# Control Board

**Resistors:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 2 | ‎220Ω | R17, R18 | 291-220-RC |
| 5 | 1.5kΩ | R11, R12, R13, R14, R15 | 291-1.5k-RC |
| 1 | 10kΩ | R8 | 291-10k-RC |
| 2 | 22kΩ | R9, R20 | 291-22k-RC |
| 2 | 47kΩ | R10, R21 | 291-47k-RC |
| 1 | 100kΩ | R19 | 291-100k-RC |

**TOTAL: 13**

**Diodes:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 5 | 3mm Red LED | LED1, LED2, LED3, LED4, LED5 | 604-WP710A10GD |
| 2 | BAT85 | D7, D8 | 78-BAT85S |

**TOTAL: 7**

**Potentiometers:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 2 | B50kΩ | TIME-POT, CHANNEL-POT | Various Suppliers |

**TOTAL: 2**

**Jacks/Switches:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 4 | 3.5mm Mono PJ-301BM-12 Vertical Mount Jack | RESET-CV, TIME-CV, OUTPUT, CHANNEL-CV | PJ301M-12 (Synthrotek or Thonk) |
| 1 | Vertical SD Card Holder | X1 | 945-PJS008U-3000-0 |
| 1 | Push Button | RESET | 611-D6R60F1LFS |
| 1 | 11x1 Male Header | JP2 | Synthrotek |
| 1 | 7x1 Male Header | JP4 | Synthrotek |

**TOTAL: 8**

**Other:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 2 | 2.5mm x 6mm Screws | N/A | Synthrotek |
| 2 | 3mm x 6mm Screws | N/A | Synthrotek |
| 1 | PCB & Panel | N/A | Synthrotek |
| 1 | 10 - 16 Pin Power Cable | N/A | Synthrotek |

**TOTAL: 6**

# Logic Board

**Resistors:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 2 | 47Ω | R1, R2 | 291-47-RC |
| 1 | 1kΩ | R7 | 291-1k-RC |
| 2 | 8.2kΩ | R3, R4 | 291-8.2k-RC |
| 1 | 330kΩ | R5 | 291-330k-RC |

**TOTAL: 6**

**Diodes:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 4 | BAT85 | D1, D2, D3, D4 | 78-BAT85S |
| 2 | 1N4002 | D5, D6 | 863-1N4002G |

**TOTAL: 6**

**Capacitors:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 2 | 1nF Ceramic | C1, C4 | 140-50P2-102K-RC |
| 4 | 100nF Ceramic | C2, C3, C5, C8 | 140-50V5-104Z-RC |
| 2 | 10μF Electrolytic | C6, C7 | 667-ECE-A1CKA100 |

**TOTAL: 8**

**Integrated Circuits:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 1 | LM78L05 | IC1 | 512-LM78L05ACZ |
| 1 | TL074 | IC4 | 595-TL074CN |
| 1 | 14 Pin DIP Socket | IC4 | 571-1-2199298-3 |

**TOTAL: 3**

**Potentiometers:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 1 | B50kΩ Small Box Trimmer | OUTPUT VOLUME | 652-3362P-1-503LF |

**TOTAL: 1**

**Jacks/Switches:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 1 | 11x1 Socket | JP1 | Synthrotek |
| 1 | 7x1 Socket | JP3 | Synthrotek |
| 1 | 14x1 Socket | See Assembly Instructions | Synthrotek |
| 1 | 13x1 Socket | See Assembly Instructions | Synthrotek |
| 1 | 2x1 Socket | See Assembly Instructions | Synthrotek |
| 1 | 14x1 Header | See Assembly Instructions | Synthrotek |
| 1 | 13x1 Header | See Assembly Instructions | Synthrotek |
| 1 | 2x1 Header | See Assembly Instructions | Synthrotek |
| 1 | 5x2 Unshrouded Male Header | POWER | Synthrotek |

**TOTAL: 6**

**Other:**

|  |  |  |  |
| --- | --- | --- | --- |
| QTY | Value | Ref. | Mouser Part # |
| 2 | 200mA Fuse | F1, F2 | 652-MFR020-LF |
| 2 | BL01RNA Ferrite Bead | L1, L2 | 81-BL01RN1A1D2B |
| 1 | Teensy 3.0, 3.1, or 3.2 | TEENSY 3.0, 3.1, or 3.2 |  |

**TOTAL: 5**