**Industrial/Commercial Qualification Result**

**Objective:** 9568LL16 Design fix qual

**Freescale Part Name:** 9568LL16

**Technology:**
- **Pack:** 9568_9568_9568_9568
- **Design:** 9568_9568_9568_9568

**Pre-conditioning**
- **Die Size (in mm):**
  - **Part Name:** 9568LL16
  - **Technology:**
    - **Package:**
      - **Maskset #:**

**Final Test Sites:**
- **Vreg Bypassed:**
- **Part Operating Temp. Grade:**
- **Technology:**
  - **Package:**
    - **Maskset #:**

**HAST**
- **Temp. Grade:**
- **Stress Test Reference:**
  - **End Point:**
  - **Results:**

**HTOL**
- **Temp. Grade:**
- **Stress Test Reference:**
  - **End Point:**
  - **Results:**

**HTSL**
- **Temp. Grade:**
- **Stress Test Reference:**
  - **End Point:**
  - **Results:**

**Operational Life (EDR):**
- **Temp. Grade:**
- **Stress Test Reference:**
  - **End Point:**
  - **Results:**

**Early Life Failure Rate (ELFR):**
- **Temp. Grade:**
- **Stress Test Reference:**
  - **End Point:**
  - **Results:**

**Results**
- **Lot ID-(#Rej/SS):**
- **Revision #:**

**Comments**
- **Part Operating Temp. Grade:**
- **Technology:**
  - **Package:**
    - **Maskset #:**

**Process Control:**
- **Design Engr:**
- **Product Engr:**
- **PN(s):**
- **NPI PRQE Approval Signature & Date:**
- **PPE Approval (for NVM Endurance, Data Retention, and Operational Life (EDR))**
- **CAB Approval**
- **SPE Approval**
- **QA Approval**
- **Customer Approval & Date:**

**Tests Highlighted in Yellow Were Performed for this Study**

This testing was performed by Freescale Reliability Lab (TAN) unless otherwise noted in the Comments.
### TEST GROUP A - PROCESS RELIABILITY TESTS

<table>
<thead>
<tr>
<th>Stress Test</th>
<th>Reference</th>
<th>Test Conditions</th>
<th>End Point Requirements</th>
<th>Minimum Sample Size</th>
<th># of Lots</th>
<th>Total Units Including Spares</th>
<th>Results</th>
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**Test Objectives**
- Determine the capability of the process to meet or exceed specifications.
- Identify potential issues early in the process.

**Test Conditions**
- Temperature: 85°C ± 3°C
- Humidity: 85% ± 5% RH

**Data Collection**
- Data is collected during the test period.

**Results**
- Data is reviewed for compliance with specifications.

**Comments**
- Any deviations from specifications are documented.

### TEST GROUP B - QUALIFICATION TESTS

<table>
<thead>
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<th>Stress Test</th>
<th>Reference</th>
<th>Test Conditions</th>
<th>End Point Requirements</th>
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<th># of Lots</th>
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**Test Objectives**
- Verify the robustness of the package design.
- Confirm compatibility with expected operating conditions.

**Test Conditions**
- Temperature: 125°C ± 5°C
- Humidity: 85% ± 5% RH

**Data Collection**
- Data is collected during the test period.

**Results**
- Data is reviewed for compliance with specifications.

**Comments**
- Any deviations from specifications are documented.

### TEST GROUP C - PACKAGE ASSEMBLY INTEGRITY TESTS

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<th>Stress Test</th>
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**Test Objectives**
- Verify the integrity of the package assembly process.
- Confirm compatibility with expected operating conditions.

**Test Conditions**
- Temperature: 85°C ± 3°C
- Humidity: 85% ± 5% RH

**Data Collection**
- Data is collected during the test period.

**Results**
- Data is reviewed for compliance with specifications.

**Comments**
- Any deviations from specifications are documented.

### TEST GROUP D - DIE FABRICATION RELIABILITY TESTS

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**Test Objectives**
- Verify the reliability of the die fabrication process.
- Confirm compatibility with expected operating conditions.

**Test Conditions**
- Temperature: 125°C ± 5°C
- Humidity: 85% ± 5% RH

**Data Collection**
- Data is collected during the test period.

**Results**
- Data is reviewed for compliance with specifications.

**Comments**
- Any deviations from specifications are documented.

### TEST GROUP E - ELECTRICAL VERIFICATION TESTS

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**Test Objectives**
- Verify the electrical functionality of the die.
- Confirm compatibility with expected operating conditions.

**Test Conditions**
- Temperature: 85°C ± 3°C
- Humidity: 85% ± 5% RH

**Data Collection**
- Data is collected during the test period.

**Results**
- Data is reviewed for compliance with specifications.

**Comments**
- Any deviations from specifications are documented.

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**General Notes:**
- All test results are available to the customer upon request for new technologies.
- The data, test methods, calculations and internal criteria should be available to the customer upon request for new technologies.

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**Revision:**
- Rev A

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**File Information:**
- Form PPAP004XLS
- 2 of 2 Freescale Rev T

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**Freescale Rev T**