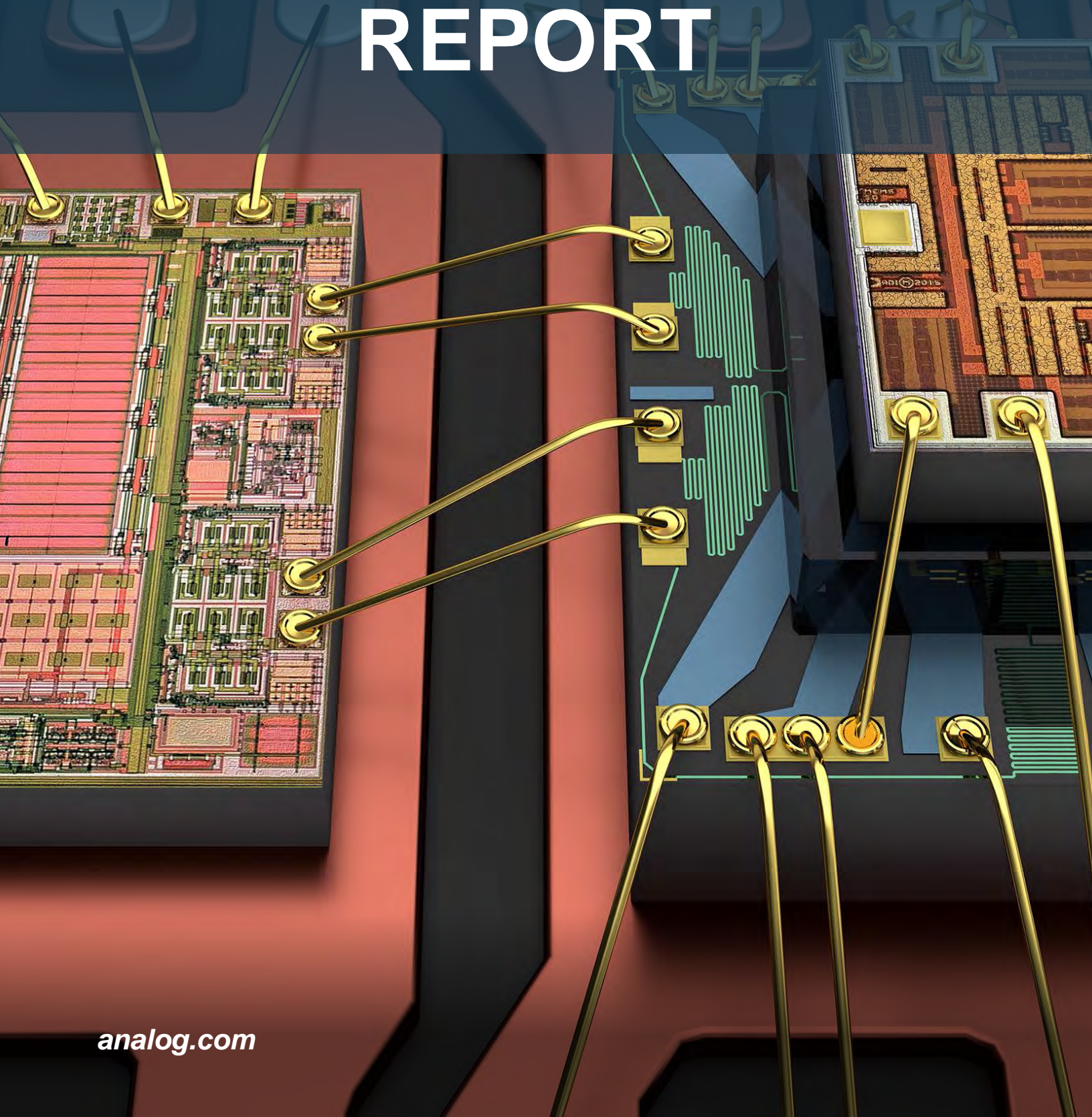


# RELIABILITY REPORT





# Reliability Data Report

## Product Family R062

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LTC1047 \ LTC1049 \ LTC1050 \  
LTC1051 \ LTC1052 \ LTC1053 \  
LTC1100 \ LTC1250 \ LTC7652

# Reliability Data Report

## Report Number: R062

Report generated on: Fri Apr 01 17:14:42 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 2, 3
HERMETIC	451	8449	9839	822	0
CERDIP	1407	8511	0127	2409	2
PLASTIC DIP	1894	8545	1214	2881	0
SOIC/MSOP	734	9834	1447	308	0
Totals	4,486	-	-	6,420	2

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
PLASTIC DIP	405	9049	9719	619	0
SOIC/MSOP	1742	9349	1348	2009	0
Totals	2,147	-	-	2,628	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
PLASTIC DIP	5871	9502	1102	241	0
SOIC/MSOP	6711	9501	1052	277	0
Totals	12,582	-	-	518	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
HERMETIC	40	8449	8810	7	0
CERDIP	30	8511	8545	0	0
PLASTIC DIP	10517	8736	1102	3005	0
SOIC/MSOP	6081	9146	1052	1146	0
Totals	16,668	-	-	4,158	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
PLASTIC DIP	3045	8915	0237	597	0
SOIC/MSOP	4096	9146	1052	757	0
Totals	7,141	-	-	1,354	0

- (1) Assumes Activation Energy = 0.7 Electron Volts  
 (2) Failure Rate Equivalent to +55 °C, 60% Confidence Level = 6.22 FITS  
 (3) Mean Time Between Failure in Years = 18358.46  
 (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: R062

Report generated on: Fri Apr 01 17:14:42 PDT 2016

HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SOIC/MSOP	299	0851	1402	274	0
Totals	299	-	-	274	0