

# RELIABILITY REPORT





NOW PART OF



## Reliability Data Report Product Family R570

---

LT3905 / LT8300 / LT8301 / LT8302 /  
LT8303 / LT8304 / LT8309 / LT8315 /  
LT8330 / LT8331 / LT8335 / LT8390 /  
LT8391 / LT8601 / LT8602 / LT8606 /  
LT8607 / LT8608 / LT8609 / LT8610 /  
LT8611 / LT8612 / LT8613 / LT8614 /  
LT8616 / LT8619 / LT8620 / LT8640 /  
LT8641 / LT8697

# Reliability Data Report

## Report Number: R570

Report generated on: Mon Mar 05 11:06:26 PST 2018

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>
SOIC/MSOP	23374	1206	1648	6488	0
QFN/DFN	7021	1112	1651	6340	0
SOT	539	1206	1502	1800	0
Totals	30,934	-	-	14,628	0

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
SOIC/MSOP	864	1318	1646	2175	0
QFN/DFN	3934	1117	1706	9522	0
SOT	869	1141	1708	2916	0
Totals	5,667	-	-	14,613	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
SSOP/TSSOP	952	1504	1652	70	0
SOIC/MSOP	13497	1239	1715	924	0
QFN/DFN	9383	0227	1714	932	0
SOT	1090	1302	1710	147	0
Totals	24,922	-	-	2,073	0

TEMP CYCLE FROM -65 TO 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
SSOP/TSSOP	1576	1504	1652	316	0
SOIC/MSOP	14008	1240	1713	5071	0
QFN/DFN	16169	0227	1712	10672	0
SOT	1530	1141	1710	1149	0
Totals	33,283	-	-	17,208	0

THERMAL SHOCK FROM -65 TO 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
SSOP/TSSOP	954	1504	1652	234	0
SOIC/MSOP	13003	1240	1715	3746	0
QFN/DFN	9103	0227	1714	5648	0
SOT	1070	1141	1710	394	0
Totals	24,130	-	-	10,022	0

(1) Assumes Activation Energy = 0.7 Electron Volts  
(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.81 FITS  
(3) Mean Time Between Failure in Years = 140927.89  
(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

# Reliability Data Report

## Report Number: R570

Report generated on: Mon Mar 05 11:06:26 PST 2018

HIGH TEMPERATURE BAKE AT 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SOIC/MSOP	773	1308	1526	917	0
QFN/DFN	2441	1425	1704	2566	0
SOT	100	1611	1625	200	0
Totals	3,314	-	-	3,683	0

  

HIGH TEMPERATURE BAKE AT 125 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	100	1550	1550	2	0
Totals	100	-	-	2	0

  

HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SSOP/TSSOP	50	1524	1524	50	0
SOIC/MSOP	1196	1325	1640	1171	0
QFN/DFN	1633	0227	1550	1633	0
Totals	2,879	-	-	2,854	0