>18K2 1%</td>
<td>1206</td>
<td>(Generic Thick Film resistor)</td>
</tr>
<tr>
<td>R31</td>
<td>18K2 1%</td>
<td>1206</td>
<td>(Generic Thick Film resistor)</td>
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</tbody>
</table>

-Inductors------------------------------------------

<table>
<thead>
<tr>
<th>Part</th>
<th>Value</th>
<th>Package</th>
<th>Description</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td>L1</td>
<td>4u7</td>
<td>1210</td>
<td>(Generic SMD inductor)</td>
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<tr>
<td>L2</td>
<td>47u</td>
<td>1210</td>
<td>(Generic SMD inductor)</td>
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<tr>
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<td>2.3u</td>
<td>T50-10</td>
<td>(Micrometals T50-10, 25 turns, 0.5mm enameled)</td>
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<tr>
<td>L4</td>
<td>2.3u</td>
<td>T50-10</td>
<td>(Micrometals T50-10, 25 turns, 0.5mm enameled)</td>
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<td>1.5u</td>
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<td>L6</td>
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<td>(Generic SMD inductor)</td>
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<tr>
<td>L7</td>
<td>1.5u</td>
<td>1210</td>
<td>(Generic SMD inductor)</td>
</tr>
<tr>
<td>L8</td>
<td>1.5u</td>
<td>1210</td>
<td>(Generic SMD inductor)</td>
</tr>
</tbody>
</table>
## L9
- **Inductors**
  - L9: 1.5u 1210 (Generic SMD inductor)

## L10
- **Inductors**
  - L10: 1.5u 1210 (Generic SMD inductor)

### Capacitors
- **Capacitors**
  - C1: N/A 1206 (Generic C0G,NP0 MLCC)
  - C2: N/A 1206 (Generic C0G,NP0 MLCC)
  - C3: N/A 1206 (Generic C0G,NP0 MLCC)
  - C4: 3p3 1206 (Generic C0G,NP0 MLCC)
  - C5: 3p3 1206 (Generic C0G,NP0 MLCC)
  - C6: 10p 5.5x7.0mm, 2-pin (Philips film trimmer, brown yellow)
  - C7: 10p 5.5x7.0mm, 2-pin (Philips film trimmer, brown yellow)
  - C8: 10p 5.5x7.0mm, 2-pin (Philips film trimmer, brown yellow)
  - C9: 15p 1206 (Generic C0G,NP0 MLCC)
  - C10: 15p 1206 (Generic C0G,NP0 MLCC)
  - C11: 22p 1206 (Generic C0G,NP0 MLCC)
  - C12: 22p 1206 (Generic C0G,NP0 MLCC)
  - C13: 27p 1206 (Generic C0G,NP0 MLCC)
  - C14: 39p 1206 (Generic C0G,NP0 MLCC)
  - C15: 39p 1206 (Generic C0G,NP0 MLCC)
  - C16: 68p 1206 (Generic C0G,NP0 MLCC)
  - C17: 82p 1206 (Generic C0G,NP0 MLCC)
  - C18: 82p 1206 (Generic C0G,NP0 MLCC)
  - C19: 150p 1206 (Generic C0G,NP0 MLCC)
  - C20: 150p 1206 (Generic C0G,NP0 MLCC)
  - C21: 470p 1206 (Generic C0G,NP0 MLCC)
  - C22: 470p 1206 (Generic C0G,NP0 MLCC)
  - C23: 3n3 2.5x7.5, 5mm (Generic Polyester film, MKT)
  - C24: 3n3 2.5x7.5, 5mm (Generic Polyester film, MKT)
  - C25: 22n 2.5x7.5, 5mm (Generic Polyester film, MKT)
  - C26: 22n 2.5x7.5, 5mm (Generic Polyester film, MKT)
  - C27: 22n 2.5x7.5, 5mm (Generic Polyester film, MKT)
  - C28: 22n 2.5x7.5, 5mm (Generic Polyester film, MKT)
  - C29: 22n 2.5x7.5, 5mm (Generic Polyester film, MKT)
  - C30: 22n 2.5x7.5, 5mm (Generic Polyester film, MKT)
  - C31: 100n 1206 (Generic X7R MLCC)
  - C32: 100n 1206 (Generic X7R MLCC)
  - C33: 100n 1206 (Generic X7R MLCC)
  - C34: 100n 1206 (Generic X7R MLCC)
  - C35: 100n 1206 (Generic X7R MLCC)
  - C36: 100n 1206 (Generic X7R MLCC)
  - C37: 100n 1206 (Generic X7R MLCC)
  - C38: 100n 1206 (Generic X7R MLCC)
  - C39: 100n 1206 (Generic X7R MLCC)
  - C40: 100n 1206 (Generic X7R MLCC)
  - C41: 100n 1206 (Generic X7R MLCC)
  - C42: 100n 1206 (Generic X7R MLCC)
  - C43: 100n 1206 (Generic X7R MLCC)
C44  100n  1206 (Generic X7R MLCC)
C45  100n  1206 (Generic X7R MLCC)
C46  100n  1206 (Generic X7R MLCC)
C47  100n  1206 (Generic X7R MLCC)
C48  100n  1206 (Generic X7R MLCC)
C49  100n  1206 (Generic X7R MLCC)
C50  100n  1206 (Generic X7R MLCC)
C51  100n  1206 (Generic X7R MLCC)
C52  100n  1206 (Generic X7R MLCC)
C53  100n  1206 (Generic X7R MLCC)
C54  100n  1206 (Generic X7R MLCC)
C55  100n  1206 (Generic X7R MLCC)
C56  100n  1206 (Generic X7R MLCC)
C57  100n  1206 (Generic X7R MLCC)
C58  100n  1206 (Generic X7R MLCC)
C59  100n  1206 (Generic X7R MLCC)
C60  100n  1206 (Generic X7R MLCC)
C61  100n  1206 (Generic X7R MLCC)
C62  100n  1206 (Generic X7R MLCC)
C63  100n  1206 (Generic X7R MLCC)
C64  100n  1206 (Generic X7R MLCC)
C65  100n  1206 (Generic X7R MLCC)
C66  100n  1206 (Generic X7R MLCC)
C67  100n  1206 (Generic X7R MLCC)
C68  1u   1206 (Generic X7R MLCC)
C69  1u   1206 (Generic X7R MLCC)
C70  10u  SMCB (Generic Tantalium)
C71  10u  SMCB (Generic Tantalium)
C72  10u  SMCB (Generic Tantalium)
C73  10u  SMCB (Generic Tantalium)
C74  10u  SMCB (Generic Tantalium)
C75  33u  SMCD (Generic Tantalium)
C76  33u  SMCD (Generic Tantalium)

-Ferrite Beads---------------------------------------------------------------
FB1  FB43   6 turns     (6 turns 0.3mm enameled copper)
FB2  FB43   6 turns     (6 turns 0.3mm enameled copper)
FB3  BN73-2402 2 turns (2 turns 0.8mm enameled copper)
FB4  BN73-2402 2 turns (2 turns 0.8mm enameled copper)

-Transformers-----------------------------------------------------------------
T1  1:4  BN43-2402 (Binocular mix 43 bead, 7 bifilar turns, 0.5mm enameled)
    (or MCL ADTT4-1, T4-1 etc)

-Integrated Circuits---------------------------------------------------------

3
IC1  AD8221ARZ  SOIC-8  (Analog Devices Inc, Instrumentation amplifier)
IC2  AD8221ARZ  SOIC-8  (Analog Devices Inc, Instrumentation amplifier)
IC3  FSAV311NTCX  TSOP-16  (Fairchild Semiconductor, Video Switch 2x4:1)
IC4  SN74AC74D  SOIC-14  (Texas Instruments, Dual D-type Flip Flop)
IC5  LME49710MA  SOIC-8  (National Semiconductor, Audio Opamp)
IC6  LME49710MA  SOIC-8  (National Semiconductor, Audio Opamp)
IC7  UA78L05CD  SOIC-8  (Texas Instruments, 5V regulator)
IC8  LM2940IMP-12  SOT223-4  (National Semiconductor, 12V LDO regulator)
IC9  LM2990S-12  TO263  (National Semiconductor, -12V LDO regulator)
IC10  FSA3157P6X  SC70-6  (Fairchild Semiconductor, SPDT bus-switch)
IC11  FSA3157P6X  SC70-6  (Fairchild Semiconductor, SPDT bus-switch)
IC12  FSA3157P6X  SC70-6  (Fairchild Semiconductor, SPDT bus-switch)
IC13  FSA3157P6X  SC70-6  (Fairchild Semiconductor, SPDT bus-switch)
IC14  PCF8574AT  SOIC-16W  (NXP Semiconductors, I2C 8-bit IO-expander)

-Transistors

Q7  MMBFJ310LT1G  SOT23-3  (ON-Semiconductor N-JFET)
Q8  MMBT3904  SOT23-3  (Fairchild Semiconductor, NPN transistor)

-Crystals

Q1  8.997M  HC-49  (QT Quarztechnik GmbH, specification 20100J1M1045)
Q2  8.997M  HC-49  (QT Quarztechnik GmbH, specification 20100J1M1045)
Q3  8.997M  HC-49  (QT Quarztechnik GmbH, specification 20100J1M1045)
Q4  8.997M  HC-49  (QT Quarztechnik GmbH, specification 20100J1M1045)
Q5  8.997M  HC-49  (QT Quarztechnik GmbH, specification 20100J1M1045)
Q6  8.997M  HC-49  (QT Quarztechnik GmbH, specification 20100J1M1045)

-Connectors

J1  BFO_IN  SMA  (Card edge SMA female connector)
J2  Q_OUT  SMA  (Card edge SMA female connector)
J3  I_OUT  SMA  (Card edge SMA female connector)
J4  IF_IN  SMA  (Card edge SMA female connector)
J5  pin-header  2X02  (2x2 pin header)
I2C-HEADER  I2C-bus  ML10L  (10 pin male flatcable connector)
X1  MSTBA  MSTBA  2.5/3-G-5.08  (conn header rt ang 3pos 5.08mm, PhoenixContact 1757255)
X1  MSTBA  MSTBA  2.5/3-ST-5.08  (conn term block plug 3pos 5.08mm, PhoenixContact 1757022)