

RTC-1200SK

Reliability Prediction Report

(MTBF)

Summary	Failure Rate: 15048.477624 MTBF: 66,452 Hours
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Issue date	QE Manager	Test Engineer
2017/3/2	KJ Wang	Anderson Lin

Reliability Prediction (MTBF)

I . Model Name: RTC-1200SK

II . Prediction Date: Mar. 2, 2017

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

IV . Predicted by: Anderson Lin

V . Equipment: Windchill Quality Solutions 10.1

VI. Simulation Environment:

- Temperature: 30 degrees C
- Standard: Telcordia (Bellcore) Standard

VII. Term and Definition:

- Unit : An assembly of device.
- Duty Cycle : Used in 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 in specify that the failure rate is to be calculated based the selected Calculation models. The multiplier is 1,000,000,000.
- MTBF : MTBF is always specified in hours.

VIII. Prediction Result:**RTC-1200SK (96971200S0-D):**

- Failure Rate: 15048.477624
- MTBF: 66,452 Hours

**Reliability Prediction
Summary**

File Name: RTC-1200SK.rfp
System: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
RTC-1200SK	96971200S0-D		1	15048.477624	66,452

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
1050500334.0000000 00000000	Resistor	R27,R831, R836	2.547039	3	9.343982
1050501004.0000000 00000000	Resistor	R442,R68 7,R7,R701 , R8	2.547039	5	14.923560
1050501224.0000000 00000000	Resistor	R918	2.547039	1	3.541821
1050501234.0000000 00000000	Resistor	R316,R41 6,R456, R460,R77 6	2.547039	5	14.923560
1050502224.0000000 00000000	Resistor	R726,R72 7	2.547039	2	6.490186
1050502724.0000000 00000000	Resistor	R522	2.547039	1	3.541821
1050503334.0000000 00000000	Resistor	R784	2.547039	1	3.541821
1050503934.0000000 00000000	Resistor	R389,R89 8,R900	2.547039	3	9.343982
1050504334.0000000 00000000	Resistor	R405	2.547039	1	3.541821
1050504724.0000000 00000000	Resistor	R2,R917	2.547039	2	6.490186
1050504734.0000000 00000000	Resistor	R616,R77 3	2.547039	2	6.490186
1050505134.0000000 00000000	Resistor	R862,R86 3	2.547039	2	6.490186
1050507524.0000000 00000000	Resistor	R422,R44 3,R453	2.547039	3	9.343982
1050507530.0000000 00000000	Resistor	R375	2.547039	1	3.541821
1050508224.0000000 00000000	Resistor	R30	2.547039	1	3.541821
1050510034.0000000 00000000	Resistor	R361,R36 2,R5,R899 , R901	2.547039	5	14.923560
1050510524.0000000 00000000	Resistor	R160	2.547039	1	3.541821
1050512104.0000000 00000000	Resistor	R594	2.547039	1	3.541821
1050513034.0000000 00000000	Resistor	R897	2.547039	1	3.541821
1050513314.0000000 00000000	Resistor	R544,R77 5	2.547039	2	6.490186
1050514324.0000000 00000000	Resistor	R315	2.547039	1	3.541821
1050515034.0000000 00000000	Resistor	R423	2.547039	1	3.541821

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1050516014.0000000 00000000	Resistor	R548	2.547039	1	3.541821
1050518034.0000000 00000000	Resistor	R832	2.547039	1	3.541821
1050520004.0000000 00000000	Resistor	R283,R73 4	2.547039	2	6.490186
1050520034.0000000 00000000	Resistor	R1011,R7 55	2.547039	2	6.490186
1050520044.0000000 00000000	Resistor	R652,R89 2,R893	2.547039	3	9.343982
1050521524.0000000 00000000	Resistor	R399	2.547039	1	3.541821
1050523224.0000000 00000000	Resistor	R837	2.547039	1	3.541821
1050524904.0000000 00000000	Resistor	R200,R40 6,R483	2.547039	3	9.343982
1050524909.0000000 00000000	Resistor	R875,R87 6	2.547039	2	6.490186
1050524934.0000000 00000000	Resistor	R785	2.547039	1	3.541821
1050527424.0000000 00000000	Resistor	R409	2.547039	1	3.541821
1050533034.0000000 00000000	Resistor	R605	2.547039	1	3.541821
1050533234.0000000 00000000	Resistor	R320	2.547039	1	3.541821
1050539224.0000000 00000000	Resistor	R396	2.547039	1	3.541821
1050545364.0000000 00000000	Resistor	R454	2.547039	1	3.541821
1050547034.0000000 00000000	Resistor	R651	2.547039	1	3.541821
1050548714.0000000 00000000	Resistor	R123	2.547039	1	3.541821
1050549904.0000000 00000000	Resistor	R281,R66, R729	2.547039	3	9.343982
1050549964.0000000 00000000	Resistor	R19,R440, R477,R57, R58,R624, R628,R88	2.547039	8	23.134533
1050551004.0000000 00000000	Resistor	R397	2.547039	1	3.541821
1050560464.0000000 00000000	Resistor	R68,R79	2.547039	2	6.490186
1050580614.0000000 00000000	Resistor	R907	2.547039	1	3.541821
1050580664.0000000 00000000	Resistor	R595	2.547039	1	3.541821

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1050586614.0000000 00000000	Resistor	R184	2.547039	1	3.541821
1050588704.0000000 00000000	Resistor	R6,R9	2.547039	2	6.490186
1050595314.0000000 00000000	Resistor	R140	2.547039	1	3.541821
1050700002.0000000 00000000	Resistor	R527	2.547039	1	3.541821
1050701504.0000000 00000000	Resistor	R285,R28 6,R288	2.547039	3	9.343982
1050704304.0000000 00000000	Resistor	R128	2.547039	1	3.541821
1050708234.0000000 00000000	Resistor	R388	2.547039	1	3.541821
1051500172.0000000 00000000	Resistor	R322	2.547039	1	3.541821
1052500171.0000000 00000000	Resistor	R762	2.547039	1	3.541821
1052700008.0000000 00000000	Resistor	R132,R45 0,R532, R631	2.547039	4	12.149228
1055500570.0000000 00000000	Resistor	R708	2.547039	1	3.541821
1059700001.0000000 00000000	Resistor	R1024,R1 96,R198, R492,R53 9,R608, R629,R64 6,R683, R721,R79 9	2.547039	11	31.201544
1059704761.0000000 00000000	Resistor	R317	2.547039	1	3.541821
1121415090.0000000 00000000	Capacitor	C293,C29 4,C312, C313	1.128806	4	5.079407
1121501690.0000000 00000000	Capacitor	C597,C60 6,C642, C643,C72 2	1.128806	5	6.274805
1124418090.0000000 00000000	Capacitor	C587,C58 8	1.128806	2	2.664608
1124510280.0000000 00000000	Capacitor	C794	1.128806	1	1.418485
1124539180.0000000 00000000	Capacitor	C253	1.128806	1	1.418485
1124547290.0000000 00000000	Capacitor	C262,C30 0,C311, C649	1.128806	4	5.079407

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1129522790.0000000 00000000	Capacitor	C275,C29 5,C301,C5 3, C698,C69 9,C700, C701,C70 2,C703, C704,C70 5,C82	1.128806	13	15.691573
1129610080.0000000 00000000	Capacitor	C107,C11 4,C117, C126,C13 4,C139, C233,C28 4,C290, C554,C56 1,C611, C630,C65 3,C654, C783,C78 6,C79,C87 , C98	1.128806	20	23.837670
1129622690.0000000 00000000	Capacitor	C108,C18 5,C350	1.128806	3	3.883281
1129710090.0000000 00000000	Capacitor	C431,C45 4,C708, C718	1.128806	4	5.079407
1129715090.0000000 00000000	Capacitor	C12,C235, C274,C31 5, C469,C48 9,C711	1.128806	7	8.647986
1129722091.0000000 00000000	Capacitor	C125,C13 5,C255	1.128806	3	3.883281
1129747090.0000000 00000000	Capacitor	C367,C38 7,C390	1.128806	3	3.883281
1174518180.0000000 00000000	Capacitor	CP1,CP2	1.128806	2	2.664608
1182615090.0000000 00000000	Capacitor	C164,C16 5,C615, C625	1.128806	4	5.079407
1189610192.0000000 00000000	Capacitor	C223	1.128806	1	1.418485
1189633151.0000000 00000000	Capacitor	C317,C51	1.128806	2	2.664608
1211101970.0000000 00000000	Inductor	L2	11.199536	1	14.636527
1211102272.0000000 00000000	Inductor	L12,L13	9.731343	2	23.656109
1211102275.0000000 00000000	Inductor	L3	10.405097	1	13.598285

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1211106876.0000000 00000000	Inductor	L16	4.944252	1	6.461578
1211110061.0000000 00000000	Inductor	L23	8.320752	1	10.874282
1214109000.0000000 00000000	Inductor	L1,L10,L1 1,L15,L19, L20,L24,L 26,L29,L9	4.944252	10	54.097620
1214109004.0000000 00000000	Inductor	L21,L22,L 27,L28,L6, L7	4.944252	6	33.271337
1231324054.0000000 00000000	Inductor	Y1	4.944252	1	6.461578
1231332726.0000000 00000000	Inductor	Y3,Y5	4.944252	2	12.019077
1300414849.0000000 00000000	Miscellaneous	D19,D9	19.200000	2	112.942642
1301000560.0000000 00000000	Miscellaneous	D6	19.200000	1	41.938810
1301005447.0000000 00000000	Miscellaneous	D1	19.200000	1	41.938810
1301005450.0000000 00000000	Miscellaneous	D18,D4	19.200000	2	112.942642
1301400642.0000000 00000000	Miscellaneous	D7	19.200000	1	41.938810
1301793040.0000000 00000000	Miscellaneous	D10,D12, D13,D20, D21,D22, D23,D25	19.200000	8	404.249433
1304101540.0000000 00000000	Optical Device	LED_VCC	79.003355	1	153.913100
1304300140.0000000 00000000	Optical Device	LED_GOO D	79.003355	1	153.913100
1305002041.0000000 00000000	Miscellaneous	D14,D15, D16,D17	19.200000	4	227.882136
1305050040.0000000 00000000	Optical Device	U31,U32, U34,U35, U8, U85,U9	79.003355	7	749.599265
1305080040.0000000 00000000	Miscellaneous	D5	19.200000	1	41.938810
1315033510.0000000 00000000	Semiconductor	Q15,Q5	22.463360	2	57.753076
1315083270.0000000 00000000	Semiconductor	Q14	22.463360	1	31.602965
1315200312.0000000 00000000	Semiconductor	Q31,Q516 1006100	22.463360	2	57.753076
1315230511.0000000 00000000	Semiconductor	Q30	22.463360	1	31.602965

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1315443512.0000000 00000000	Semiconductor	Q17,Q18, Q19,Q20, Q21,Q32, Q35,Q36, Q37,Q40, Q41,Q42, Q43,Q45	22.463360	14	347.460915
1315873300.0000000 00000000	Semiconductor	Q10,Q25, Q26,Q27, Q7	62.098471	5	366.060979
1315873500.0000000 00000000	Semiconductor	Q2,Q3,Q4	59.083796	3	218.397214
1410034200.0000000 00000000	Integrated Circuit	U87	43.803003	1	85.184662
1420134580.0000000 00000000	Integrated Circuit	U2	43.803003	1	85.184662
1430015380.0000000 00000000	Integrated Circuit	U36	43.803003	1	85.184662
1430023050.0000000 00000000	Integrated Circuit	U76	43.803003	1	85.184662
1430035210.0000000 00000000	Integrated Circuit	U58,U60, U84,U89, U93	43.803003	5	311.118304
1430044170.0000000 00000000	Integrated Circuit	U74	43.803003	1	85.184662
1430090590.0000000 00000000	Integrated Circuit	U61,U71	43.803003	2	146.310248
1430168140.0000000 00000000	Integrated Circuit	U22	43.803003	1	85.184662
1430229540.0000000 00000000	Integrated Circuit	U11,U17, U21,U23, U24,U30, U50	507.878627	7	4813.977279
1430455200.0000000 00000000	Integrated Circuit	U26	43.803003	1	85.184662
1430650830.0000000 00000000	Integrated Circuit	U55	576.551027	1	1121.231434
1430686102.0000000 00000000	Integrated Circuit	U28	43.803003	1	85.184662
1430812460.0000000 00000000	Integrated Circuit	U43	412.653483	1	802.496282
1430812530.0000000 00000000	Integrated Circuit	U5	43.803003	1	85.184662
1439055100.0000000 00000000	Integrated Circuit	U73	43.803003	1	85.184662
1462001280.0000000 00000000	Integrated Circuit	U70	43.803003	1	85.184662
1490360010.0000000 00000000	Integrated Circuit	U99	43.803003	1	85.184662

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Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
1540100040.0000000 00000000	Resistor	RN10,RN1 1,RN12, RN15,RN1 7,RN2,RN 21, RN22,RN2 3,RN9	9.971436	10	129.090646
1601030700.0000000 00000000	Connection	PWR_BTN ,RST_BTN	16.184835	2	49.043282
1651508010.0000000 00000000	Connection	CN27	16.184835	1	28.022514
1651520412.0000000 00000000	Connection	SODIMM1	16.184835	1	28.022514
1652707201.0000000 00000000	Connection	CN25	16.184835	1	28.022514
1653202100.0000000 00000000	Connection	CN30,CN6	16.184835	2	49.043282
1653510120.0000000 00000000	Connection	CN8	16.184835	1	28.022514
1653530130.0000000 00000000	Connection	eDP_DISP LAY	16.184835	1	28.022514
1653926211.0000000 00000000	Connection	CN12,CN1 5	16.184835	2	49.043282
1654002024.0000000 00000000	Connection	CN21,CN2 2	16.184835	2	49.043282
1654010020.0000000 00000000	Connection	CN13	16.184835	1	28.022514
1654207534.0000000 00000000	Connection	M2_SSD	16.184835	1	28.022514
1654900834.0000000 00000000	Connection	BIOS_SPI, CN10, EC_SPI,P WR_KEY	16.184835	4	88.145664
1654901005.0000000 00000000	Connection	CN5	16.184835	1	28.022514
1654901035.0000000 00000000	Connection	CN26	16.184835	1	28.022514
1654901232.0000000 00000000	Connection	BCR,FN_K EY	16.184835	2	49.043282
1654903600.0000000 00000000	Connection	CARD_AN T,EX_ANT , INT_ANT	16.184835	3	68.890067
1654904032.0000000 00000000	Connection	DOCKING	16.184835	1	28.022514
1654910201.0000000 00000000	Connection	TOUCH	16.184835	1	28.022514
1654930200.0000000 00000000	Connection	CN11	16.184835	1	28.022514

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1655802130.0000000 00000000	Connection	BL_LED,C OIN_BATA	16.184835	2	49.043282
1655802131.0000000 00000000	Connection	CN29	16.184835	1	28.022514
1655812130.0000000 00000000	Connection	LPC1	16.184835	1	28.022514
1655905126.0000000 00000000	Connection	R_CAM	16.184835	1	28.022514
1655908123.0000000 00000000	Connection	DC_IN	16.184835	1	28.022514
1655909131.0000000 00000000	Connection	UART	16.184835	1	28.022514
1655912131.0000000 00000000	Connection	F_CAM	16.184835	1	28.022514
	Resistor	R386,R44 4	2.547039	2	6.490186
	Resistor	R75,R964	2.547039	2	6.490186
	Resistor	R215,R47 9,R480, R599	2.547039	4	12.149228
	Resistor	R1,R383,R 385,R451	2.547039	4	12.149228
	Resistor	R921,R92 5	2.547039	2	6.490186
	Resistor	R772,R78 3,R855, R903,R90 6,R908, R914,R91 9,R920, R922	2.547039	10	28.506324
	Resistor	R421	2.547039	1	3.541821
	Resistor	R1009,R4 49	2.547039	2	6.490186
	Resistor	R392,R40 0,R580	2.547039	3	9.343982
	Resistor	R756	2.547039	1	3.541821
	Resistor	R114,R12 7,R575	2.547039	3	9.343982

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	Resistor	R105,R12, R178,R22 4, R23,R231, R260,R28, R33,R38,R 426,R427, R43,R520, R533,R55 4, R572,R59 6,R724,R8 5	2.547039	20	55.234238
	Resistor	R372,R37 7	2.547039	2	6.490186
	Resistor	R118	2.547039	1	3.541821
	Resistor	R746	2.547039	1	3.541821
	Resistor	R371	2.547039	1	3.541821
	Resistor	R722	2.547039	1	3.541821
	Resistor	R201,R20 9,R408, R418	2.547039	4	12.149228
	Resistor	R904,R90 9	2.547039	2	6.490186
	Resistor	R661	2.547039	1	3.541821
	Resistor	R186	2.547039	1	3.541821
	Resistor	R39	2.547039	1	3.541821
	Resistor	R290	2.547039	1	3.541821
	Resistor	R447	2.547039	1	3.541821
	Resistor	R617,R76 3	2.547039	2	6.490186
	Resistor	R41	2.547039	1	3.541821

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	Resistor	R1023,R11,R13,R21 R219,R292,R321,R329,R348,R493,R494,R498,R582,R583,R619,R623,R626,R634,R65,R690,R691,R692,R694,R696,R697,R698,R699,R700,R706,R747,R748,R791,R95	2.547039	33	89.567332

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	Resistor	R10,R100 3,R1008, R1026,R1 07,R109, R113,R12 0,R122, R137,R14, R143,R15 0, R152,R16 6,R177, R183,R18 7,R190, R191,R19 2,R193, R197,R20 2,R207, R212,R21 3,R22,R22 5, R228,R23 2,R238, R241,R24 4,R246, R247,R24 9,R25,R25 1, R255,R25 8,R263, R264,R26 8,R269, R270,R27 1,R272, R R124,R23 6,R275, R276,R27 8,R279, R410,R54, R59,R730, R731,R73 2,R733, R766,R76 7,R777, R778,R83, R872,R87 3 R391,R39 8,R417, R429,R62 R846,R86 9	2.547039	163	427.424383
	Resistor	R124,R23 6,R275, R276,R27 8,R279, R410,R54, R59,R730, R731,R73 2,R733, R766,R76 7,R777, R778,R83, R872,R87 3	2.547039	20	55.234238
	Resistor	R391,R39 8,R417, R429,R62	2.547039	5	14.923560
	Resistor	R846,R86 9	2.547039	2	6.490186

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	Resistor	R1002,R1004,R1005, R1006,R1007,R108, R115,R119,R126, R170,R208,R211, R214,R217,R218, R222,R223,R229, R239,R245,R250, R252,R266,R273, R274,R291,R295, R296,R304,R336, R337,R339,R342, R343,R344,R346, R347,R350,R37,R384, R390,R393,R394, R403,R404,R411, R419,R	2.547039	117	308.388036
	Resistor	R110,R189,R199, R462,R705,R787, R842,R848,R856, R860,R902,R951	2.547039	12	33.890167
	Resistor	R598,R604	2.547039	2	6.490186
	Resistor	R380,R381,R811, R816,R817,R825	2.547039	6	17.675978
	Resistor	R1012,R1013,R435, R752,R753	2.547039	5	14.923560
	Resistor	R401,R414	2.547039	2	6.490186

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Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Resistor	R703	2.547039	1	3.541821
	Resistor	R204,R407	2.547039	2	6.490186
	Resistor	R474,R484,R491,R504,R519,R528,R606,R610,R659,R769,R774,R789	2.547039	12	33.890167
	Resistor	R253,R256,R327,R370,R576,R639,R647,R809	2.547039	8	23.134533
	Resistor	R382,R841	2.547039	2	6.490186
	Resistor	R76	2.547039	1	3.541821
	Resistor	R457,R458	2.547039	2	6.490186
	Resistor	R254,R632	2.547039	2	6.490186
	Resistor	R121,R455,R558,R72	2.547039	4	12.149228

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Resistor	R1010,R1014,R147,R174,R235,R237,R240,R294,R308,R311,R325,R335,R338,R340,R341,R351,R352,R376,R402,R437,R439,R452,R459,R508,R524,R535,R538,R633,R645,R655,R657,R674,R675,R707,R71,R713,R716,R725,R73,R741,R745,R749,R760,R771,R78,R798,R80,R826,R82	2.547039	54	144.594972
	Resistor	R684	2.547039	1	3.541821
	Resistor	R309,R64,R965	2.547039	3	9.343982
	Resistor	R864,R865,R866	2.547039	3	9.343982

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Resistor	R100,R117,R130,R131,R144,R146,R154,R156,R158,R163,R164,R165,R167,R176,R179,R180,R185,R513,R523,R529,R540,R546,R559,R87,R874,R97,R98,R99	2.547039	28	76.397179
	Resistor	R172,R547	2.547039	2	6.490186
	Resistor	R169	2.547039	1	3.541821
	Resistor	R101,R103,R104,R112,R129,R141,R145,R153,R155,R157,R162,R168,R171,R181,R516,R545	2.547039	16	44.592810
	Resistor	RT1,RT2,RT3,RT4	2.547039	4	12.149228
	Resistor	RT5	2.547039	1	3.541821
	Capacitor	C123,C151,C314,C38,C483	1.128806	5	6.274805
	Capacitor	C319,C320,C58,C59	1.414632	6	9.353733
	Capacitor	C71,C744	1.128806	3	3.883281
	Capacitor	C245,C342,C343	1.128806	4	5.079407
	Capacitor	C137,C210,C211,C216,C227,C263	1.128806	6	7.463816

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
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Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Capacitor	C140,C280	1.128806	2	2.664608
	Capacitor	C279,C309,C723	1.128806	3	3.883281
	Capacitor	TC7	1.128806	1	1.418485
	Capacitor	C585,C592,C644,C645,C646,C648	1.128806	6	7.463816
	Capacitor	C14,C194,C25,C27,C3,C36	1.128806	6	7.463816
	Capacitor	C208,C243,C264,C689,C712,C80	1.128806	6	7.463816
	Capacitor	C2	1.128806	1	1.418485
	Capacitor	C602	1.128806	1	1.418485
	Capacitor	C258,C30,C33,C43,C589	1.128806	5	6.274805
	Capacitor	C144,C329,C728,C730,C732,C734,C735	1.128806	7	8.647986
	Capacitor	C775,C776	1.128806	2	2.664608
	Capacitor	C261	1.128806	1	1.418485

**Reliability Prediction
Summary**

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Capacitor	C1,C10,C103,C104,C105,C109,C110,C113,C122,C124,C128,C136,C138,C147,C149,C15,C150,C157,C161,C162,C163,C166,C167,C169,C171,C173,C176,C186,C187,C188,C190,C192,C195,C197,C198,C200,C203,C204,C205,C206,C209,C211,C212,C215,C219,C220,C221,C224,C225,	1.128806	178	204.691028
	Capacitor	C591,C607,C627,C647	1.128806	4	5.079407

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Capacitor	C13,C142, C181,C18 2, C20,C22,C 229,C23, C248,C24 9,C250, C252,C25 7,C26,C26 8, C270,C27 1,C278, C351,C35 2,C4,C46, C47,C5,C5 29,C563, C564,C6,C 604,C616, C62,C666, C67,C690, C694,C70 9,C745,C8	1.128806	38	44.633555
	Capacitor	C228,C36 9,C593, C686,C69 5,C714,C8 1	1.128806	7	8.647986
	Capacitor	C174,C60 3,C693	1.128806	3	3.883281
	Capacitor	C524,C53 3	1.128806	2	2.664608
	Capacitor	C452	1.128806	1	1.418485
	Capacitor	C127,C20 7,C359, C377,C37 8,C379, C395,C39 6,C400, C413,C41 4,C417, C418,C46 5,C466, C470,C47 1,C472, C664,C66 5,C667,C8 5, C96	1.128806	23	27.315400

**Reliability Prediction
Summary**

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Capacitor	C24,C241, C273,C28 9, C296,C37 1,C381, C567,C73 8	1.128806	9	11.005528
	Capacitor	C336,C34 0,C345, C346,C34 7,C353, C360,C36 5,C374, C383,C38 4,C392, C401,C40 3,C406, C409,C41 0,C411, C416,C41 9,C420, C421,C42 3,C426, C427,C42 8,C430, C432,C43 3,C434, C436,C43 8,C442, C443,C44 4,C445, C446,C44 7,C449, C451,C45 3,C455, C456,C45 7,C458, C460,C46 1,C476,	1.128806	63	73.353806

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Capacitor	C101,C102,C120,C121,C168,C184,C231,C239,C247,C251,C260,C283,C301,C335,C338,C344,C354,C361,C362,C373,C376,C394,C399,C402,C404,C408,C415,C422,C424,C435,C439,C440,C441,C450,C462,C463,C467,C468,C473,C484,C485,C491,C494,C498,C499,C500,C503,C504,C	1.128806	66	76.792914
	Capacitor	C100,C318,C330,C331,C332,C333,C334,C337,C355,C356,C363,C364,C366,C382,C398,C412,C451,C514,C541,C559,C571,C64,C65,C68,C69,C99	1.128806	26	30.787345

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Capacitor	C106,C11, C119,C12 9, C141,C14 5,C159, C172,C17 7,C178, C179,C19 3,C199, C218,C22 2,C234, C269,C27 2,C285, C287,C30 4,C323, C324,C32 5,C368, C386,C40 5,C429, C459,C48, C492,C49 3, C495,C49 6,C520, C530,C53 1,C532, C540,C54 2,C544, C547,C55 2,C558, C568,C57 2,C581, C610,C6	1.128806	63	73.353806
	Capacitor	C286,C30 2,C303,C6 0	1.128806	4	5.079407
	Capacitor	C115,C15 6,C18,C23 2, C266,C28, C282,C29 8, C299,C30 7,C308,C3 5, C357,C37 0,C39,C51 1, C528	1.128806	17	20.352794
	Inductor	L18	4.944252	1	6.461578
	Inductor	L17	4.944252	1	6.461578
	Inductor	L14	4.944252	1	6.461578
	Inductor	L4	9.846566	1	12.868348

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Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Inductor	L5	4.944252	1	6.461578
	Inductor	FB16	4.944252	1	6.461578
	Inductor	FB19,FB2 2,FB29, FB30	4.944252	4	22.772366
	Inductor	FB20,FB2 4,FB25, FB27	4.944252	4	22.772366
	Inductor	FB12,FB1 3,FB26	4.944252	3	17.432754
	Inductor	FB23,FB3 1,FB32,FB 6	4.944252	4	22.772366
	Inductor	FB1	4.944252	1	6.461578
	Inductor	FB10,FB1 7,FB33,FB 7, FB8,FB9	4.944252	6	33.271337
	Inductor	FB2,FB3,F B4	4.944252	3	17.432754
	Inductor	FB14,FB1 8	4.944252	2	12.019077
	Inductor	FB11,FB4 0	4.944252	2	12.019077
	Inductor	Y2,Y6	4.944252	2	12.019077
	Inductor	Y4	4.944252	1	6.461578
	Miscellaneous	D26,D27, D28,D29	19.200000	4	227.882136
	Semiconductor	Q47	22.463360	1	31.602965
	Semiconductor	Q11,Q12, Q16,Q22, Q23,Q24, Q28,Q29, Q33,Q34, Q38,Q39, Q44,Q46, Q48,Q49, Q52,Q8	22.463360	22	535.528859
	Integrated Circuit	U37	43.803003	1	85.184662
	Integrated Circuit	U25,U3	43.803003	2	146.310248
	Integrated Circuit	U68	454.214139	1	883.320203
	Integrated Circuit	U42	43.803003	1	85.184662
	Integrated Circuit	U62	43.803003	1	85.184662
	Integrated Circuit	U12	117.926734	1	229.334706
	Integrated Circuit	U51	43.803003	1	85.184662
	Integrated Circuit	U56	43.803003	1	85.184662
	Integrated Circuit	U59	43.803003	1	85.184662
	Integrated Circuit	U63	43.803003	1	85.184662
	Integrated Circuit	U53	43.803003	1	85.184662

**Reliability Prediction
Summary**

File Name: RTC-1200SK.rfp
Assembly: 96971200S0-D
Ref Des:
Description:

Failure Rate: 15048.477624
MTBF (hrs): 66,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
	Integrated Circuit	U101,U52, U54,U81, U82,U83, U92	43.803003	7	415.191054
	Integrated Circuit	U79	43.803003	1	85.184662
	Integrated Circuit	U69	43.803003	1	85.184662
	Integrated Circuit	U67	43.803003	1	85.184662
	Integrated Circuit	U45	43.803003	1	85.184662
	Integrated Circuit	U19	43.803003	1	85.184662
	Integrated Circuit	U16,U65, U72	43.803003	3	203.118269
	Integrated Circuit	U20	43.803003	1	85.184662
	Integrated Circuit	U98	43.803003	1	85.184662
	Integrated Circuit	U48	43.803003	1	85.184662
	Integrated Circuit	U29,U77, U78	43.803003	3	203.118269