

## P3ST Transceiver Kit / Master Parts List

1.16.2025

0.01μF, ceramic, 0.20" LS       1       Mouser 80-C322C103K5R-TR       \$0.1         0.01μF, ceramic, 0.10" LS       1       Digikey 399-13905-1-ND       \$0.1         0.047μF, ceramic, 0.2"       1       Digikey BC1082CT-ND       \$0.1         0.047μF, ceramic 0.10" LS       1       Digikey BC1082CT-ND       \$0.1         0.1μF, ceramic, 0.20" LS       9       Mouser 80-C318C104K5R5TATU       \$0.1	0 \$0.14 6 \$0.18 6 \$0.18 4 \$1.39
0.047μF, ceramic, 0.2"       1 Digikey BC1082CT-ND       \$0.1         0.047μF, ceramic 0.10" LS       1 Digikey BC1082CT-ND       \$0.1	6 \$0.18 6 \$0.18 4 \$1.39
0.047μF, ceramic 0.10" LS 1 Digikey BC1082CT-ND \$0.1	6 \$0.18 4 \$1.39
	4 \$1.39
0.1μF, ceramic, 0.20" LS 9 Mouser 80-C318C104K5R5TATU \$0.1	
	3 \$0.82
0.1µF, ceramic 0.10" LS	-   +5.52
0.22μF, ceramic 1 Digikey 445-181223-ND \$0.1	0 \$0.18
1.5pF, hand-made "gimmick" 1 (salvage 20-24AWG solid wire) \$0.0	0 \$0.00
100μF, electrolytic, radial, pins 0.1" 2 Digikey 732-8825-1-ND \$0.1	0 \$0.22
10μF, electrolytic, radial, pins 0.1" 2 Digikey 4191-EM1H100MP26307F2P9UCT-ND \$0.1	0 \$0.38
10μF, SMD 2 Digikey 478-CM105X5R106K16ATCT-ND \$0.1	7 \$0.29
14.8pF, trim capacitor 2 Digikey 2447-GKG30015-ND \$0.6	0 \$1.38
220pF, NP0/C0G ceramic 0.20" LS 2 Digikey 399-13974-2-ND \$0.1	0 \$0.28
220pF, NP0/C0G 0.10" LS	0 \$0.16
220uF, SMD 2 Digikey 399-6680-1-ND \$0.5	0 \$1.06
220μF, electrolytic, radial, pins 0.1" 3 Digikey 732-8634-1-ND \$0.1	0 \$0.45
22μF, electrolytic, radial, pins 0.1" 2 Digikey 732-8767-1-ND \$0.1	0 \$0.22
330pF, NP0/C0G ceramic 0.20" LS 2 Digikey 399-4231-ND \$0.1	0 \$0.28
39pF, trim capacitor 2 Digikey 2447-GKG60015-ND \$0.6	0 \$1.38
470μF, electrolytic, radial, pins 0.1" 2 Digikey 732-8708-1-ND \$0.1	0 \$0.26
47pF, NP0/C0G ceramic 0.20" LS	0 \$0.21
47pF, NP0/C0G ceramic 0.10" LS 7 Digikey BC1009CT-ND \$0.0	0 \$0.42

Crystals	Qty	Source & Part Number	Ea	Ext
Crystal, HC49u, 4.915MHz	10	Digikey X1014-ND	\$0.463	\$4.63

Diodes	Qty	Source & Part Number	Ea	Ext
PMEG2010ER SMD	1	Digikey 1727-5192-1-ND	\$0.183	\$0.18
1N4148 DO-35	4	Digikey 1N4148FS-ND	\$0.020	\$0.08
Hardware	Qty	Source & Part Number	Ea	Ext
Screw/Nut, 4-40	1	Ace Hardware	\$0.050	\$0.05
TO-220 Black / Wakefield-Vette	1	Digikey 345-1020-ND	\$0.440	\$0.44
TO-39 Black Crown / Boyd Laconia	1	Digikey 325705B00000G-ND	\$2.060	\$2.06
Headers	Qty	Source & Part Number	Ea	Ext
Pin header, 1x2, straight	2	Amazon / HiLetgo (from 40-pin, 0.10")	\$0.030	\$0.06
Pin header, 1x3	3	Amazon / HiLetgo (from 40-pin, 0.10")	\$0.050	\$0.15
Pin header, 1x4, right-angle	22	Amazon / Ruiwaer (from 40-pin, 0.10")	\$0.090	\$1.98
Female socket header 1x4	22	Digikey S7002-ND	\$0.232	\$5.10
Jumper block, 2pin, 0.10" LS	3	Amazon / California JOS	\$0.050	\$0.15
Inductors	Otv	Source & Part Number	<b>-</b> -	
	Qty	Source & Part Number	Ea	Ext
22µH, molded, axial	5	Digikey 118-77F220K-TR-RCCT-ND	\$0.170	<b>Ext</b> \$0.85
	<del>, , ,</del>			1
22μH, molded, axial	5	Digikey 118-77F220K-TR-RCCT-ND	\$0.170	\$0.85
22μH, molded, axial 22μH, molded, radial	5 1 1	Digikey 118-77F220K-TR-RCCT-ND Digikey 495-6964-1-ND	\$0.170 \$0.244	\$0.85 \$0.24
22μH, molded, axial 22μH, molded, radial 680μH SMD	5 1 1	Digikey 118-77F220K-TR-RCCT-ND  Digikey 495-6964-1-ND  Digikey 445-180928-1-ND	\$0.170 \$0.244 \$0.198	\$0.85 \$0.24 \$0.20
22μH, molded, axial 22μH, molded, radial 680μH SMD Integrated	5 1 1 Qty	Digikey 118-77F220K-TR-RCCT-ND  Digikey 495-6964-1-ND  Digikey 445-180928-1-ND  Source & Part Number	\$0.170 \$0.244 \$0.198	\$0.85 \$0.24 \$0.20
22μH, molded, axial 22μH, molded, radial 680μH SMD Integrated LM380N, 14-pin	5 1 1 2 Qty 1	Digikey 118-77F220K-TR-RCCT-ND  Digikey 495-6964-1-ND  Digikey 445-180928-1-ND  Source & Part Number  Digikey 296-LM380N/NOPB-ND	\$0.170 \$0.244 \$0.198 <b>Ea</b> \$1.090	\$0.85 \$0.24 \$0.20 <b>Ext</b> \$1.09
22μH, molded, axial 22μH, molded, radial 680μH SMD  Integrated LM380N, 14-pin ADE-1	5 1 1 2 Qty 1 2	Digikey 118-77F220K-TR-RCCT-ND  Digikey 495-6964-1-ND  Digikey 445-180928-1-ND  Source & Part Number  Digikey 296-LM380N/NOPB-ND  Digikey 3157-ADE-1+CT-ND	\$0.170 \$0.244 \$0.198 <b>Ea</b> \$1.090 \$4.930	\$0.85 \$0.24 \$0.20 <b>Ext</b> \$1.09 \$9.86
22μH, molded, axial 22μH, molded, radial 680μH SMD  Integrated LM380N, 14-pin ADE-1 LM317L, 3.3V regulator TO-92	5 1 1 Qty 1 2 1 1	Digikey 118-77F220K-TR-RCCT-ND  Digikey 495-6964-1-ND  Digikey 445-180928-1-ND  Source & Part Number  Digikey 296-LM380N/NOPB-ND  Digikey 3157-ADE-1+CT-ND  Digikey LM317LZRAGOSCT-ND	\$0.170 \$0.244 \$0.198 <b>Ea</b> \$1.090 \$4.930 \$0.490	\$0.85 \$0.24 \$0.20 <b>Ext</b> \$1.09 \$9.86 \$0.49
22μH, molded, axial 22μH, molded, radial 680μH SMD  Integrated  LM380N, 14-pin  ADE-1  LM317L, 3.3V regulator TO-92  TLV1117LV-3.3 Regulator, SMD	5 1 1 Qty 1 2 1 1	Digikey 118-77F220K-TR-RCCT-ND  Digikey 495-6964-1-ND  Digikey 445-180928-1-ND  Source & Part Number  Digikey 296-LM380N/NOPB-ND  Digikey 3157-ADE-1+CT-ND  Digikey LM317LZRAGOSCT-ND  Digikey 296-21112-1-ND	\$0.170 \$0.244 \$0.198 <b>Ea</b> \$1.090 \$4.930 \$0.490 \$0.278	\$0.85 \$0.24 \$0.20 <b>Ext</b> \$1.09 \$9.86 \$0.49 \$0.28
22μH, molded, axial 22μH, molded, radial 680μH SMD  Integrated  LM380N, 14-pin  ADE-1  LM317L, 3.3V regulator TO-92  TLV1117LV-3.3 Regulator, SMD  Modules	5 1 1 Qty 1 2 1 1 Qty 2 ty	Digikey 118-77F220K-TR-RCCT-ND Digikey 495-6964-1-ND Digikey 445-180928-1-ND  Source & Part Number Digikey 296-LM380N/NOPB-ND Digikey 3157-ADE-1+CT-ND Digikey LM317LZRAGOSCT-ND Digikey 296-21112-1-ND  Source & Part Number	\$0.170 \$0.244 \$0.198 <b>Ea</b> \$1.090 \$4.930 \$0.490 \$0.278	\$0.85 \$0.24 \$0.20 <b>Ext</b> \$1.09 \$9.86 \$0.49 \$0.28
22μH, molded, axial 22μH, molded, radial 680μH SMD  Integrated  LM380N, 14-pin  ADE-1  LM317L, 3.3V regulator TO-92  TLV1117LV-3.3 Regulator, SMD  Modules  LCD Display, 16x2, 5V, I2C	5 1 1 Qty 1 2 1 1 Qty 1 1	Digikey 118-77F220K-TR-RCCT-ND Digikey 495-6964-1-ND Digikey 445-180928-1-ND  Source & Part Number  Digikey 296-LM380N/NOPB-ND Digikey 3157-ADE-1+CT-ND Digikey LM317LZRAGOSCT-ND Digikey 296-21112-1-ND  Source & Part Number  Amazon / Teyleten	\$0.170 \$0.244 \$0.198 <b>Ea</b> \$1.090 \$4.930 \$0.490 \$0.278 <b>Ea</b> \$2.780	\$0.85 \$0.24 \$0.20 <b>Ext</b> \$1.09 \$9.86 \$0.49 \$0.28 <b>Ext</b> \$2.78

Potentiometers	Qty	Source & Part Number	Ea	Ext
10K trim pot	1	Digikey 3362P-103LF-ND	\$0.910	\$0.91
10K Audio Taper	2	Mouser 652-PDB181E420K103A2	\$0.970	\$1.94

Relays	Qty	Source & Part Number	Ea	Ext
DPDT, 12V	3	Digikey TX2-12V	\$1.710	\$5.13
SPDT, 12V	1	Digikey J102K1CS312VDC.20	\$0.935	\$0.94

Resistors	Qty	Source & Part Number	Ea	Ext
100K 1/4W carbon film	1	Digikey 13-CFR-25JT-52-100KCT-ND	\$0.020	\$0.02
100 1/4W carbon film	1	Digikey 13-CFR-25JT-52-100RCT-ND	\$0.020	\$0.02
47K 1/4W carbon film	1	Digikey 13-CFR-25JT-52-47KCT-ND	\$0.020	\$0.02
3K 1/4W carbon film	2	Mouser 603-CFR-25JB-52-3K	\$0.010	\$0.02
2.7K 1/4W carbon film	2	Digikey 13-CFR-25JT-52-2K7CT-ND	\$0.020	\$0.04
51 1/4W carbon film	1	Digikey 13-CFR-25JR-52-51RCT-ND	\$0.020	\$0.02
51 1/4W carbon film	1	Digikey 13-CFR-25JR-52-51RCT-ND	\$0.020	\$0.02
47K 1/4W carbon film	1	Digikey 13-CFR-25JT-52-47KCT-ND	\$0.020	\$0.02
100K 1/4W carbon film	1	Digikey 13-CFR-25JT-52-100KCT-ND	\$0.020	\$0.02
680 1/4W carbon film	1	Digikey 13-CFR-25JT-52-680RCT-ND	\$0.020	\$0.02
680 1/4W carbon film	1	Digikey 13-CFR-25JT-52-680RCT-ND	\$0.020	\$0.02
680 1/4W carbon film	2	Digikey 13-CFR-25JT-52-680RCT-ND	\$0.020	\$0.04
100 1/4W carbon film	1	Digikey 13-CFR-25JT-52-100RCT-ND	\$0.020	\$0.02
100 1/4W carbon film	1	Digikey 13-CFR-25JT-52-100RCT-ND	\$0.020	\$0.02
3K 1/4W carbon film	2	Mouser 603-CFR-25JB-52-3K	\$0.010	\$0.02
2.2K 1/4W carbon film	1	Digikey 13-CFR25SJT-52-2K2CT-ND	\$0.020	\$0.02
1K 1/4W carbon film	1	Digikey 13-CFR-25JT-52-100RCT-ND	\$0.020	\$0.02
10 1/4W carbon film	1	Digikey 13-CFR-25JR-52-10RCT-ND	\$0.010	\$0.01
1K 1/4W carbon film	2	Digikey 13-CFR-25JT-52-1KCT-ND	\$0.020	\$0.04
10 1/4W carbon film	2	Digikey 13-CFR-25JR-52-10RCT-ND	\$0.010	\$0.02
1K 1/4W carbon film	1	Digikey 13-CFR-25JT-52-100RCT-ND	\$0.020	\$0.02
2.2K 1/4W carbon film	1	Digikey 13-CFR25SJT-52-2K2CT-ND	\$0.020	\$0.02

10 1/4W carbon film	2	Digikey 13-CFR-25JR-52-10RCT-ND	\$0.010	\$0.02
2.2 1/4W carbon film	1	Digikey 2.2QBK-ND	\$0.010	\$0.01
4.7K 1/4W carbon film	2	Digikey 13-CFR-25JT-52-4K7CT-ND	\$0.020	\$0.04
330 1/4W carbon film	1	Digikey 13-CFR-25JT-52-330RCT-ND	\$0.020	\$0.02
270 1/4W carbon film	1	Digikey 13-CFR-25JR-52-270RCT-ND	\$0.020	\$0.02
1K 1/4W carbon film	1	Digikey 13-CFR-25JT-52-100RCT-ND	\$0.020	\$0.02

Toroids	Qty	Source & Part Number	Ea	Ext
T50-7 toroid core	7	kitsandparts.com	\$0.210	\$1.47
FT50-43 Toroid Core	1	kitsandparts.com	\$0.400	\$0.40

Transistors	Qty	Source & Part Number	Ea	Ext
2N2222A (TO-18)	5	EBay / LF Components	\$0.800	\$4.00
2N2219A (TO-39/TO-5)	1	Jameco 38228	\$1.420	\$1.42
IRF510 MOSFET TO-223	1	Digikey IRF510PBF-ND	\$0.780	\$0.78
IRF9Z24NPBF P-Channel MOSFET	1	Digikey IRF9Z24NPBF-ND \$0.75	\$0.750	\$0.75

Wire & Cable	Qty	Source & Part Number	Ea	Ext
3-Conductor Cable, R-G-W, 22AWG	2ft	Amazon / AOTOINK	\$0.160	\$0.32
Coax, RG174	6ft	Amazon / MOOKEERF	\$0.260	\$1.66
Magnet Wire, 26AWG	102"	Amazon / BINNEKER		\$0.10
Magnet Wire, 27AWG, Red, Green	1	Amazon /	\$0.100	\$0.10