

Required Parts Enumeration – An Incomplete list at this time

4/10/2021

Most sources that I have purchased from and a few that I have not but are representative of what I have.

Teensy 4.0 <https://www.pjrc.com/store/teensy40.html>

Audio Adapter Board https://www.pjrc.com/store/teensy3_audio.html

3.5 in TFT Display W/ Touch ILI9488 <https://www.ebay.com/itm/HN-ILI9488-3-5-Inch-480x320-SPI-Serial-TFT-LCD-Module-Screen-with-Touch-Panel/224205375372?ssPageName=STRK%3AMEBIDX%3AIT&trksid=p2060353.m2749.l2649>

Possible substitute 2.8 in TFT Display W/ Touch ILI9341

https://www.amazon.com/gp/product/B073R7BH1B/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&psc=1

Double Male Pin Stacking header

https://www.amazon.com/gp/product/B00U8OCENY/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&psc=1

4, 6, 8, & 10 pin Long Leg Female Stacking Header <https://www.ebay.com/itm/10pcs-2-54-mm-Stackable-Long-Legs-Femal-Header-For-Arduino-Shield-LuTs/313408104974?ssPageName=STRK%3AMEBIDX%3AIT&var=612275527847&trksid=p2060353.m2749.l2649>

Or

<https://www.ebay.com/itm/10pcs-2-54-mm-Stackable-Long-Legs-Femal-Header-For-Arduino-Shield-USf8/393165232065?ssPageName=STRK%3AMEBIDX%3AIT&var=662096174930&trksid=p2060353.m2749.l2649>

Male Headers

https://www.amazon.com/gp/product/B07PKKY8BX/ref=ppx_yo_dt_b_asin_title_o04_s01?ie=UTF8&psc=1

2.54mm Pitch Single/Double Row Female Header Socket Connector For PCB 2 to 40Pin

<https://www.ebay.com/itm/2-54mm-Pitch-Single-Double-Row-Female-Header-Socket-Connector-For-PCB-2-to-40Pin-/293687772833>

Dupont Connectors

<https://www.ebay.com/itm/620pcs-Dupont-Connector-2-54mm-Cable-Jumper-Wire-Header-Housing-Kit-Male-Female/254375066157?hash=item3b39ef7a2d:g:nEcAAOSwoSldkjCv>

Dupont Crimping tool

https://www.amazon.com/gp/product/B00OMM4YUY/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1

or

MPI ACC-175 Crimping tool <https://www.maxxprod.com/mpi/mpi-4.html>

Push Lock DPDT switches 8x8mm with 2.5-2.5 x 6mm pin spacing that fit PCB

<https://www.ebay.com/itm/20-Pcs-8mm-x-8mm-x-17mm-Latching-Tactile-Tact-Push-Button-Switch-Self-Lock-6-Pin/323745621698?ssPageName=STRK%3AMEBIDX%3AIT&trksid=p2060353.m2749.l2649>

Caps for above Push Lock Switches

<https://www.ebay.com/itm/40Pcs-Plastic-6x7mm-Latching-Pushbutton-Tactile-Switch-Caps-Cover-Keycaps-Black/312531004007?ssPageName=STRK%3AMEBIDX%3AIT&trksid=p2060353.m2749.l2649>

Audio Xformers 600 - 600 Ohms

<https://www.ebay.com/itm/10pcs-audio-transformer-600-600-ohm-1-1-EI14-isolation-transformer-ringIN-Wnd/393196606754?ssPageName=STRK%3AMEBIDX%3AIT&trksid=p2060353.m2749.l2649>

10K Pots for Volume

<https://www.ebay.com/itm/10PCS-6mm-3pin-Knurled-Shaft-Single-Linear-B-Type-B10K-ohm-Rotary-Potentiometer/222445944546?ssPageName=STRK%3AMEBIDX%3AIT&trksid=p2060353.m2749.l2649>

Audio Amplifiers those like in Book

Best to read one or all of below, if you used the book or on line wiring diagrams.

<https://www.analog.com/media/en/analog-dialogue/volume-40/number-2/articles/class-d-audio-amplifiers.pdf>

https://www.edn.com/contentetimes/documents/edn/di%20pdfs/7.9.09_di.pdf

<https://pdfserv.maximintegrated.com/en/an/AN3977.pdf>

Post PAM8610 Stereo Class D Amplifier

https://www.amazon.com/gp/product/B07PDGDKRW/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1

Pre PAM8403 Class D Amplifier

https://www.amazon.com/HiLetgo%C2%AE-PAM8403-Digital-Amplifier-2-5-5V/dp/B00LODGV64/ref=psdc_537344_t1_B00LNACGT

Audio Amplifiers those that would work with headphones

LM386 –these may need rework for R2 & C4 User Comment: Should be 50nF & 10 Ohm, per datasheet, not 10pf & 220 Ohm

https://www.amazon.com/gp/product/B00LNACGT/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1

Or

TDA2030A Mono Amplifier

https://www.amazon.com/gp/product/B07QNW61G5/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1

2 KY-040 Rotary encoders

https://www.amazon.com/dp/B07F26CT6B/ref=sspa_dk_detail_3?psc=1&pd_rd_i=B07F26CT6B&pd_rd_w=PGOYE&pf_rd_p=4269e1a0-a218-4fbd-9748-1cd337d2f2a5&pd_rd_wg=QU6zw&pf_rd_r=9DF0SGFTSCE13BAE1XH2&pd_rd_r=bd470e74-a5da-43b8-895e-e88098d4415d&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEXVjA0RFJNQzlwSUUxJmVuY3J5cHRIZEikPUEwNTk5NjkYTVdHSDc2SE1YWUs2JmVuY3J5cHRIZEFkSWQ9QTAWMjUzNTQxTFcwUVY0UkFETIJSJndpZGldE5hbWU9c3BfZGV0YWVsJmFjdGlvb1j1bGlia1JlZGl5ZWNOJmRvTm90TG9nQ2xpY2s9dHJ1ZQ==

MB102 Breadboard Power Supply Module 3.3V 5V for Bread Board of final design

https://www.ebay.com/itm/253375716714?chn=ps&norover=1&mkevt=1&mkrid=711-117182-37290-0&mkcid=2&itemid=253375716714&targetid=1068227928889&device=c&mktype=pla&googleloc=9030138&poi=&campaignid=11613469575&mkgrouppid=111802294743&rlsarget=pla-1068227928889&abclId=9300455&merchantid=118852035&gclid=CjwKCAjwx6WDBhBQEiwA_dP8rThhmooQTaVqG35SoCyOvSiDtuAW5rXfDYpIrt4r0SbPacaBnPW7IBoCT4QQAvD_BwE

9-T1 Red Led's for Switch Board – Using SiemensLD350-5

9-Resistor 0805 for current limiting on LED 680 Ohms for 4.8ma @5v or 560 Ohms for 6ma

1-Resistor 150 Ohms 0805 or through hole 1/8 W to 1/4W for display

10- 10K 0805 for PB's

10-1000pf 0805 caps for PB

x- 0.1uF 0805 bypass caps

Mono &/or Stereo jacks for audio

Stripboard Vero 5x7cm

<https://www.ebay.com/itm/5pcs-Stripboard-Vero-5x7cm-5er-joint-hole-Prototype-Fiberglass-circuit-board-pcb/284236079052?hash=item422dca5fcc:g:Gb0AAOSwo9Fa8Ahk>