



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
6	1	2.3E Top	0.860 0.940	BATTERY BATT_ML1220	BT2	ML-1220	ML-1220/F1AN									
7	1	3.9D Top	3.440 0.580	SPEAKER 8 Ohm SM231508	BZ1	SM231508-1	SM231508-1									
8	1	1.5C Top	1.230 2.030	CAP CER X7R 50V SM0603	C110	.01UF	CL10B103KB8NNNC									
8	1	1.5A Bot	0.875 2.085	CAP CER X7R 50V SM0603	C112	.01UF	CL10B103KB8NNNC									
8	1	1.6E Bot	3.430 0.175	CAP CER X7R 50V SM0603	C114	.01UF	CL10B103KB8NNNC									
8	1	1.6B Bot	2.155 2.590	CAP CER X7R 50V SM0603	C116	.01UF	CL10B103KB8NNNC									
8	1	1.6D Bot	3.275 2.725	CAP CER X7R 50V SM0603	C117	.01UF	CL10B103KB8NNNC									
8	1	1.6B Bot	2.770 2.140	CAP CER X7R 50V SM0603	C118	.01UF	CL10B103KB8NNNC									
8	1	1.6B Bot	2.440 2.590	CAP CER X7R 50V SM0603	C119	.01UF	CL10B103KB8NNNC									
8	1	1.7B Bot	2.765 2.405	CAP CER X7R 50V SM0603	C120	.01UF	CL10B103KB8NNNC									
8	1	1.7E Bot	3.795 0.175	CAP CER X7R 50V SM0603	C121	.01UF	CL10B103KB8NNNC									
8	1	1.7B Bot	2.375 1.975	CAP CER X7R 50V SM0603	C122	.01UF	CL10B103KB8NNNC									
8	1	1.7B Bot	2.080 1.980	CAP CER X7R 50V SM0603	C123	.01UF	CL10B103KB8NNNC									
8	1	1.7E Bot	3.945 0.155	CAP CER X7R 50V SM0603	C124	.01UF	CL10B103KB8NNNC									
8	1	1.8D Top	3.375 2.640	CAP CER X7R 50V SM0603	C129	.01UF	CL10B103KB8NNNC									
8	1	1.9E Top	4.085 0.740	CAP CER X7R 50V SM0603	C131	.01UF	CL10B103KB8NNNC									
8	1	2.2F Bot	3.730 1.915	CAP CER X7R 50V SM0603	C201	.01UF	CL10B103KB8NNNC									
8	1	2.4F Bot	3.885 1.295	CAP CER X7R 50V SM0603	C207	.01UF	CL10B103KB8NNNC									



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
8	2	2.4F Bot	3.715 1.405	CAP CER X7R 50V SM0603	C208	.01UF	CL10B103KB8NNNC									
8	2	2.4E Bot	1.520 1.440	CAP CER X7R 50V SM0603	C210	.01UF	CL10B103KB8NNNC									
8	2	2.6E Bot	4.590 0.595	CAP CER X7R 50V SM0603	C216	.01UF	CL10B103KB8NNNC									
8	2	2.6E Bot	4.465 0.375	CAP CER X7R 50V SM0603	C218	.01UF	CL10B103KB8NNNC									
8	2	2.7E Bot	4.260 0.660	CAP CER X7R 50V SM0603	C219	.01UF	CL10B103KB8NNNC									
8	2	2.8D Bot	3.990 0.530	CAP CER X7R 50V SM0603	C220	.01UF	CL10B103KB8NNNC									
8	2	2.8D Bot	3.745 2.230	CAP CER X7R 50V SM0603	C222	.01UF	CL10B103KB8NNNC									
8	2	2.8E Bot	4.585 1.205	CAP CER X7R 50V SM0603	C223	.01UF	CL10B103KB8NNNC									
8	2	2.9E Bot	4.585 1.620	CAP CER X7R 50V SM0603	C226	.01UF	CL10B103KB8NNNC									
8	2	3.2C Bot	1.715 0.335	CAP CER X7R 50V SM0603	C301	.01UF	CL10B103KB8NNNC									
8	2	3.3E Bot	1.405 0.620	CAP CER X7R 50V SM0603	C305	.01UF	CL10B103KB8NNNC									
8	2	3.4B Top	1.845 0.850	CAP CER X7R 50V SM0603	C306	.01UF	CL10B103KB8NNNC									
8	2	3.4C Bot	2.165 0.735	CAP CER X7R 50V SM0603	C307	.01UF	CL10B103KB8NNNC									
8	2	3.7B Bot	1.955 1.310	CAP CER X7R 50V SM0603	C311	.01UF	CL10B103KB8NNNC									
8	2	4.7B Bot	1.425 1.000	CAP CER X7R 50V SM0603	C406	.01UF	CL10B103KB8NNNC									
8	2	5.4C Bot	3.125 2.220	CAP CER X7R 50V SM0603	C501	.01UF	CL10B103KB8NNNC									
9	2	1.1C Bot	0.990 2.620	CAP CER X7R 50V SM0805	C101	.1UF	CL21B104KBFNNG									
9	2	1.3E Bot	0.145 1.950	CAP CER X7R 50V SM0805	C105	.1UF	CL21B104KBFNNG									



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
9	3	1.4E Bot	0.145 2.150	CAP CER X7R 50V SM0805	C106	.1UF	CL21B104KBFNNNG									
9	3	1.5E Bot	3.175 0.180	CAP CER X7R 50V SM0805	C113	.1UF	CL21B104KBFNNNG									
9	3	1.6D Bot	3.095 2.705	CAP CER X7R 50V SM0805	C115	.1UF	CL21B104KBFNNNG									
9	3	1.8E Top	3.860 0.150	CAP CER X7R 50V SM0805	C126	.1UF	CL21B104KBFNNNG									
9	3	1.8D Top	3.705 2.690	CAP CER X7R 50V SM0805	C127	.1UF	CL21B104KBFNNNG									
9	3	2.3F Bot	3.710 1.665	CAP CER X7R 50V SM0805	C202	.1UF	CL21B104KBFNNNG									
9	3	2.5E Top	4.530 0.450	CAP CER X7R 50V SM0805	C214	.1UF	CL21B104KBFNNNG									
9	3	4.3D Bot	0.980 1.005	CAP CER X7R 50V SM0805	C401	.1UF	CL21B104KBFNNNG									
9	3	4.5D Bot	0.600 0.810	CAP CER X7R 50V SM0805	C404	.1UF	CL21B104KBFNNNG									
9	3	4.6D Bot	0.225 0.350	CAP CER X7R 50V SM0805	C405	.1UF	CL21B104KBFNNNG									
9	3	4.7D Bot	0.620 0.535	CAP CER X7R 50V SM0805	C407	.1UF	CL21B104KBFNNNG									
9	3	4.7D Top	0.445 0.650	CAP CER X7R 50V SM0805	C408	.1UF	CL21B104KBFNNNG									
10	3	3.2B Bot	3.110 0.660	CAP X7R/BX SM0805	C302	.47UF	CL21B474KBFNNNG									
10	3	3.5D Bot	2.360 0.790	CAP X7R/BX SM0805	C308	.47UF	CL21B474KBFNNNG									
11	3	2.3F Bot	3.715 1.510	CAP NPO/BP SM0603	C203	1000PF	GRM1885C1H102JA01J									
11	3	4.3D Bot	0.585 1.080	CAP NPO/BP SM0603	C402	1000PF	GRM1885C1H102JA01J									
12	3	5.4B Bot	2.865 0.150	CAP NPO/BP SM0603	C502	100PF	C0603C101M5GACTU									
13	3	1.1A Bot	1.820 2.445	CAP NPO/BP SM0603	C102	10PF	C0603C100K5GACTU									



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
13	4	1.1B Bot	1.865 2.655	CAP NPO/BP SM0603	C103	10PF	C0603C100K5GACTU									
14	4	1.5E Top	4.745 2.360	CAP TANTALUM SMP_M3528	C11	10UF/25V	10UF/15V									
14	4	1.7D Top	3.120 2.670	CAP TANTALUM SMP_M3528	C125	10UF/25V	10UF/15V									
14	4	1.8E Top	4.070 0.450	CAP TANTALUM SMP_M3528	C128	10UF/25V	10UF/15V									
14	4	1.8E Top	4.260 0.710	CAP TANTALUM SMP_M3528	C130	10UF/25V	10UF/15V									
14	4	1.3E Top	0.575 1.950	CAP TANTALUM SMP_M3528	C14	10UF/25V	10UF/15V									
14	4	1.4C Top	1.125 1.875	CAP TANTALUM SMP_M3528	C17	10UF/25V	10UF/15V									
14	4	1.4E Top	0.575 2.150	CAP TANTALUM SMP_M3528	C18	10UF/25V	10UF/15V									
15	4	2.6E Bot	4.610 0.435	CAP X7R/BX SM0805	C217	1UF	C0805C105J3RACTU									
15	4	2.8E Bot	4.255 0.775	CAP X7R/BX SM0805	C221	1UF	C0805C105J3RACTU									
15	4	3.7B Bot	2.080 1.515	CAP X7R/BX SM0805	C312	1UF	C0805C105J3RACTU									
16	4	3.5D Top	1.980 0.915	CAP X7R/BX SM0805	C309	2.2UF	UMK212BB7225KG-T									
17	4	1.5B Bot	0.720 2.470	CAP NPO/BP SM0603	C109	33PF	C0603C330J50GACTU									
18	4	3.6C Top	2.125 1.350	CAP NPO/BP SM0603	C310	4.7PF	C0603C479D5GACTU									
19	4	4.4D Bot	0.420 0.855	CAP X7R/BX SM0805	C403	4.7UF	C2012X7R1E475M125A									
20	4	2.6B Top	4.240 1.435	CAP NPO/BP SM0603	C215	470PF	C0603C471J5GACTU									
20	4	2.9B Top	4.380 0.995	CAP NPO/BP SM0603	C224	470PF	C0603C471J5GACTU									
20	4	2.9C Top	4.495 1.745	CAP NPO/BP SM0603	C225	470PF	C0603C471J5GACTU									



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
21	5	3.3C Top	2.380 0.735	CAP NPO/BP SM0603	C303	47PF	C0603C470J5GACAU0									
21	5	3.3A Bot	1.905 0.845	CAP NPO/BP SM0603	C304	47PF	C0603C470J5GACAU0									
22	5	2.4D Bot	1.230 1.550	CAP NPO/BP SM0603	C204	5.6PF	C0603C569C5GACTU									
22	5	2.4E Bot	1.265 1.345	CAP NPO/BP SM0603	C205	5.6PF	C0603C569C5GACTU									
23	5	2.4A Top	4.465 2.430	CAP NPO/BP SM0603	C206	68PF	C0603C680J50GACTU									
23	5	2.5A Top	4.160 1.575	CAP NPO/BP SM0603	C213	68PF	C0603C680J50GACTU									
24	5	2.5A Top	4.500 2.260	CAP NPO/BP SM0603	C211	91PF	C0603C910J5GACTU									
24	5	2.5A Top	4.090 2.060	CAP NPO/BP SM0603	C212	91PF	C0603C910J5GACTU									
25	5	2.4C Bot	3.790 1.145	N/A Not Applicable SM0603	C209	N/A 100PF	Do NOT Install									
26	5	4.7D Top	0.470 0.500	SCHOTTKY DIODE SOD123FL	D43	1N5819HW	1N5819HW									
27	5	4.6D Top	1.250 0.700	LCD DISPLAY AMC0802B	DSP4	AMC0802	AMC0802BR-B-B6WTDW-SPI									
28	5	2.8B Top	4.395 1.380	DIODE PIN SOT23-3	DV21	BAR64-05	BAR6405E6327HTSA1									
29	5	4.3D Bot	0.775 1.115	SCHOTTKY DIODE 1V SOD123	D41	BAT42W-7-F	BAT42W-7-F									
29	5	4.3D Bot	0.775 0.960	SCHOTTKY DIODE 1V SOD123	D42	BAT42W-7-F	BAT42W-7-F									
30	5	1.5C Top	0.795 1.945	DIODE SOT23-3	D13	BAV99	BAV99-7-F									
31	5	1.7D Bot	3.970 2.740	ZENER DIODE 4.3V SOD123FL	DZ101	BZT52HC4V3	BZT52HC4V3WF-7									
32	5	1.3E Bot	0.535 2.040	N/A Not Applicable DO214AC	D102	N/A VS-3EMU06	Do NOT Install									
33	5	1.6D Bot	3.565 2.685	DIODE 1A DO214AC	D14	US1J	US1J-13-F									



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
34	6	1.2E Bot	0.640 1.480	DIODE 3A DO214AC	D101	VS-3EMU06	VS-3EMU06-M3/5AT									
36	6	1.1D Top	0.875 1.555	CONN-LTCH-MOLEX-R/A 3 HDR_50-57-9403N	J101	0705530002	0705530002									
37	6	2.9C Top	4.450 2.008	CONN BNC R/A MOLEX_0731713150	J2L	0731713150	0731713150									
37	6	2.9B Top	4.450 0.827	CONN BNC R/A MOLEX_0731713150	J2R	0731713150	0731713150									
38	6	1.2C Top	1.155 2.465	CONNECTOR HDR_2X3	J1	75869-131LF	75869-131LF									
39	6	3.8C Top	1.875 0.000	CONN JACK STEREO SJ-352X	J3	SJ-3524	SJ-3524-SMT-TR									
39	6	5.6B Top	1.025 0.000	CONN JACK STEREO SJ-352X	J5	SJ-3524	SJ-3524-SMT-TR									
41	6	2.6C Top	4.715 1.345	INDUCTOR AIAC-1812	L25	100nH	AIAC-1812-R10									
41	6	2.8B Top	4.495 1.220	INDUCTOR AIAC-1812	L26	100nH	AIAC-1812-R10									
41	6	2.8C Top	4.535 1.570	INDUCTOR AIAC-1812	L27	100nH	AIAC-1812-R10									
42	6	2.3F Bot	3.875 1.555	INDUCTOR SM0805	L21	1uH	36502A1R0JTDG									
43	6	2.4A Top	4.280 2.325	INDUCTOR AIAC-1812	L22	39nH	AIAC-1812-39N									
43	6	2.5A Top	4.265 2.050	INDUCTOR AIAC-1812	L23	39nH	AIAC-1812-39N									
43	6	2.5A Top	4.235 1.785	INDUCTOR AIAC-1812	L24	39nH	AIAC-1812-39N									
44	6	4.7D Top	0.415 0.340	INDUCTOR SM1210	L401	CBC3225T102KR	CBC3225T102KR									
49	6	4.7E Top	0.475 0.135	MOSFET N-CHANNEL 1.8A/30V SOT23-3	Q41	ZXMN3A01	ZXMN3A01FTA									
50	6	1.3C Top	1.370 2.370	RES Jumper SM0603-3	R104	0	M55342									
51	6	2.2F Bot	3.875 2.015	RES THK-FLM SM0805	R205	1.54K	M55342K06B1E54TW									



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
51	7	2.3F Bot	3.875 1.805	RES THK-FLM SM0805	R208	1.54K	M55342K06B1E54TW									
52	7	1.6E Bot	3.310 0.180	RES THK-FLM SM0805	R109	10.0K	M55342K06B10E0TW									
53	7	3.3D Top	2.300 1.045	RES THK-FLM SM0805	R304	100K	M55342K06B100ETW									
53	7	3.6C Top	2.330 1.455	RES THK-FLM SM0805	R313	100K	M55342K06B100ETW									
53	7	4.8E Top	0.635 0.150	RES THK-FLM SM0805	R405	100K	M55342K06B100ETW									
54	7	1.4B Bot	1.125 2.175	RES THK-FLM SM0603	R105	100K	M55342K12B100ETW									
54	7	1.4B Top	1.090 2.065	RES THK-FLM SM0603	R106	100K	M55342K12B100ETW									
55	7	1.2C Bot	1.190 2.690	RES THK-FLM SM0805	R101	10K	M55342K06B10E0TW									
55	7	1.2C Bot	1.320 2.320	RES THK-FLM SM0805	R102	10K	M55342K06B10E0TW									
55	7	1.3C Bot	0.990 2.400	RES THK-FLM SM0805	R103	10K	M55342K06B10E0TW									
55	7	1.5A Bot	0.875 2.200	RES THK-FLM SM0805	R107	10K	M55342K06B10E0TW									
55	7	1.5B Top	0.930 1.930	RES THK-FLM SM0805	R18	10K	M55342K06B10E0TW									
55	7	2.2E Bot	1.645 1.355	RES THK-FLM SM0805	R201	10K	M55342K06B10E0TW									
55	7	2.2E Bot	1.720 1.530	RES THK-FLM SM0805	R202	10K	M55342K06B10E0TW									
55	7	3.3C Top	2.265 0.740	RES THK-FLM SM0805	R306	10K	M55342K06B10E0TW									
55	7	3.3B Bot	2.020 0.865	RES THK-FLM SM0805	R307	10K	M55342K06B10E0TW									
55	7	5.4A Top	2.860 0.275	RES THK-FLM SM0805	R501	10K	M55342K06B10E0TW									
56	7	2.2D Top	3.890 0.950	RES THK-FLM SMR0805-41	R206	10	M55342K06B10D0TW									



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
56	8	2.2D Top	3.990 0.950	RES THK-FLM SMR0805-41	R207	10	M55342K06B10D0TW									
57	8	4.4D Top	0.450 0.855	RES THK-FLM SM0805	R403	12.1K	M55342K06B12E1TW									
58	8	3.2B Bot	1.560 0.730	RES THK-FLM SM0805	R301	150K	M55342K06B150ETW									
58	8	3.2C Bot	1.620 0.485	RES THK-FLM SM0805	R302	150K	M55342K06B150ETW									
59	8	2.2C Bot	3.570 2.220	RES THK-FLM SM0805	R203	15K	M55342K06B15E0TW									
60	8	2.4B Top	3.125 1.110	RES THK-FLM SM0805	R209	1K	CRCW08051K00FKEA									
60	8	3.4C Top	2.305 0.915	RES THK-FLM SM0805	R308	1K	CRCW08051K00FKEA									
60	8	3.4C Bot	2.315 0.550	RES THK-FLM SM0805	R309	1K	CRCW08051K00FKEA									
60	8	3.4D Bot	2.590 0.640	RES THK-FLM SM0805	R310	1K	CRCW08051K00FKEA									
60	8	4.8E Top	0.635 0.355	RES THK-FLM SM0805	R406	1K	CRCW08051K00FKEA									
60	8	5.4A Top	2.860 0.145	RES THK-FLM SM0805	R502	1K	CRCW08051K00FKEA									
60	8	5.7C Bot	2.750 1.225	RES THK-FLM SM0805	R503	1K	CRCW08051K00FKEA									
60	8	5.8C Bot	2.890 1.525	RES THK-FLM SM0805	R504	1K	CRCW08051K00FKEA									
60	8	5.8C Bot	2.610 1.525	RES THK-FLM SM0805	R505	1K	CRCW08051K00FKEA									
61	8	4.4D Top	0.450 1.115	RES THK-FLM SM0805	R402	22.1K	M55342K06B22E1TW									
62	8	2.6C Bot	4.775 1.455	RES THK-FLM SM0805	R210	220	M55342K06B221DTW									
62	8	2.8B Bot	4.500 1.345	RES THK-FLM SM0805	R211	220	M55342K06B221DTW									
62	8	2.8C Bot	4.465 1.760	RES THK-FLM SM0805	R212	220	M55342K06B221DTW									



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
63	9	4.4D Top	0.450 0.985	RES THK-FLM SM0805	R401	3.65K	M55342K06B3E65TW									
64	9	2.2B Bot	3.340 1.570	RES THK-FLM SM0805	R204	4.7K	M55342K06B4E75TW									
64	9	3.2B Bot	2.940 0.750	RES THK-FLM SM0805	R303	4.7K	M55342K06B4E75TW									
64	9	3.3C Top	2.265 0.450	RES THK-FLM SM0805	R305	4.7K	M55342K06B4E75TW									
65	9	3.5D Bot	2.315 0.960	RES THK-FLM SM0805	R312	47K	M55342K06B47E5TW									
66	9	3.4D Top	2.750 0.650	POT 5K OHM PTV09-A4	R311	5K	PTV09A-4230U-B502									
67	9	4.7D Bot	0.460 0.560	RESISTOR SM1210	R404	68	RMCF1210JT68R0									
68	9	2.3B Top	3.600 1.830	RF MODULE SA818	RF21	DRA818	DRA818									
69	9	1.2D Top	0.250 2.470	PCB SWITCH SPDT R/A ON-OFF SW_200_M6	SW101	200MSP2T3B2M6QE	200MSP2T3B2M6QE									
70	9	1.5B Top	0.710 2.520	PUSH BUTTON BLK SW CIT_NCA	SW1	NCA2	NCA2									
71	9	5.9D Top	2.750 1.350	ENCODER W/SW SW_PEC12R2	SW5	PEC12R20	PEC12R-2120F-S0012									
73	9	5.3B Top	2.950 1.860	LOGIC GATE INVERT OD SOT23-5	U52	74LVC1G06	SN74LVC1G06DBVR									
74	9	3.4D Top	1.420 0.600	LOGIC GATE AND SOT23-5	U31	74LVC1G08	SN74LVC1G08DBVR									
75	9	1.4B Top	0.870 2.125	LOGIC GATE AND SOT23-6	U12	74LVC1G11	SN74LVC1G11DBVR									
76	9	5.4B Top	3.050 2.090	LOGIC GATE INVERT ST SOT23-5	U51	74LVC1G14	SN74LVC1G14DBVR									
78	9	2.3E Top	1.560 1.410	TOY CLOCK BINARY SO8	U22	DS1672	DS1672S-3+									
79	9	3.6D Top	1.955 1.185	AUDIO AMPLIFIER SO8	U34	LM4871	LM4871MX/NOPB									
80	9	2.7C Bot	4.395 1.620	DRIVER RS232 SOT23-6	U24	MAX3188	MAX3188EEUT+T									



MATERIAL BUILD RECORD

Department of
Physics & Astronomy

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185

Next Assembly: 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
80	10	2.7B Bot	4.395 1.205	DRIVER RS232 SOT23-6	U25	MAX3188	MAX3188EEUT+T									
81	10	2.7E Bot	4.355 0.540	REG CHR9 PUMP SOT23-5	U23	MAX870	MAX870EUK+T									
82	10	4.6C Top	1.355 0.935	SERIAL NVRAM/FRAM SO8	U41	MB85RS4MTPF	MB85RS4MTPF-G-JNERE2									
83	10	3.3B Bot	1.765 0.875	OPAMP GP SOT23-6	U32	MCP6273	MCP6273T-E/CH									
83	10	3.3D Top	2.115 0.755	OPAMP GP SOT23-6	U33	MCP6273	MCP6273T-E/CH									
84	10	1.2B Top	2.330 2.280	ZNEO PROCESSOR QFP80	U11	Z16F2811	Z16F2811FI20SG									
85	10	1.6E Bot	3.635 0.175	VOLTAGE REGULATOR 3.3V SOT23-5	VR12	LT1761-3.3	LT1761IS5-3.3#TRMPBF									
86	10	1.4D Top	0.315 2.050	SWITCHMODE REG(6.5V) TO220-3/VX78	VR11	VX7805-500	VX7805-500									
87	10	1.1B Top	1.725 2.560	CRYSTAL 20.000MHZ 18PF HC49U	X101	ABL-20.000MHZ	ABL-20.000MHZ-B2									
88	10	2.4E Top	1.340 1.460	XTAL 32.768K 12.5PF 50K X-CFS206	X201	VT200F	VT200F-12.5PF20PPM									

Department of
Physics & Astronomy

NON-POPULATED and NON-PARTS (do not fill in this sheet)

Project: FOX DF TOOLS

DF RECEIVER

Assembly: 102-73185 **Next Assembly:** 102-73185

Board: 102-73185.0

Next Assembly Dwg: 102-73185

Schematic: 102-73185.0

Idx #	Pg #	Comp S/N as needed	Component MIT	Part Type	Ref Des	Part Value	Flight Part Number	Kit by	Value Ver	Insp by	Lead Form	Insp by	Tinned by	Insp by	Appl by	Insp by
1	173	11	1.7E Top -3.995 -1.995	Documentation Artifact	BRD102	DRAWING FRAME	VP: Documentation Artifact									
2	174	11	1.7E Top 7.995 -1.995	Documentation Artifact	BRD103	DRAWING FRAME	VP: Documentation Artifact									
3	175	11	1.8E Bot 1.265 1.810	Documentation Artifact	BRD104	DRAWING FRAME	VP: Documentation Artifact									
4	176	11	1.8E Top 1.865 1.810	Documentation Artifact	BRD105	DRAWING FRAME	VP: Documentation Artifact									
5	177	11	1.7F Top 0.000 0.000	Documentation Artifact	BRD101	DRAWING FRAME	VP: Documentation Artifact									
35	178	11	1.7F Top 1.685 1.895	Documentation Artifact	ESD101	DRAWING FRAME	VP: Documentation Artifact									
40	179	11	5.5B Top 2.540 0.225	Invalid Flight Part(1)	JP5		Invalid Flight Part (see schematic)									
45	180	11	5.2F Top 0.000 0.000	Invalid Flight Part(1)	PCB501	102-73185	Invalid Flight Part (see schematic)									
46	181	11	1.10F Top -3.850 5.850	Documentation Artifact	PWA101	DRAWING FRAME	VP: Documentation Artifact									
47	182	11	1.10E Top -3.850 5.850	Documentation Artifact	PWB101	DRAWING FRAME	VP: Documentation Artifact									
48	183	11	2.4E Top 1.090 1.545	Pad	PD201	PAD	VP: Not a Physical Part									
48	184	11	2.5E Top 1.090 1.375	Pad	PD202	PAD	VP: Not a Physical Part									
72	185	11	3.9D Top 3.440 0.685	Pad	TP1	PAD	VP: Not a Physical Part									
77	186	11	Top -3.375 2.200	Documentation Artifact	US\$	DRAWING FRAME	VP: Documentation Artifact									