Reliability Data Report
Product Family R518

LT3003 / LT3475 / LT3478 / LT3491 / LT3492 / LT3496 / LT3497 / LT3498 /
LT3517 / LT3518 / LT3519 / LT3590 / LT3591 / LT3592 / LT3593 / LT3595 /
LT3596 / LT3597 / LT3598 / LT3599 / LT3745 / LT3746 / LT3754 / LT3755 /
LT3756 / LT3760 / LT3761 / LT3791 / LT3796 / LT3956
### OPERATING LIFE TEST

<table>
<thead>
<tr>
<th>PACKAGE TYPE</th>
<th>SAMPLE SIZE</th>
<th>OLDEST DATE CODE</th>
<th>NEWEST DATE CODE</th>
<th>K DEVICE HRS (+125°C)</th>
<th>No. of FAILURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSOP/TSSOP</td>
<td>535</td>
<td>0640</td>
<td>1150</td>
<td>2090</td>
<td>0</td>
</tr>
<tr>
<td>SOIC/SOT/MSOP</td>
<td>384</td>
<td>0710</td>
<td>0917</td>
<td>1087</td>
<td>0</td>
</tr>
<tr>
<td>QFN/DFN</td>
<td>1795</td>
<td>0703</td>
<td>1041</td>
<td>2457</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>2,714</strong></td>
<td>-</td>
<td>-</td>
<td><strong>5,634</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

### HIGHLY ACCELERATED STRESS TEST AT +131 DEG C / 85% RH

<table>
<thead>
<tr>
<th>PACKAGE TYPE</th>
<th>SAMPLE SIZE</th>
<th>OLDEST DATE CODE</th>
<th>NEWEST DATE CODE</th>
<th>K DEVICE HRS (+85°C)</th>
<th>No. of FAILURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSOP/TSSOP</td>
<td>240</td>
<td>0946</td>
<td>1131</td>
<td>460</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>240</strong></td>
<td>-</td>
<td>-</td>
<td><strong>460</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

### PRESSURE COOKER TEST AT 15 PSIG , +121 DEG C

<table>
<thead>
<tr>
<th>PACKAGE TYPE</th>
<th>SAMPLE SIZE</th>
<th>OLDEST DATE CODE</th>
<th>NEWEST DATE CODE</th>
<th>K DEVICE HRS</th>
<th>No. of FAILURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>QFN/DFN</td>
<td>11137</td>
<td>0520</td>
<td>1122</td>
<td>1088</td>
<td>0</td>
</tr>
<tr>
<td>SSOP/TSSOP</td>
<td>4406</td>
<td>0550</td>
<td>1122</td>
<td>374</td>
<td>0</td>
</tr>
<tr>
<td>SOIC/SOT/MSOP</td>
<td>4757</td>
<td>0721</td>
<td>1122</td>
<td>253</td>
<td>0</td>
</tr>
<tr>
<td>TO-220</td>
<td>50</td>
<td>0813</td>
<td>0813</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>20,350</strong></td>
<td>-</td>
<td>-</td>
<td><strong>1,716</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

### TEMP CYCLE FROM -65 TO 150 DEG C

<table>
<thead>
<tr>
<th>PACKAGE TYPE</th>
<th>SAMPLE SIZE</th>
<th>OLDEST DATE CODE</th>
<th>NEWEST DATE CODE</th>
<th>K DEVICE CYCLES</th>
<th>No. of FAILURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>QFN/DFN</td>
<td>6184</td>
<td>0552</td>
<td>1122</td>
<td>2177</td>
<td>0</td>
</tr>
<tr>
<td>SSOP/TSSOP</td>
<td>4460</td>
<td>0550</td>
<td>1122</td>
<td>975</td>
<td>0</td>
</tr>
<tr>
<td>SOIC/SOT/MSOP</td>
<td>2780</td>
<td>0745</td>
<td>1117</td>
<td>678</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>13,424</strong></td>
<td>-</td>
<td>-</td>
<td><strong>3,830</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

### THERMAL SHOCK FROM -65 TO 150 DEG C

<table>
<thead>
<tr>
<th>PACKAGE TYPE</th>
<th>SAMPLE SIZE</th>
<th>OLDEST DATE CODE</th>
<th>NEWEST DATE CODE</th>
<th>K DEVICE CYCLES</th>
<th>No. of FAILURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>QFN/DFN</td>
<td>9609</td>
<td>0520</td>
<td>1122</td>
<td>2582</td>
<td>0</td>
</tr>
<tr>
<td>SSOP/TSSOP</td>
<td>4027</td>
<td>0550</td>
<td>1122</td>
<td>976</td>
<td>0</td>
</tr>
<tr>
<td>SOIC/SOT/MSOP</td>
<td>2856</td>
<td>0646</td>
<td>1117</td>
<td>422</td>
<td>0</td>
</tr>
<tr>
<td>TO-220</td>
<td>50</td>
<td>0813</td>
<td>0813</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>16,542</strong></td>
<td>-</td>
<td>-</td>
<td><strong>3,985</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

---

1. Assumes Activation Energy = 1.0 Electron Volts
2. Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.33 FITS
3. Mean Time Between Failure in Years = 350835.38
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 1 Preconditioning
### HIGH TEMPERATURE BAKE AT 150 DEG C

<table>
<thead>
<tr>
<th>PACKAGE TYPE</th>
<th>SAMPLE SIZE</th>
<th>OLDEST DATE CODE</th>
<th>NEWEST DATE CODE</th>
<th>K DEVICE HRS</th>
<th>No. of FAILURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>QFN/DFN</td>
<td>1413</td>
<td>0801</td>
<td>1021</td>
<td>1263</td>
<td>0</td>
</tr>
<tr>
<td>SSOP/TSSOP</td>
<td>461</td>
<td>0644</td>
<td>0831</td>
<td>461</td>
<td>0</td>
</tr>
<tr>
<td>SOIC/SOT/MSOP</td>
<td>150</td>
<td>0852</td>
<td>0852</td>
<td>75</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>2,024</strong></td>
<td>-</td>
<td>-</td>
<td><strong>1,799</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

### HIGH TEMPERATURE BAKE AT 175 DEG C

<table>
<thead>
<tr>
<th>PACKAGE TYPE</th>
<th>SAMPLE SIZE</th>
<th>OLDEST DATE CODE</th>
<th>NEWEST DATE CODE</th>
<th>K DEVICE HRS</th>
<th>No. of FAILURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>QFN/DFN</td>
<td>727</td>
<td>0713</td>
<td>1004</td>
<td>727</td>
<td>0</td>
</tr>
<tr>
<td>SSOP/TSSOP</td>
<td>415</td>
<td>0644</td>
<td>0831</td>
<td>415</td>
<td>0</td>
</tr>
<tr>
<td>SOIC/SOT/MSOP</td>
<td>200</td>
<td>0745</td>
<td>0745</td>
<td>200</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1,342</strong></td>
<td>-</td>
<td>-</td>
<td><strong>1,342</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>