

**File Name:** AL051-BC-E3950.rfp

**System:** 770-AL0511-200G

**Ref Des:**

**Calculation Model:** Telcordia Issue 2



**MTBF (hrs):** 213,436

**Failure Rate:** 4685.25

**Temperature:** 60

**Environment:** GB, GC - Ground Benign, Controlled

Assembly Name	Part Number	Quantity	Failure Rate (Fit)	MTBF (Hrs)
AL051-BC-E3950	770-AL0511-200G	1	4685.25	213,436

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Assembly: 770-AL0511-200G

Ref Des:

Calculation Model: Telcordia Issue 2



MTBF (hrs): 213,436

Failure Rate: 4685.2514

Temperature: 60

Environment: GB, GC - Ground Benign, Controlled

Part Number	Description	Unit Failure Rate	Quantity	Total Failure Rate
113-500000-210G	IC TTL,Single 2-Input Positive-NAND Gate,SN74LVC1G00DCKR/SC70-5(TI)RoHS	43.5064	1	65.4416
113-500007-210S	IC TTL,Single Buffer/Driver,SN74LVC1G07DCKR/SC70(TI)	43.5064	1	65.4416
113-500008-210G	IC TTL,Single 2-Input Positive-AND Gate,SN74LVC1G08DCKR/SC70-5(TI)RoHS	43.5064	5	265.7459
113-833306-400G	IC TTL,Dual FET Bus Switch,SN74CB3Q3306ADCUR/VSSOP8(US8-DCU) (TI)RoHS	43.5064	2	117.8032
113-906408-400G	IC LOW-VOLTAGE 8-BIT I2C AND SMBus I/O EXPANDER,UQFN16, TCA6408ARSVR(TI)RoHS	43.5064	1	65.4416
121-000104-420G	IC 4-BIT BIDIRECTIONAL VOLTAGE-LEVEL TRANSLATOR,NTS0104GU12/XQFN12(NXP) RoHS	43.5064	7	361.4168
121-000204-400G	4-Bits Bidirectional Multi-Voltage Level Translator,LSF0204RUTR/UQFN12(TI)RoHS	43.5064	1	65.4416
121-009406-200G	IC DUAL BIDIRECTIONAL I <sup>2</sup> C-bus and SMBus TRANSLATOR,TCA9406DCUR/micro SO8(TI)RoHS	43.5064	2	117.8032
121-081439-400G	IC RS232/RS422/RS485 Multiprotocol Transceivers,F81439N/TQFN40(FINTEK)RoHS	43.5064	1	65.4416
123-100341-200G	IC OP Amplifier,LMV341IDCK/SC70-6(TI)RoHS	43.5064	1	65.4416
135-301004-201G	EEPROM 8K(1024*8)M24C08-WMN6TP/SO-8(ST) RoHS	18.4992	1	28.7152
135-301282-210G	SPI SERIAL FLASH 128Mbit,W25Q128FWSIQ/SOIC-8 (WINBOND)RoHS	18.4992	1	28.7152
136-115090-400G	Flash 8-Bit Microcontroller PIC16F1509-I/ML/QFN-20 (MICROCHIP)RoHS	18.4992	1	28.7152
141-003460-403G	eDP to LVDS bridge PTN3460BS/F6,HVQFN56(NXP) RoHS	43.5064	1	65.4416
141-006850-401G	IC Synchronous Buck Converter,4.5-26Vin,12A,NB685AGQ/QFN16(MPS)RoHS	43.5064	1	65.4416
141-029390-403G	IC Controller,Multi-Rail PWM for Intel IMVP8,MP2939GQK-Z/QFN-48,D/C after 1650(MPS) RoHS	43.5064	1	65.4416
141-232120-400G	IC PCIE 3.0 Switch 2:1 Mux/DeMux,PI3PCIE3212ZBE/TQFN-20(PERICOM) RoHS	43.5064	1	65.4416
141-262001-200G	AUDIO CODEC ALC262-VC2-GR/LQFP48(REALTEK) RoHS	43.5064	1	65.4416
141-562150-400G	IC Synchronous Step-down Converter,TPS56C215RNN/VQFN-18(TI)RoHS	43.5064	3	168.0611
141-620850-200G	IC Synchronous Buck Converter,2.5-6,3A,TLV62085RLT/VSON-7(TI)RoHS	43.5064	3	168.0611
147-002110-200G	IC CHIP,Giga LAN CTRL,WGI211AT SLJXZ/QFN64 (INTEL)RoHS	43.5064	2	117.8032
147-065160-200G	IC Converter,Single Chip DisplayPort to VGA with Embedded MCU,IT6516BFN/CX-0068(R)/QFN-32 (ITE)RoHS	43.5064	1	65.4416
147-818030-200G	IC CHIP,F81803U-I/TQFP64(FINTEK)RoHS	43.5064	1	65.4416

File Name: AL051-BC-E3950.rfp

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Part Number	Description	Unit Failure Rate	Quantity	Total Failure Rate
171-205200-210S	DIODE Schottky ,30V ,200mA ,IR=1uA@V R=10V ,SCS520S-TG/SOD-523(WILLAS)	2.7742	12	36.8401
171-215817-213G	DIODE Schottky,SMA,FM5817P-T-FM/DO214AC (FMS)RoHS	2.7742	1	3.8355
171-230502-200G	DIODE ESD Protection,VRWM=5.0V,IRM=100nA,VESD=10KV,SM T,SOT883,PESD5V0U2BM(NXP)RoHS	2.7742	1	3.8355
171-364212-200G	DIODE TVS VRWM:-12V~12V,AZ4212-01G.R7G/SOD -123(AMAZING)RoHS	2.7742	1	3.8355
171-404001-200S	DIODE 4-CHANNEL ESD PROTECTION,TPD4E001DBVR/SOT23-6(TI)	43.5064	2	117.8032
171-404010-200S	DIODE 4-CHANNEL ESD PROTECTION,TPD4S010DQAR/SON-DQA10(TI)	43.5064	5	265.7459
171-450150-200G	DIODE Zener,15V,UDZS 15B/SOD323(ROHM)RoHS	2.7742	1	3.8355
172-223904-400G	TRANSISTOR Dual NPN,MBT3904DW1T1G/SOT-363 (ON)RoHS	7.9962	3	29.5571
172-223906-207S	TRANSISTOR PNP,PMBS3906/SOT23(NXP)	7.9962	1	11.2496
172-300612-200G	MOSFET Dual N-Ch,VDS:30V,VGS:±20V,ID:100mA,@4V,RDS:8Ω,EM 6K1GT2R/SOT-563(ROHM)RoHS	17.9506	15	300.8483
172-301402-200G	MOSFET Dual N-Ch VDS:20V,ID:9.5A,VGS:±12V,@4.5V,RDS:14mΩ,EMZ F14R02W/8-DFN(3x3)(EXCELLIANCE)RoHS	17.9506	1	26.4362
172-304402-200G	MOSFET P-Ch,VDS:-20V,ID:-4A,VGS:±12V,@-4.5V,RDS:44mΩ,EMF44P02J/SOT-23(EXCELLIANCE) HF	17.9506	1	26.4362
172-304435-200G	MOSFET P-Ch,VDS:-30V,ID:-11A,VGS:±25V,@-4.5V,RDS:36mΩ,AP4435GYT-HF/PMPAK3x3 (APEC)/HF	17.9506	2	47.8105
172-304438-200G	MOSFET N-Ch,VDS:30V,ID:13.7A,VGS:±20V,@-4.5V,RDS:18mΩ,AP4438GYT-HF/PMPAK3x3(APEC) HF	17.9506	1	26.4362
172-385301-200G	MOSFET N-Ch,VDS:20V,ID:5A,VGS:±10V,at 4.5V RDS:23mΩ,CSD85301Q2/WSN-8(TI)RoHS	17.9506	1	26.4362
172-886901-200G	DrMOS Power Stage MP86901-AGQT-Z/TQFN13 (MPS)RoHS	17.9506	1	26.4362
172-886901-210G	DrMOS Power Stage MP86901-CGLT-Z/TQFN21 (MPS)RoHS	17.9506	1	26.4362
174-210010-500S	LED,RED,SMD0805,17-21VRC/TR8(HT)(EVERLIGHT)	4.2279	1	5.5461
213-150330-200C	MLCC 3.3pF/50V,NPO,C(0.25pF),SMD,0402,(None JP)RoHS	0.2235	2	0.5277
213-151005-120C	MLCC 10pF/50V,NPO,J(5%),SMD 0201(None JP) RoHS	0.2235	3	0.7690
213-151505-200C	MLCC 15pF/50V,NPO,J(5%),SMD,0402,(None JP) RoHS	0.2235	2	0.5277
213-151805-200C	MLCC 18pF/50V,NPO,J(5%),SMD,0402,(None JP) RoHS	0.2235	2	0.5277
213-152205-110C	MLCC 22pF/25V,NPO,J(5%),SMD 0201(None JP) RoHS	0.2235	1	0.2809

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Part Number	Description	Unit Failure Rate	Quantity	Total Failure Rate
213-152215-200C	MLCC 221P/50V,NPO,J(5%),SMD,0402,(None JP) RoHS	0.2235	6	1.4781
213-152705-200C	MLCC 27pF/50V,NPO,J(5%),SMD,0402,(None JP) RoHS	0.2235	4	1.0059
213-152715-200C	MLCC 271P/50V,NPO,J(5%),SMD,0402,(None JP) RoHS	0.2235	1	0.2809
213-153319-200C	MLCC 331P/50V,X7R,K(10%),SMD,0402,(None JP) RoHS	0.2235	10	2.4121
213-155605-200C	MLCC 56pF/50V,NPO,J(5%),SMD,0402,(None JP) RoHS	0.2235	1	0.2809
213-156805-200C	MLCC 68pF/50V,NPO,J(5%),SMD,0402,(None JP) RoHS	0.2235	2	0.5277
213-158205-200C	MLCC 82pF/50V,NPO,J(5%),SMD,0402,(None JP) RoHS	0.2235	1	0.2809
213-251028-200C	MLCC 102P/50V,X7R,K(10%),SMD,0402,(None JP) RoHS	0.2235	4	1.0059
213-251038-200C	MLCC 103P/16V,X7R,K(10%),SMD,0402,(None JP) RoHS	0.2235	3	0.7690
213-251038-250C	MLCC 103P/50V,X7R,K(10%),SMD,0402,(None JP) RoHS	0.2235	1	0.2809
213-251039-130C	MLCC 103P/10V,X7R,K(10%),SMD,0201,(None JP) RoHS	0.2235	10	2.4121
213-251049-130J	MLCC 104P/10V,X5R,K(10%),SMD,0201,(JP)RoHS	0.2235	135	30.8279
213-251049-200J	MLCC 104P/16V,X7R,K(10%),SMD,0402,(JP)RoHS	0.2235	34	7.9263
213-251049-270J	MLCC 104P/25V,X5R,K(10%),SMD,0402,(JP)RoHS	0.2235	6	1.4781
213-251049-320J	MLCC 104P/50V,X7R,K(10%),SMD,0603,(JP)RoHS	0.2235	1	0.2809
213-251049-330J	MLCC 104P/25V,X7R,K(10%),SMD,0603,(JP)RoHS	0.2235	3	0.7690
213-251059-109G	MLCC 105P/6.3V,X5R,K(10%),SMD,0201,CC0201KRX5R5BB105(YAGEO) RoHS	0.2235	20	4.7208
213-251059-200J	MLCC 105P/6.3V,X5R,K(10%),SMD,0402,(JP)RoHS	0.2235	13	3.1075
213-251059-220J	MLCC 105P/10V,X5R,K(10%),SMD,0402,(JP)RoHS	0.2235	1	0.2809
213-251059-230J	MLCC 105P/16V,X5R,K(10%),SMD,0402,(JP)RoHS	0.2235	21	4.9505
213-251059-330J	MLCC 105P/25V,X5R,K(10%),SMD,0603,(JP)RoHS	0.2235	2	0.5277
213-251068-200J	MLCC 106P/6.3V,X5R,M(20%),SMD,0402,(JP)RoHS	0.2235	37	8.6110
213-251068-300J	MLCC 106P/6.3V,X5R,M(20%),SMD,0603,(JP)RoHS	0.2235	4	1.0059
213-251069-320J	MLCC 106P/10V,X5R,K(10%),SMD,0603,(JP)RoHS	0.2235	8	1.9464
213-252239-200C	MLCC 223P/25V,X7R,K(10%),SMD,0402,(None JP) RoHS	0.2235	1	0.2809
213-252249-310C	MLCC 224P/10V,X7R,K(10%),SMD,0603,(None JP) RoHS	0.2235	1	0.2809
213-252249-330C	MLCC 224P/25V,X7R,K(10%),SMD,0603,(None JP) RoHS	0.2235	1	0.2809
213-252259-200J	MLCC 225P/6.3V,X5R,M(20%),SMD,0402,(JP)RoHS	0.2235	10	2.4121
213-252268-310J	MLCC 226P/6.3V,X5R,M(20%),SMD,0603,(JP)RoHS	0.2235	53	12.2547
213-252269-510J	MLCC 226P/6.3V,X5R,M(20%),SMD,0805,(JP)RoHS	0.2235	4	1.0059
213-253938-200C	MLCC 393P/10V,X7R,K(10%),SMD,0402,(None JP) RoHS	0.2235	2	0.5277

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Temperature: 60

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Part Number	Description	Unit Failure Rate	Quantity	Total Failure Rate
213-254715-200C	MLCC 471P/50V,NPO,J(5%),SMD,0402,(None JP) RoHS	0.2235	8	1.9464
213-254739-210C	MLCC 473P/16V,X7R,K(10%),SMD,0402,(None JP) RoHS	0.2235	3	0.7690
213-254758-210J	MLCC 475P/6.3V,X5R,M(20%),SMD,0402,(JP)RoHS	0.2235	5	1.2427
213-254759-320C	MLCC 475P/10V,X5R,K(10%),SMD,0603,(None JP) RoHS	0.2235	4	1.0059
213-254759-510J	MLCC 475P/25V,X5R,K(10%),SMD,0805,(JP)RoHS	0.2235	5	1.2427
213-351068-510J	MLCC 106P/25V,X7S,M(20%),SMD,0805,(JP)RoHS	0.2235	8	1.9464
217-301078-325G	POLYMER(TAN) CAP 100uF/6.3V,40mΩ,1.8A,SMD,B3528,M (20%),T520B107M006ATE040(KEMET)RoHS	1.3266	3	4.7073
217-302278-326G	POLYMER(TAN)CAP 220uF/6.3V,45mΩ,1700mA,105°C/2000H,M (20%),B3528(1.9),T520B227M006ATE045(KEMET) RoHS	1.3266	3	4.7073
217-304768-725G	POLYMER(TAN) CAP,47uF/16V,70mΩ,1600mA,SMD,V7343- 20,105°C/2000H,M(20%),T520V476M016ATE070 (KEMET)RoHS	1.3266	4	6.1444
223-015122-610G	CHOKE 0.15uH,M (20%),RDC ≤ 0.9mΩ,Idc ≤ 35A,Isat ≤ 41A,SMD, (7.6*6.6*2.8),CMME063T-R15MS0R907(CYNTEC) RoHS	1.3824	1	1.8067
223-015222-610G	CHOKE 1.5uH,M (20%),RDC ≤ 15mΩ,Irms=9A,Isat=16A,SMD, (7.3*6.6*3.0),MCS0630-1R5MN2(PDC)RoHS	1.3824	1	1.8067
223-015223-110G	CHOKE 1.5uH,M (20%),RDC ≤ 4.2mΩ,Irms=16A,Isat=21A,SMD, (11.5*10.3*4),MCS1040-1R5MN1(PDC)RoHS	1.3824	1	1.8067
223-036121-700G	CHOKE 0.36uH,M (20%),DCR=12mΩ,Irms:9A,Isat:11A,SMD (4.5*4*1.8),GSTD4020PJ-R36M(GOTREND)RoHS	1.3824	1	1.8067
223-047120-820G	CHOKE 0.47uH,M (20%),RDC ≤ 39mΩ,Irms=3.5A,SMD, (2.5x2x1.2),AWP252012AF-R47M(TAI TECH)RoHS	1.3824	3	4.8743
223-047122-620G	CHOKE 0.47uH,M (20%),RDC ≤ 4mΩ,Idc=17.5A,Isat=26A,SMD, (7.3x6.6x3),PCMC063T-R47MN(CYNTEC)RoHS	1.3824	1	1.8067
223-368122-600S	CHOKE 0.68uH,M (20%),RDC=5mΩ,Idc=15.5A,Isat=25A,SMD (7.4*6.9*3.0),GSTD6030PE-R68M(GOTREND)	1.3824	1	1.8067
223-410040-501S	COMMON CHOKE Z ≥ 90Ω,M (20%),RDC ≤ 0.35Ω,Idc ≤ 330mA,SMD, (2.05*1.25*1.2),CMM21T-900M-N(CHILISIN)	1.3824	2	3.3606
223-490090-500S	COMMON CHOKE USB3.0,90Ω,60-100Ω,350mA (Max),SMD0805(20*12mm),GLECM2012B-900QT (GOTREND)	1.3824	4	6.3673

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223-523000-410G	CM FILTER Cd=0.25pF, Rs=3Ω, SMD (1.57*1.17*0.57), PCMF2USB3S/WLCSP10(NXP) RoHS	1.3824	2	3.3606
231-107168-200G	REGULATOR 0.8A, GS7168TD-R/TDFN8(GSTK)HF	151.1309	1	293.9075
231-111700-250G	REGULATOR 1A, Adjustable, SMD, LD1117AG-AD-AB3-A-R/SOT89(UTC)RoHS	151.1309	1	293.9075
241-219206-330G	X'TAL 19.2MHz, 12pF, ±30ppm, ESR:50Ω (Max), TOPR=-40°C ~+105°C, SMD3225 (4PAD), 7M19200021(TXC)RoHS	3.2000	1	6.9898
241-225006-340G	X'TAL 25MHz, 18pF, ±10ppm, TOPR=-40°C ~+85°C, SMD3225(4PAD), 7M25090002(TXC)RoHS	3.2000	2	18.8238
241-432773-312G	X'TAL 32.768kHz, 12.5pf, 20ppm, TOPR=-40°C ~+85°C, SMD3215(2PAD), CM315D 32.768KDZF (CITIZEN)RoHS	3.2000	1	6.9898
242-248006-200G	OSC 48Mhz, 3.3V, 15pf, 25ppm, TOPR=-40°C ~+85°C, SMD2520(4PAD), FCO-236A 48.000MAC (FUJICOM)RoHS	14.0000	1	42.3449
251-160808-083S	BEAD CORE 160808 80Ω, 300mA, 25%, SMT0603, SBK160808T-800Y-N (CHILISIN)	1.3824	2	3.3606
251-160808-615S	BEAD CORE 160808 600Ω, 1A, 25%, SMT0603, PBY160808T-601Y-N (CHILISIN)	1.3824	1	1.8067
251-647000-301S	BEAD CORE 160808 47Ω, 400mA, 25%, SMT0603, SBK160808T-470Y-N (CHILISIN)	1.3824	7	10.7661
251-915470-200G	FERRITE BEAD 47Ω, 300mA, 25%, BLM15BB470SN1D/0402(MURATA) RoHS	1.3824	3	4.8743
253-100115-501S	POLY SWITCH 1.1A, 6V, SMT0805, 0805L100 (LITTELFUSE)	0.4000	4	2.1022
253-100155-604S	POLY SWITCH 1.5A/8V, SMD1206 TYPE PTC, 1206L150THWR(LITTELFUSE)	0.4000	2	1.1579
253-105000-610G	FUSE 5A/32V SMD3216(1206), 0466005.NRHF (LITTELFUSE)RoHS	0.4000	1	0.6546
261-361515-200C	RES NET 150Ω 8P4R J(5%), 0402*4, (None JP)RoHS	0.7122	2	1.8147
261-364725-200C	RES NET 4.7KΩ 8P4R J(5%), 0402*4, (None JP)RoHS	0.7122	1	0.9903
263-180005-100C	RES 0Ω, J(5%), SMD, 0201 (None JP)RoHS	0.7122	65	48.4553
263-180005-200C	RES 0Ω, J(5%), SMD, 0402, (None JP)RoHS	0.7122	30	22.8354
263-180005-300C	RES 0Ω, J(5%), SMD, 0603, (None JP)RoHS	0.7122	9	7.2148
263-180100-210C	RES 10Ω, F(1%), SMD, 0402, (None JP)RoHS	0.7122	3	2.6126
263-180100-310C	RES 10Ω, F(1%), SMD, 0603, (None JP)RoHS	0.7122	1	0.9903
263-180200-210C	RES 20Ω, F(1%), SMD, 0402, (None JP)RoHS	0.7122	1	0.9903
263-180220-110C	RES 22Ω, F(1%), SMD, 0201, (None JP)RoHS	0.7122	8	6.4686
263-180220-210C	RES 22Ω, F(1%), SMD, 0402, (None JP)RoHS	0.7122	3	2.6126
263-180470-210C	RES 47Ω, F(1%), SMD, 0402, (None JP)RoHS	0.7122	1	0.9903
263-180519-310C	RES 5.1Ω, F(1%), SMD, 0603, (None JP)RoHS	0.7122	1	0.9903
263-180680-210C	RES 68Ω, F(1%), SMD, 0402, (None JP)RoHS	0.7122	1	0.9903
263-180750-110C	RES 75Ω, F(1%), SMD, 0201, (None JP)RoHS	0.7122	5	4.1727

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263-181000-110C	RES 100Ω,F(1%),SMD,0201,(None JP)RoHS	0.7122	3	2.6126
263-181000-210C	RES 100Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	6	4.9423
263-181000-310C	RES 100Ω,F(1%),SMD,0603,(None JP)RoHS	0.7122	1	0.9903
263-181001-110C	RES 1KΩ,F(1%),SMD,0201,(None JP)RoHS	0.7122	20	15.4439
263-181001-210C	RES 1KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	7	5.7073
263-181001-310C	RES 1KΩ,F(1%),SMD,0603,(None JP)RoHS	0.7122	2	1.8147
263-181002-110C	RES 10KΩ,F(1%),SMD,0201,(None JP)RoHS	0.7122	67	49.9127
263-181002-210C	RES 10KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	17	13.2137
263-181003-110C	RES 100KΩ,F(1%),SMD,0201,(None JP)RoHS	0.7122	15	11.7222
263-181003-210C	RES 100KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	5	4.1727
263-181004-210C	RES 1MΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-181005-210C	RES 10MΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181022-210C	RES 10.2KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-181050-210C	RES 105Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-181053-210C	RES 105KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-181130-210C	RES 113Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181182-210C	RES 11.8KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181210-210C	RES 121Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181273-210C	RES 127KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181400-210C	RES 140Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181402-210C	RES 14KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181500-210C	RES 150Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	6	4.9423
263-181503-210C	RES 150KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181542-210C	RES 15.4KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181623-210C	RES 162KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	3	2.6126
263-181651-210C	RES 1.65KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181690-210C	RES 169Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-181691-210C	RES 1.69KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-181803-210C	RES 180KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	3	2.6126
263-182000-110C	RES 200Ω,F(1%),SMD,0201,(None JP)RoHS	0.7122	3	2.6126
263-182000-210C	RES 200Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-182001-210C	RES 2KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	3	2.6126
263-182002-110C	RES 20KΩ,F(1%),SMD,0201,(None JP)RoHS	0.7122	3	2.6126
263-182002-210C	RES 20KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	8	6.4686
263-182003-210C	RES 200KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-182004-210C	RES 2MΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-182050-210C	RES 205Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-182053-210C	RES 205KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-182200-210C	RES 220Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-182201-110C	RES 2.2KΩ,F(1%),SMD,0201,(None JP)RoHS	0.7122	6	4.9423
263-182202-110C	RES 22KΩ,F(1%),SMD,0201,(None JP)RoHS	0.7122	4	3.3970
263-182208-310C	RES 2.2Ω,F(1%),SMD,0603,(None JP)RoHS	0.7122	1	0.9903
263-182553-210C	RES 255KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-182612-210C	RES 26.1KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-182872-210C	RES 28.7KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-183000-310C	RES 300Ω,F(1%),SMD,0603,(None JP)RoHS	0.7122	1	0.9903

File Name: AL051-BC-E3950.rfp

Assembly: 770-AL0511-200G

Ref Des:

Calculation Model: Telcordia Issue 2



MTBF (hrs): 213,436

Failure Rate: 4685.2514

Temperature: 60

Environment: GB, GC - Ground Benign, Controlled

Part Number	Description	Unit Failure Rate	Quantity	Total Failure Rate
263-183092-210C	RES 30.9KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-183300-210C	RES 330Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	4	3.3970
263-183301-110C	RES 3.3KΩ,F(1%),SMD,0201(None JP)RoHS	0.7122	12	9.4759
263-183301-210C	RES 3.3KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	4	3.3970
263-183302-110C	RES 33KΩ,F(1%),SMD,0201(None JP)RoHS	0.7122	4	3.3970
263-183303-210C	RES 330KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-183305-100C	RES 33Ω,J(5%),SMD,0201(None JP)RoHS	0.7122	18	13.9580
263-183651-210C	RES 3.65KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	4	3.3970
263-183901-210C	RES 3.9KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-183922-210C	RES 39.2KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-184020-210C	RES 402Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	3	2.6126
263-184122-210C	RES 41.2KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-184532-210C	RES 45.3KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-184701-110C	RES 4.7KΩ,F(1%),SMD,0201,(None JP)RoHS	0.7122	47	35.3123
263-184701-210C	RES 4.7KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	5	4.1727
263-184702-110C	RES 47KΩ,F(1%),SMD,0201,(None JP)RoHS	0.7122	8	6.4686
263-184750-210C	RES 475Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-184872-210C	RES 48.7KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-184990-210C	RES 499Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-184991-210C	RES 4.99KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-184992-210C	RES 49.9KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-185102-210C	RES 51KΩ,F(1%),SMD,0402(None JP)RoHS	0.7122	4	3.3970
263-185110-210C	RES 511Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-185112-210C	RES 51.1KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-185230-210C	RES 523Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-185600-210C	RES 560Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-185602-210C	RES 56KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-185621-210C	RES 5.62KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-186040-210C	RES 604Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-186049-210C	RES 60.4Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-186981-210C	RES 6.98KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-187502-210C	RES 75KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-187870-210C	RES 787Ω,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-188062-210C	RES 80.6KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-188201-210C	RES 8.2KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-188459-210C	RES 84.5Ω,F(1%),SMD,0402 (None JP)RoHS ( RALEC)	0.7122	1	0.9903
263-188661-210C	RES 8.66KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-189092-210C	RES 90.9KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-189312-210C	RES 93.1KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-189531-210C	RES 9.53KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	2	1.8147
263-189761-210C	RES 9.76KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
263-189762-210C	RES 97.6KΩ,F(1%),SMD,0402,(None JP)RoHS	0.7122	1	0.9903
273-100402-301S	THERM RES 10KΩ,J(5%),SMD,0603, (B25/85=3435,3%),TSM1A103J34D3RZ(TKS)	5.1159	2	17.1593
342-112003-210G	MINI DISPLAYPORT,20pin,F,0.6mm,R/A,30u",WMDR -20FEL1PH4(WIN WIN)RoHS	10.7191	1	18.5590

File Name: AL051-BC-E3950.rfp

Assembly: 770-AL0511-200G

Ref Des:

Calculation Model: Telcordia Issue 2



MTBF (hrs): 213,436

Failure Rate: 4685.2514

Temperature: 60

Environment: GB, GC - Ground Benign, Controlled

Part Number	Description	Unit Failure Rate	Quantity	Total Failure Rate
342-310022-110G	Screw CONN. Terminal Block,Green,2Pos,300V,16A,PIT:5.0mm,MB612-50002(DECA) RoHS	10.7191	1	18.5590
343-111514-110G	DSUB CONN 15SA,90D,FASTEN SCREW,G/F,Blue,,D4324-15F-422B(XIAN YI)RoHS	10.7191	1	18.5590
343-500642-111G	Giga LAN CONN RJ45 30μ,W/Transformer&LED,24-000939N13-1(UDE)RoHS	10.7191	2	32.4809
343-503600-100S	USB 3.0*2 ,A Type,30u,UEA1112C-8FS6-4F (FOXCONN)	10.7191	1	18.5590
344-002003-600G	Mini JUMPER BLACK 2.0mm,200-72-PBGB03 (PINREX)RoHS	10.7191	1	18.5590
344-002003-610G	Mini JUMPER RED 2.0mm,200-72-PBGR0B(PINREX) RoHS	10.7191	1	18.5590
346-110320-100G	PIN PLUG 1*3,2.0mm,M,H=5.9mm,180D,DIP,W/BLACK JUMPER,22S-96-03GB01(PINREX)RoHS	10.7191	1	18.5590
346-120310-200G	PIN PLUG 2*3,1.27mm,H=5mm,V/T,SMD,JCL20161228019(V-STAR)RoHS	10.7191	1	18.5590
346-120320-800S	PIN PLUG 2*3,2.0mm,M,H=6.7mm,180D,SMT,W/CAP,222-97-03GBE1(R)(PINREX)	10.7191	1	18.5590
346-120511-200G	PIN PLUG 2*5,1.27mm,H=5mm,V/T,SMD,JCL20161228017(V-STAR)RoHS	10.7191	3	45.6252
346-220320-200G	PIN PLUG 2*3/2.0mm,90D,SMD,BLACK,22W-97-03GBBD(PINREX)RoHS	10.7191	1	18.5590
346-220520-200G	PIN PLUG 2*5/2.0mm,90D,SMD,22W-97-05GBBD (PINREX)RoHS	10.7191	1	18.5590
346-510223-102G	WAFER 1*2,2.0mm,M,H=6.1mm,180D,DIP,WHITE,721-81-02TW00(PINREX)RoHS	10.7191	1	18.5590
346-522040-200G	BOX HEADER 2*20,1.00mm,V/T,SMD,W100V40TP2 (V-STAR)RoHS	10.7191	1	18.5590
346-600750-101S	SATA3 CONNECTOR 7Pin,15u",180D,DIP,DARK BLUE,W/LOCK,LE18077-Z54D-4H(FOXCONN)	10.7191	1	18.5590
347-150051-210G	WAFER 1*5,1.25mm,M,H=3.45mm,90D,SMT,WHITE,0110-3221050(E-CALL)RoHS	10.7191	1	18.5590
348-220800-200S	SOCKET SPI 8Pin,GF,H=5.65mm,180D,SMT,ACA-SPI-004-K01(LOTES)	5.8468	1	9.5280
348-370750-240G	NGFF CONN 75P/0.5mm,H=8.5mm,B key,90D,BLACK,SMD,APCI0161-P002H(LOTES)HF	10.7191	1	18.5590
348-652047-210G	DDR-III SO DIMM 1*204P,10u,H=8.0mm 1.5V,SMD,RVS,AS0A626-H8RN-7H(FOXCONN) RoHS/HF	10.7191	1	18.5590
348-660522-200S	MINI PCI-EXPRESS 1*52,0.8mm,10u",F,H=9.9mm,90D,SMT,IVORY,GENRAL TYPE,AS0B226-S99Q-7H(FOXCONN)HF	5.8468	1	9.5280

File Name: AL051-BC-E3950.rfp

Assembly: 770-AL0511-200G

Ref Des:

Calculation Model: Telcordia Issue 2



MTBF (hrs): 213,436

Failure Rate: 4685.2514

Temperature: 60

Environment: GB, GC - Ground Benign, Controlled

Part Number	Description	Unit Failure Rate	Quantity	Total Failure Rate
622-010140-000G	BATTERY CR2032 3V 220mAh W/CABLE (L=150mm&TAPE),BIN-CR2032-I-CT-SL-PV-01(RE-ENERGY)RoHS	25.0000	1	34.9638
768-003460-100A	LVDS EDID PTN3460 File:dual.bin CL:0 04/01/2016 RoHS	18.4992	1	28.7152
143-10160I-402G	CPU Intel Atom x7-E3950 1.6GHz C/2M LH8066803102601 SR33P D0/FCBGA-1296(INTEL) RoHS	228.0000	1	228.0000
292-301000-500S	BUZZER 3V,100mA,12Ω,4Khz,85db,SMD (5*4.2mm),SMT-G5030A(KEPO)	600.0000	1	600.0000
314-AL0511-039G	PCB AL051 R.3 (12L HDI 230x92x1.6mm / 2 ) OSP (CIRCUITECH)RoHS	3.0000	1	3.0000