

EMB-845M Reliability Prediction Report (MTBF)

Report NO : 04E070021

12-24-2004

Issue Date

Wenyuan Yang

Manager

Jessica Chou

Test Engineer

Reliability Prediction (MTBF)

I . Model Name: EMB-845M

II . Prediction Date: Dec. 24, 2004

III . Prediction Site: AAEON Q.E. Dept.

IV . Predicted by : Jessica Chou

V . Equipment: Relex Ver.7.3 Visual Reliability Software

VI. Simulation Environment:

- Temperature: 26 degrees C
- Standard: Telcordia (Bellcore) Standard

VII. Term and Definition:

- Unit : An assembly of device.
- Duty Cycle : Used to specify the percentage of time that the element is in an on state, and it is equal to the percentage of total time the item is in the active environment.
- Quantity : The quantity of the selected item.
- Failure Rate : Used to specify that the failure rate is to be calculated based the selected Calculation models. The multiplier is 1,000,000.
- MTBF : MTBF is always specified in hours.

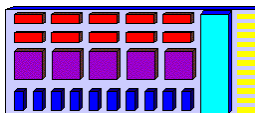
VIII. Prediction Result:

- Failure Rate: 12.631765 ppm
- MTBF: 79,165 Hours

IX. Prediction Table

Standard Reliability Prediction Report

Part Number EMB-845M
Reference Des
Date 十二月 24, 2004
Environment GF, GU - Ground Fixed,
Temperature 26.00

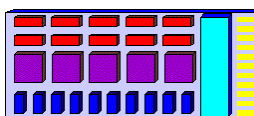


Description Top-level assembly
File Name EMB-845M.RPJ
Time 2:18 下午
Failure Rate 12.631765
MTBF 79,165

Assembly Name	Part Number	Ref Des	Qty	Failure Rate	MTBF
System	EMB-845M		1.00	12.631765	79,165

Standard Reliability Prediction Report

Part Number EMB-845M
Reference Des
Date 十二月 24, 2004
Environment GF, GU - Ground Fixed,
Temperature 26.00

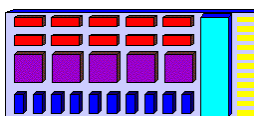


Description Top-level assembly
File Name EMB-845M.RPJ
Time 2:18 下午
Failure Rate 12.631765
MTBF 79,165

Part Number	Category	Ref Des	Failure Rate, Unit	Quantity	Failure Rate
0861030900	Capacitor	CE1,EC3,EC4,EC-8,EC24	0.021881	5.00	0.109407
0862220000	Capacitor	CE16,EC9	0.028698	2.00	0.057397
0863321728	Capacitor	CE8,CE24	0.028698	2.00	0.057397
0871020709	Capacitor	CE5,CE21,EC14,-EC16-EC18,EC20-,EC22,EC23,EC7-,EC11,EC15	0.028698	12.00	0.344381
0871520749	Capacitor	CE2-CE4,CE7	0.028698	4.00	0.114794
0872210731	Capacitor	EC19,EC21	0.029893	2.00	0.059787
0874720000	Capacitor	CE6,CE22,CE23,-EC5,EC6,EC12	0.047831	6.00	0.286984
0874770754	Capacitor	EC1,EC2	0.163443	2.00	0.326887
0876810001	Capacitor	EC10	0.049822	1.00	0.049822
0881060765	Capacitor	CE17,CE19,EC13	0.079366	3.00	0.238097
0881560719	Capacitor	CE9-CE11,CE13--CE15,CE18,CE12-,CE20	0.079366	9.00	0.714291
1031040902	Capacitor	C97	0.000723	1.00	0.000723
1410027001	Inductor	L30	0.001821	1.00	0.001821
1410027001	Inductor	L31	0.002189	1.00	0.002189
1460020001	Inductor	L29	0.002312	1.00	0.002312
2010010400	Connection	X3	0.029969	1.00	0.029969
2010030200	Connection	X4	0.029969	1.00	0.029969
2010200404	Connection	X2	0.029969	1.00	0.029969
2010210400	Connection	X1	0.029969	1.00	0.029969
2311800615	Semiconductor	Q14	0.163833	1.00	0.163833
3501210154	Connection	PT4C	0.023975	1.00	0.023975
3501220256	Connection	PT4A	0.023975	1.00	0.023975
3502001201	Connection	PCI1-PCI3	0.071926	3.00	0.215779
3503501851	Connection	DIMM1,DIMM2	0.110287	2.00	0.220574
3504020202	Connection	PT2	0.023975	1.00	0.023975
3505000200	Connection	PWI	0.299694	1.00	0.299694
3506200060	Connection	PTI	0.023975	1.00	0.023975
3512010040	Connection	PW2	0.002398	1.00	0.002398
3612100300	Connection	JP5,JP6,JP6A,JP-11	0.044954	4.00	0.179816
3612100303	Connection	CN17	0.001798	1.00	0.001798
3612100310	Connection	JP100,JP103,JP1-01,JP102	0.044954	4.00	0.179816
3612100328	Connection	CN5,CN5A	0.001798	2.00	0.003596
3612100432	Connection	CN2	0.059939	1.00	0.059939
3612100433	Connection	CN2A	0.059939	1.00	0.059939
3612100633	Connection	IR1	0.089908	1.00	0.089908
3612200317	Connection	FAN1,FAN2	0.044954	2.00	0.089908
3612200600	Connection	JP1	0.003596	1.00	0.003596
3612200700	Connection	CN7	0.209786	1.00	0.209786
3632201009	Connection	COM2	0.005994	1.00	0.005994
3612201011	Connection	CN24	0.149847	1.00	0.149847
3612201040	Connection	CN23,CN23A	0.149847	2.00	0.299694
3612201802	Connection	CN1A	0.010789	1.00	0.010789
3614100401	Connection	CN3	0.059939	1.00	0.059939

Standard Reliability Prediction Report

Part Number EMB-845M
Reference Des
Date 十二月 24, 2004
Environment GF, GU - Ground Fixed,
Temperature 26.00

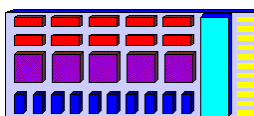


Description Top-level assembly
File Name EMB-845M.RPJ
Time 2:18 下午
Failure Rate 12.631765
MTBF 79,165

Part Number	Category	Ref Des	Failure Rate, Unit	Quantity	Failure Rate
3632203412	Connection	FD1	0.020379	1.00	0.020379
3632204014	Connection	IDE2	0.599387	1.00	0.599387
3632204015	Connection	IDE1	0.599387	1.00	0.599387
4204000100	Miscellaneous	BZ1	0.150000	1.00	0.150000
4213000103	Connection	BT1	0.029969	1.00	0.029969
0402001009	Resistor	R229	0.001209	1.00	0.001209
0405000008	Resistor	R95,R103,R418,- R419	0.001209	4.00	0.004835
0405000010	Resistor	R3,R4,R6,R8,R37- ,R38,R60-R63,R6- 5,R77,R80,R92,R- 145	0.001209	15.00	0.018131
0405000010	Resistor	R150,R171,R193- ,R227,R244	0.001209	5.00	0.006044
0405000110	Resistor	R165,R253	0.001209	2.00	0.002418
0405000210	Resistor	R2	0.001209	1.00	0.001209
0405001008	Resistor	R99,R106	0.001209	2.00	0.002418
0405111010	Resistor	R97,R277-R290,- R292,R293,R357- ,R391,R397	0.001209	20.00	0.024175
0405002210	Resistor	R337,R338,R341- ,R343	0.001209	4.00	0.004835
0405002708	Resistor	R361	0.001209	1.00	0.001209
0405002710	Resistor	R239	0.001209	1.00	0.001209
0405003310	Resistor	R40,R109,R113,- R121,R123,R124- ,R126-R128,R132- ,R138,R367	0.001209	12.00	0.014505
0405003310	Resistor	R392,R404	0.001209	2.00	0.002418
0405003910	Resistor	R215	0.001209	1.00	0.001209
0405005110	Resistor	R160,R161,R169- ,R170,R237,R266- ,R271,R370,R411	0.001209	9.00	0.010879
0405005610	Resistor	R339,R340,R342- ,R344	0.001209	4.00	0.004835
0405005210	Resistor	R181,R300,R332	0.001209	3.00	0.003626
0405006810	Resistor	R302,R303,R306- ,R309,R316,R317- ,R320,R323,R327- ,R328	0.001209	10.00	0.012088
0405006810	Resistor	R363,R366	0.001209	2.00	0.002418
0405007510	Resistor	R14,R51,R59,R67- ,R224	0.001209	5.00	0.006044
0405101010	Resistor	R371,R373,R401- ,R408	0.001209	4.00	0.004835
0405103010	Resistor	R164	0.001209	1.00	0.001209
0405103310	Resistor	R52,R130,R135,- R136	0.001209	4.00	0.004835
0405104710	Resistor	R31,R43,R269,R- 369,R379,R383	0.001209	6.00	0.007253
0405106810	Resistor	R231	0.001209	1.00	0.001209

Standard Reliability Prediction Report

Part Number EMB-845M
Reference Des
Date 十二月 24, 2004
Environment GF, GU - Ground Fixed,
Temperature 26.00

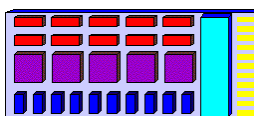


Description Top-level assembly
File Name EMB-845M.RPJ
Time 2:18 下午
Failure Rate 12.631765
MTBF 79,165

Part Number	Category	Ref Des	Failure Rate, Unit	Quantity	Failure Rate
0405201010	Resistor	R18,R68,R69,R75- ,R79,R89,R90,R1- 25,R184,R241,R2- 49,R259	0.001209	12.00	0.014505
0405201010	Resistor	R297,R349,R356- ,R359,R360,R374- ,R375,R376,R388- ,R389,R394	0.001209	11.00	0.013296
0405201010	Resistor	R395,R399,R400	0.001209	3.00	0.003626
0405202010	Resistor	R188	0.001209	1.00	0.001209
0405202210	Resistor	R35,R36,R49,R53- -R55,R71,R324,R- 329,R333,R362,R- 372,R387	0.001209	13.00	0.015714
0405202710	Resistor	R331,R334,R345- ,R350	0.001209	4.00	0.004835
0405203010	Resistor	R173,R174	0.001209	2.00	0.002418
0405204710	Resistor	R44,R48,R133,R- 134,R139,R245,R- 250,R265,R304,R- 313,R321	0.001209	11.00	0.013296
0405204710	Resistor	R347,R348,R351- ,R365,R378,R382- ,R390,R393,R409	0.001209	9.00	0.010879
0405205110	Resistor	R377	0.001209	1.00	0.001209
0405208210	Resistor	R96,R144,R194,- R197,R201,R203- ,R254,R255,R258- ,R264,R267	0.001209	11.00	0.013296
0405208210	Resistor	R268,R272,R273- ,R274,R296,R298- ,R301,R307,R308- ,R314,R315	0.001209	11.00	0.013296
0405208210	Resistor	R319,R322,R326- ,R335,R346,R358- ,R380,R384,R398	0.001209	9.00	0.010879
0405301010	Resistor	R16,R50,R56-R58- ,R66,R87,R93,R1- 00,R108,R109,R1- 15,R118	0.001209	13.00	0.015714
0405301010	Resistor	R119,R122,R129- ,R146-R149,R156- ,R158,R159,R172- ,R247,R251	0.001209	13.00	0.015714
0405301010	Resistor	R252,R257,R260- ,R276,R291,R312- ,R318,R330,R364- ,R368	0.001209	10.00	0.012088
0405301010	Resistor	R402,R413	0.001209	2.00	0.002418
0405301210	Resistor	R396	0.001209	1.00	0.001209
0405301510	Resistor	R185,R381,R385	0.001209	3.00	0.003626
0405302210	Resistor	R270,R352,R403- ,R412,R414	0.001209	5.00	0.006044
0405304710	Resistor	R81,R82	0.001209	2.00	0.002418

Standard Reliability Prediction Report

Part Number EMB-845M
Reference Des
Date 十二月 24, 2004
Environment GF, GU - Ground Fixed,
Temperature 26.00

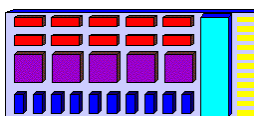


Description Top-level assembly
File Name EMB-845M.RPJ
Time 2:18 下午
Failure Rate 12.631765
MTBF 79,165

Part Number	Category	Ref Des	Failure Rate, Unit	Quantity	Failure Rate
0405401010	Resistor	R1,R5,R7,R9,R76- ,R86,R91,R410	0.001209	8.00	0.009670
0405433010	Resistor	R355	0.001209	1.00	0.001209
0405447010	Resistor	R84,R190	0.001209	2.00	0.002418
0405456010	Resistor	R85	0.001209	1.00	0.001209
0405601010	Resistor	R263,R336,R354	0.007253	3.00	0.021758
0405703308	Resistor	R83,R112	0.001209	2.00	0.002418
0405904708	Resistor	R98,R94	0.001209	2.00	0.002418
0550002210	Resistor	R256	0.001209	1.00	0.001209
0550002710	Resistor	R101,R104,R110- ,R116	0.001209	4.00	0.004835
0550003710	Resistor	R11,R12,R25	0.001209	3.00	0.003626
0550004910	Resistor	R28,R29,R34,R42- ,R64,R70,R102,R- 105,R111,R117,R- 142,R163	0.001209	12.00	0.014505
0550004910	Resistor	R179,R310,R311	0.001209	3.00	0.003626
0550006210	Resistor	R238	0.001209	1.00	0.001209
0550007510	Resistor	R23,R24,R26	0.001209	3.00	0.003626
0550010010	Resistor	R167,R176,R205- ,R206	0.001209	4.00	0.004835
0550012110	Resistor	R179	0.001209	1.00	0.001209
0550015010	Resistor	R166	0.001209	1.00	0.001209
0550020010	Resistor	R141	0.001209	1.00	0.001209
0550022610	Resistor	R218	0.001209	1.00	0.001209
0550030110	Resistor	R162	0.001209	1.00	0.001209
0550047510	Resistor	R120	0.001209	1.00	0.001209
0550100410	Resistor	R195	0.001209	1.00	0.001209
0550101510	Resistor	R262	0.001209	1.00	0.001209
0550110010	Resistor	R223,R230,R261- ,R294,R405,R407- ,R416	0.001209	7.00	0.008461
0550110510	Resistor	R295	0.001209	1.00	0.001209
0550121510	Resistor	R415,R417	0.001209	2.00	0.002418
0550160410	Resistor	R41	0.001209	1.00	0.001209
0550206810	Resistor	R217,R240	0.001209	2.00	0.002418
0550210010	Resistor	R211,R216,R220- ,R221,R222,R242	0.001209	6.00	0.007253
0550231610	Resistor	R406	0.001209	1.00	0.001209
0550256010	Resistor	R234,R236	0.001209	2.00	0.002418
0550303010	Resistor	R233,R246	0.001209	2.00	0.002418
0550312010	Resistor	R235	0.001209	1.00	0.001209
0550323210	Resistor	R232	0.001209	1.00	0.001209
0550326710	Resistor	R187	0.001209	1.00	0.001209
0550724910	Resistor	R180,R199	0.001209	2.00	0.002418
0550751110	Resistor	R152,R154,R168- ,R189,R196	0.001209	5.00	0.006044
0550760410	Resistor	R209,R210,R212- -R214,R219	0.001209	6.00	0.007253
0550768110	Resistor	R204,R299	0.001209	2.00	0.002418
0963310711	Semiconductor	TC1,TC2	0.024575	2.00	0.049150
1100320010	Capacitor	C19-C23,C37-C40	0.001608	9.00	0.014472

Standard Reliability Prediction Report

Part Number EMB-845M
Reference Des
Date 十二月 24, 2004
Environment GF, GU - Ground Fixed,
Temperature 26.00

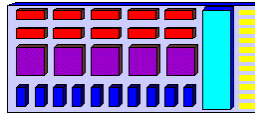


Description Top-level assembly
File Name EMB-845M.RPJ
Time 2:18 下午
Failure Rate 12.631765
MTBF 79,165

Part Number	Category	Ref Des	Failure Rate, Unit	Quantity	Failure Rate
1101010210	Capacitor	C133,C140,C321-C323	0.001067	4.00	0.004269
1102200210	Capacitor	C83,C84,C95,C96	0.001067	4.00	0.004269
1104710210	Capacitor	C401-C404	0.001067	4.00	0.004269
1111010210	Capacitor	C195,C409	0.001067	2.00	0.002134
1111810210	Capacitor	C8-C11,C35,C59	0.001067	6.00	0.006403
1112210210	Capacitor	C219	0.001067	1.00	0.001067
1114710210	Capacitor	C389	0.001067	1.00	0.001067
1121010010	Capacitor	C1,C17,C47,C56,-C57,C108,C119,-C121,C130,C411	0.001067	10.00	0.010671
1123310010	Capacitor	C273	0.001067	1.00	0.001067
1124710010	Capacitor	C44	0.001067	1.00	0.001067
1125610010	Capacitor	C226	0.001067	1.00	0.001067
1134710710	Capacitor	C182,C385	0.001067	2.00	0.002134
1141010710	Capacitor	C78-C81,C213,C-246,C248,C292,C-300,C388	0.001067	10.00	0.010671
1141010910	Capacitor	C3-C7,C12,C13,C-18,C26,C34,C42,-C54,C61,C62,C64-C65,C68	0.001067	17.00	0.018141
1141010910	Capacitor	C69-C72,C74,C76-C82,C86,C90-C9-3,C105,C106,C11-0,C111	0.001067	16.00	0.017074
1141010910	Capacitor	C115,C116,C122-C127,C129,C131-C132,C134,C139-C142,C144	0.001067	15.00	0.016007
1141010910	Capacitor	C145,C146,C149-C152,C156,C158-C159,C162,C163-C166,C168	0.001067	13.00	0.013873
1141010910	Capacitor	C172-C174,C176-C179,C181,C183-C186-C188,C193-C194,C196	0.001067	13.00	0.013873
1141010910	Capacitor	C198,-C200,C202-C205,C207-C212-C214-C218,C223-C224,C227	0.001067	21.00	0.022410
1141010910	Capacitor	C228-C230,C233-C241,C243-C245-C247,C249-C257-C262,C265	0.001067	27.00	0.028813
1141010910	Capacitor	C266-C272,C275-C278,C280,C282-C283,C285,C287-C290,C293	0.001067	20.00	0.021343
1141010910	Capacitor	C295,C296,C298-C299,C301,C304-C320,C322,C326-C353,C355	0.001067	52.00	0.055492

Standard Reliability Prediction Report

Part Number EMB-845M
Reference Des
Date 十二月 24, 2004
Environment GF, GU - Ground Fixed,
Temperature 26.00

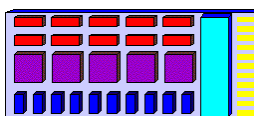


Description Top-level assembly
File Name EMB-845M.RPJ
Time 2:18 下午
Failure Rate 12.631765
MTBF 79,165

Part Number	Category	Ref Des	Failure Rate, Unit	Quantity	Failure Rate
1141010910	Capacitor	C356-C381,C383- ,C384,C386,C393- ,C394,C396-C400- ,C405-C406	0.001067	38.00	0.040552
1141010910	Capacitor	C408,C414	0.001067	2.00	0.002134
1150140910	Capacitor	C14-C16,C24,C25- ,C27,C29,C30,C3- 1,C43,C104,C109- ,C113,C117	0.002740	14.00	0.038361
1150140910	Capacitor	C118,C120,C177- ,C205,C263,C281- ,C284,C286,C294- ,C387,C391	0.002740	11.00	0.030141
1150140910	Capacitor	C392,C395,C407- ,C413	0.002740	4.00	0.010960
1151010008	Capacitor	C101,C128,C137- ,C143,C147	0.002556	5.00	0.012778
1152250608	Capacitor	C94,C102,C114,- C390	0.002556	4.00	0.010222
1154740008	Capacitor	C2,C88,C138,C1- 65,C169,C178,C1- 80,C197,C274,C2- 79,C297	0.002740	11.00	0.030141
1154740008	Capacitor	C302	0.002740	1.00	0.002740
1161040909	Capacitor	C184,C185,C189- -C192,C201,C220- ,C221,C231,C232- ,C258-C261	0.002740	15.00	0.041101
1161040909	Capacitor	C325,C354,C382	0.002740	3.00	0.008220
1340472709	Capacitor	CP7	0.001067	1.00	0.001067
1341182709	Capacitor	CP1-CP6	0.001067	6.00	0.006403
1342102709	Capacitor	CP8	0.001067	1.00	0.001067
1387108708	Semiconductor	CT1-CT3	0.081916	3.00	0.245749
1420037208	Inductor	L14,L16,L17,L19,- L20,L23-L28,L32,- L38	0.002312	13.00	0.030062
1420043002	Inductor	L2,L3,L8,L10-L13	0.002312	7.00	0.016187
1420064002	Inductor	L1,L4	0.002312	2.00	0.004625
1420068002	Inductor	L9,L18,L21,L22	0.002312	4.00	0.009250
1420146002	Inductor	L5-L7	0.002312	3.00	0.006937
1440011008	Inductor	L33,L34	0.002312	2.00	0.004625
1440050008	Inductor	L35	0.002312	1.00	0.002312
1440051008	Inductor	L37	0.002312	1.00	0.002312
1440052008	Inductor	L36	0.002312	1.00	0.002312
1440053008	Inductor	L39	0.002312	1.00	0.002312
1470012000	Inductor	U5	0.138746	1.00	0.138746
1620010083	Resistor	RN19-TN34	0.006537	16.00	0.104595
1620022063	Resistor	RN4-RN6,RN49	0.006537	4.00	0.026149
1620033063	Resistor	RN8	0.006537	1.00	0.006537
1620051063	Resistor	RN11,RN13,RN14	0.006537	3.00	0.019612
1620056063	Resistor	RN37-RN62	0.006537	25.00	0.163430
1620115063	Resistor	RN63	0.006537	1.00	0.006537
1620210060	Resistor	RN15	0.006537	1.00	0.006537

Standard Reliability Prediction Report

Part Number EMB-845M
Reference Des
Date 十二月 24, 2004
Environment GF, GU - Ground Fixed,
Temperature 26.00



Description Top-level assembly
File Name EMB-845M.RPJ
Time 2:18 下午
Failure Rate 12.631765
MTBF 79,165

Part Number	Category	Ref Des	Failure Rate, Unit	Quantity	Failure Rate
1620222063	Resistor	RN1	0.006537	1.00	0.006537
1620227063	Resistor	RN35	0.006537	1.00	0.006537
1620247063	Resistor	RN2,RN3	0.006537	2.00	0.013074
1620282060	Resistor	RN7,RN9,RN12,- RN17,RN18,RN36	0.006537	6.00	0.039223
1680222083	Resistor	RP1,RP2	0.008171	2.00	0.016343
1810060080	Semiconductor	D1,D2,D5,D10,D11	0.024575	5.00	0.122875
1810090000	Semiconductor	Q43	0.024575	1.00	0.024575
1810110000	Semiconductor	Q4	0.024575	1.00	0.024575
1830242080	Semiconductor	D3	0.024575	1.00	0.024575
1840150000	Semiconductor	D4,D6,D8,D9	0.024575	4.00	0.098300
1912222020	Semiconductor	Q18	0.024575	1.00	0.024575
1913904080	Semiconductor	Q1,Q2,Q12,Q13,- Q27-Q29,Q33,Q3- 4,Q36,Q38,Q39,Q- 41	0.024575	13.00	0.319474
1945706112	Semiconductor	Q8,Q30	0.024575	2.00	0.049150
1955240012	Semiconductor	Q22	0.024575	1.00	0.024575
2100011611	Integrated Circuit	U7	0.109123	1.00	0.109123
2100011611	Integrated Circuit	U13	0.116120	1.00	0.116120
2202074800	Integrated Circuit	U18	0.040483	1.00	0.040483
2204014200	Integrated Circuit	U20	0.040483	1.00	0.040483
2300560806	Integrated Circuit	U15	0.040254	1.00	0.040254
2301380535	Integrated Circuit	U21	0.073585	1.00	0.073585
2310150000	Semiconductor	Q3,Q17,Q19,Q21- ,Q23,Q24-Q26,Q- 35,Q37,Q40	0.081916	11.00	0.901080
2310700125	Semiconductor	Q32	0.081916	1.00	0.081916
2310912715	Integrated Circuit	U1	0.267426	1.00	0.267426
2311150804	Semiconductor	Q6	0.108268	1.00	0.108268
2311150804	Semiconductor	Q5	0.105973	1.00	0.105973
2320500825	Semiconductor	Q16	0.145589	1.00	0.145589
2320500825	Semiconductor	Q31	0.121255	1.00	0.121255
2311430538	Integrated Circuit	U19	0.250947	1.00	0.250947
2320160833	Semiconductor	Q9	0.097427	1.00	0.097427
2320160833	Semiconductor	Q11	0.095309	1.00	0.095309
2320160833	Semiconductor	Q7	0.105689	1.00	0.105689
2320160833	Semiconductor	Q10	0.081916	1.00	0.081916
2340031331	Integrated Circuit	U2	0.076167	1.00	0.076167
2504000585	Integrated Circuit	U12	0.041667	1.00	0.041667
2504028016	Integrated Circuit	U16	0.059406	1.00	0.059406
2541087122	Integrated Circuit	U14	0.056794	1.00	0.056794
2543061050	Integrated Circuit	U4	0.059074	1.00	0.059074
2630271140	Integrated Circuit	U8	0.112877	1.00	0.112877
2630300140	Integrated Circuit	U10	0.041667	1.00	0.041667
2651040138	Integrated Circuit	U9	0.094430	1.00	0.094430
2930314618	Integrated Circuit	U3	0.041667	1.00	0.041667
3503230320	Connection	U17	0.019180	1.00	0.019180
3503304785	Connection	U11	0.286507	1.00	0.286507
4203000600	Miscellaneous	F2,F3	0.030000	2.00	0.060000