

# RELIABILITY REPORT





## Reliability Data Report Product Family R164

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LT1200 / LT1201 / LT1202 / LT1203 / LT1204 /  
LT1205 / LT1206 / LT1207 / LT1208 / LT1209 /  
LT1210 / LT1211 / LT1212 / LT1213 / LT1214 /  
LT1215 / LT1216 / LT1217 / LT1218 / LT1219 /  
LT1220 / LT1221 / LT1222 / LT1223 / LT1224 /  
LT1225 / LT1226 / LT1227 / LT1228 / LT1230 /  
LT1251 / LT1252 / LT1253 / LT1254 / LT1255 /  
LT1256 / LT1257 / LT1258 / LT1259 / LT1260 /  
LT1466 / LT1467 / LT1468 / LT1469 / LT1492 /  
LT1493 / LT1497 / LT1498 / LT1499 / LT1739 /  
LT1495 / LT1970 / RH1498

# Reliability Data Report

## Report Number: R164

Report generated on: Wed Aug 17 14:39:13 PDT 2016

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C) <sup>1</sup>	No. of FAILURES <sub>2,3</sub>
SIDEBRAZE	90	9201	9201	93	0
SSOP/TSSOP	2324	0018	1511	713	1
CERDIP	793	9113	0129	881	0
PLASTIC DIP	3606	9036	1216	7237	3
SOIC/MSOP	4505	9201	1518	4996	0
TO-220	77	9601	9601	431	0
FLATPACK	232	0318	0318	342	0
Totals	11,627	-	-	14,693	4

HIGHLY ACCELERATED STRESS TEST AT +130 DEG C / 85% RH					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+85°C) <sup>4</sup>	No. of FAILURES
SSOP/TSSOP	24	0020	0020	80	0
PLASTIC DIP	468	9221	0047	657	0
SOIC/MSOP	4609	9349	1439	5047	0
Totals	5,101	-	-	5,784	0

PRESSURE COOKER TEST AT 15 PSIG , +121 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	1915	0141	1453	517	0
SSOP/TSSOP	8070	9839	1511	717	0
PLASTIC DIP	9952	9501	0825	327	0
SOIC/MSOP	28721	9501	1518	1646	0
TO-220	1566	9607	1505	184	0
Totals	50,224	-	-	3,391	0

TEMP CYCLE FROM -65 TO 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
QFN/DFN	1298	0141	1453	1021	0
SSOP/TSSOP	8334	9839	1541	1939	0
CERDIP	20	9513	9513	2	0
PLASTIC DIP	6289	9127	0833	789	0
SOIC/MSOP	19830	9205	1452	3553	0
TO-220	2214	9607	1505	620	0
FLATPACK	51	0220	0605	5	0
Totals	38,036	-	-	7,929	0

(1) Assumes Activation Energy = 1.0 Electron Volts  
(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.71 FITS  
(3) Mean Time Between Failure in Years = 161109.48  
(4) Assumes 20X Acceleration from 85 °C to +130 °C  
Note 1: 1 FIT = 1 Failure in One Billion Hours.  
Note 2: HAST, Temp Cycle & Thermal Shock are subjected to J-STD-020 MSL Preconditioning

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<b>TEMP CYCLE FROM -65 TO 150 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE CYCLES</b>	<b>No. of FAILURES</b>
QFN/DFN	1298	0141	1453	1021	0
SSOP/TSSOP	8334	9839	1541	1939	0
CERDIP	20	9513	9513	2	0
PLASTIC DIP	6289	9127	0833	789	0
SOIC/MSOP	19830	9205	1452	3553	0
TO-220	2214	9607	1505	620	0
FLATPACK	51	0220	0605	5	0
Totals	38,036	-	-	7,929	0
<b>THERMAL SHOCK FROM -65 TO 150 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE CYCLES</b>	<b>No. of FAILURES</b>
QFN/DFN	1168	0141	1453	951	0
SSOP/TSSOP	6817	9839	1451	1627	0
CERDIP	20	9513	9513	0	0
PLASTIC DIP	2475	9127	0244	575	0
SOIC/MSOP	11952	9205	1452	1866	0
TO-220	1057	9607	1505	382	0
FLATPACK	34	0220	0605	0	0
Totals	23,523	-	-	5,401	0
<b>HIGH TEMPERATURE BAKE AT 200 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS</b>	<b>No. of FAILURES</b>
SSOP/TSSOP	95	1452	1452	95	0
Totals	95	-	-	95	0
<b>HIGH TEMPERATURE BAKE AT 150 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS</b>	<b>No. of FAILURES</b>
QFN/DFN	842	0740	1349	842	0
SOIC/MSOP	10	1336	1336	1	0
Totals	852	-	-	843	0
<b>HIGH TEMPERATURE BAKE AT 175 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS</b>	<b>No. of FAILURES</b>
QFN/DFN	693	0740	0807	693	0
SSOP/TSSOP	76	1541	1541	76	0
TO-220	200	1242	1242	200	0
Totals	969	-	-	969	0