1. Type of Change (Major or Minor)

Informational (Notification only)

2. Change Description

The following changes are being made to Apogee Semiconductor's inline screening and lot acceptance flows in order to better align with industry standards (MIL-PRF-38535 and JESD47). The new document outlining these flows as well as the superseded documents are listed in section 11.

Inline Screening Flow Changes:

Changed from:

1. Temperature cycling performed using MIL-STD-883, Method 1010 Condition B (-55°C to 125°C) for 20 cycles.

Changed To:

1. Temperature cycling may be performed using MIL-STD-883, Method 1010 with either either Condition B (-55°C to 125°C) for 15 cycles or Condition C (-65°C to 150°C) for 10 cycles.

Lot Acceptance Flow Changes:

Changed from:

1. Electrical test completed over the full temperature range post-stress (Except for post-TID testing)
2. Sample size
   a. HAST - 45 units
   b. Temperature Cycling - 45 units
   c. Total Ionizing Dose (TID) - 22 units
3. Sample frequency
   a. HAST and Temperature Cycling (Group D) - Once per assembly lot per package family

Changed to:

1. Electrical test may be completed only at room temperature or over the full temperature range.
2. Sample size
   a. HAST - 15 units

        b. Temperature Cycling - 15 units
        c. Total Ionizing Dose (TID) - 5 units
    3. Sample frequency
        a. HAST and Temperature Cycling (Group D) - Once per 26 weeks per package family.

3. Impact on Product and/or Process

Simplified inline screening and lot acceptance flow.

4. Justification for Change

Alignment with MIL-PRF-38535 sampling and frequency requirements.

5. Change Risk Assessment

Low. Inline screening and lot level qualification changes were made based on the requirements set forth in MIL-PRF-38535 allowing Apogee to deliver the same level of quality.

6. Qualification Plan

N/A

7. Qualification Report

N/A

8. Summary

See change description.

9. Impacted Device - Document - Process List

All Apogee Semiconductor Products.

10. Sample Availability Date and Projected Production Shipment

N/A - informational change only.

11. File Attachment

Changed from:

1. Inline screening flow: Apogee_Screening_Flow_A02.pdf
2. Lot qualification flow: Apogee_Lot_Acceptance_Flow_A05.pdf

Changed to:

1. Inline screening and lot qualification flows: Apogee_Semiconductor_Product_Grades_and_Quality_Flows_A00.pdf