

RELIABILITY REPORT





Reliability Data Report

Product Family R461

LTC1743 \ LTC1744 \ LTC2301 \ LTC2302 \ LTC2305 \ LTC2306 \
LTC2308 \ LTC2309 \ LTC2440 \ LTC2442 \ LTC2444 \ LTC2445 \
LTC2446 \ LTC2447 \ LTC2448 \ LTC2449 \ LTC2450 \ LTC2451 \
LTC2452 \ LTC2453 \ LTC2460 \ LTC2461 \ LTC2462 \ LTC2463 \
LTC2470 \ LTC2471 \ LTC2472 \ LTC2473 \ LTC2480 \ LTC2481 \
LTC2482 \ LTC2483 \ LTC2484 \ LTC2485 \ LTC2486 \ LTC2487 \
LTC2488 \ LTC2489 \ LTC2490 \ LTC2492 \ LTC2493 \ LTC2494 \
LTC2495 \ LTC2496 \ LTC2497 \ LTC2498 \ LTC2499 \ LTC2600 \
LTC2601 \ LTC2602 \ LTC2604 \ LTC2605 \ LTC2606 \ LTC2607 \
LTC2609 \ LTC2610 \ LTC2611 \ LTC2612 \ LTC2614 \ LTC2615 \
LTC2616 \ LTC2617 \ LTC2619 \ LTC2620 \ LTC2621 \ LTC2622 \
LTC2624 \ LTC2525 \ LTC2626 \ LTC2627 \ LTC2629 \ LTC2630 \
LTC2631 \ LTC2632 \ LTC2633 \ LTC2634 \ LTC2635 \ LTC2636 \
LTC2637 \ LTC2640 \ LTC2641 \ LTC2642 \ LTC2644 \ LTC2645 \
LTC2654 \ LTC2655 \ LTC2656 \ LTC2657

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Report generated on: Mon Aug 17 10:25:22 PDT 2015

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C) ¹	No. of FAILURES _{2, 3}
QFN/DFN	1760	0421	1010	1434	0
SSOP/TSSOP	1073	0213	0928	1034	0
SOIC/MSOP	782	0416	1352	573	0
SOT	240	0802	1030	427	0
Totals	3,855	-	-	3,468	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) ⁴	No. of FAILURES
QFN/DFN	296	0817	1206	570	0
Totals	296	-	-	570	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	2626	0440	1404	113	0
SSOP/TSSOP	1253	0226	1408	190	0
SOIC/MSOP	1228	0628	1412	158	0
SOT	4655	0710	1422	202	0
Totals	9,762	-	-	663	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
QFN/DFN	2431	0440	1404	588	0
SSOP/TSSOP	2126	0226	1408	693	0
SOIC/MSOP	1415	0628	1412	652	0
SOT	3857	0715	1413	614	0
Totals	9,829	-	-	2,547	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
QFN/DFN	2268	0440	1404	432	0
SSOP/TSSOP	1670	0329	1408	281	0
SOIC/MSOP	1417	0630	1412	653	0
SOT	3869	0713	1413	614	0
Totals	9,224	-	-	1,980	0

(1) Assumes Activation Energy = 0.7 Electron Volts
 (2) Failure Rate Equivalent to +55 °C, 60% Confidence Level = 3.42 FITS
 (3) Mean Time Between Failure in Years = 33411.13
 (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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HIGH TEMPERATURE BAKE AT 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	454	1002	1404	454	0
Totals	454	-	-	454	0
HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	154	0945	0947	154	0
SOIC/MSOP	50	0804	0810	50	0
SOT	74	1305	1334	74	0
Totals	278	-	-	278	0