



NOW PART OF



Reliability Data Report Product Family R570

LT3001 \ LT3002 \ LT3905 \ LT8210 / LT8253 \
LT8300 \ LT8301 \ LT8302 \ LT8303 \ LT8304 \
LT8309 \ LT8315 \ LT8316 \ LT8330 \ LT8331 \
LT8335 \ LT8336 \ LT8337 \ LT8361 \ LT8362 \
LT8364 \ LT8365 \ LT8386 \ LT8390 \ LT8391 \
LT8392 \ LT8550 \ LT8601 \ LT8602 \ LT8603 \
LT8606 \ LT8607 \ LT8608 \ LT8609 \ LT8610 \
LT8611 \ LT8612 \ LT8613 \ LT8614 \ LT8616 \
LT8619 \ LT8620 \ LT8640 \ LT8641 \ LT8642 \
LT8672 \ LT8697 \ LT8711

Reliability Data Report R570

Report generated on: Fri May 21, 2021

| • OPERATING LIFE TEST | | | | | |
|---|-------------|------------------|------------------|-----------------------|-----------------|
| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HRS (+125°C) | No. of FAILURES |
| SOIC/MSOP | 46,902 | 1206 | 1648 | 13,491 | 0 |
| QFN/DFN | 14,042 | 1112 | 1651 | 12,681 | 0 |
| SOT | 1,078 | 1206 | 1502 | 3,600 | 0 |
| LGA | 2,262 | 1842 | 2048 | 4,543 | 0 |
| SSOP/TSSOP | 231 | 1525 | 1613 | 643 | 0 |
| Totals | 64,515 | | | 34,958 | 0 |
| • BIASED HIGHLY ACCELERATED STRESS TEST AT +130°C/85%RH | | | | | |
| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HRS (+85°C) | No. of FAILURES |
| SOIC/MSOP | 1,776 | 1318 | 1646 | 4,535 | 0 |
| QFN/DFN | 7,868 | 1117 | 1706 | 19,044 | 0 |
| SOT | 1,738 | 1141 | 1708 | 5,833 | 0 |
| LGA | 4,118 | 1842 | 2048 | 12,385 | 0 |
| SSOP/TSSOP | 774 | 1526 | 1639 | 2,367 | 0 |
| Totals | 16,274 | | | 44,164 | 0 |
| • PRESSUR COOKER TEST AT 15 PSIG , +121 DEG C | | | | | |
| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HRS | No. of FAILURES |
| SOIC/MSOP | 26,994 | 1239 | 1715 | 1,849 | 0 |
| QFN/DFN | 18,766 | 0227 | 1714 | 1,865 | 0 |
| SOT | 2,180 | 1302 | 1710 | 295 | 0 |
| SSOP/TSSOP | 383 | 1504 | 1608 | 103 | 0 |
| Totals | 48,323 | | | 4,112 | 0 |
| • TEMPERATURE CYCLE FROM -65°C to +150°C | | | | | |
| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE CYCLES | No. of FAILURES |
| SOIC/MSOP | 28,016 | 1240 | 1713 | 10,142 | 0 |
| QFN/DFN | 32,338 | 0227 | 1712 | 21,344 | 0 |
| SOT | 3,060 | 1141 | 1710 | 2,298 | 0 |
| LGA | 12,128 | 1842 | 2048 | 8,051 | 0 |
| SSOP/TSSOP | 858 | 1526 | 1639 | 1,410 | 0 |
| Totals | 76,400 | | | 43,245 | 0 |
| • THERMAL SHOCK FROM -65°C to +150°C | | | | | |
| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE CYCLES | No. of FAILURES |
| SOIC/MSOP | 26,006 | 1240 | 1715 | 7,492 | 0 |
| QFN/DFN | 18,206 | 0227 | 1714 | 11,296 | 0 |
| SOT | 2,140 | 1141 | 1710 | 798 | 0 |
| LGA | 931 | 1850 | 2009 | 1,288 | 0 |
| SSOP/TSSOP | 310 | 1526 | 1608 | 392 | 0 |
| Totals | 47,593 | | | 21,266 | 0 |

| • HIGH TEMPERATURE BAKE +150°C | | | | | |
|--------------------------------|-------------|------------------|------------------|--------------|-----------------|
| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HRS | No. of FAILURES |
| SOIC/MSOP | 1,546 | 1308 | 1526 | 1,834 | 0 |
| QFN/DFN | 4,882 | 1425 | 1704 | 5,132 | 0 |
| SOT | 200 | 1611 | 1625 | 400 | 0 |
| LGA | 1,965 | 1848 | 2048 | 2,798 | 0 |
| SSOP/TSSOP | 288 | 1622 | 1642 | 576 | 0 |
| Totals | 8,881 | | | 10,740 | 0 |

| • HIGH TEMPERATURE BAKE +125°C | | | | | |
|--------------------------------|-------------|------------------|------------------|--------------|-----------------|
| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HRS | No. of FAILURES |
| QFN/DFN | 200 | 1550 | 1550 | 4 | 0 |
| Totals | 200 | | | 4 | 0 |

| • HIGH TEMPERATURE BAKE +175°C | | | | | |
|--------------------------------|-------------|------------------|------------------|--------------|-----------------|
| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HRS | No. of FAILURES |
| SOIC/MSOP | 2,392 | 1325 | 1640 | 2,342 | 0 |
| QFN/DFN | 3,266 | 0227 | 1550 | 3,267 | 0 |
| SSOP/TSSOP | 231 | 1526 | 1508 | 231 | 0 |
| Totals | 5,889 | | | 5,840 | 0 |

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55°C, 99% Confidence Level = 1.76 FITS

(3) Mean Time Between Failure in Years : 64909.27

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