Version: 1.0

AF54RHC132 and AF54RHC14 Human Body Model (HBM) Electrostatic Discharge (ESD) Rating Change

## 1. Type of Change (Major or Minor)

Major

## 2. Change Description

Human Body Model (HBM) Electrostatic Discharge (ESD) rating was adjusted from 4000 V to 1000 V based on qualification data.

## 3. Impact on Product and/or Process

No impact on Apogee Semiconductor's production process.

## 4. Justification for Change

The AF54RHC device family was initially qualified based on qualification by similarity (QBS) to the previously qualified AP54RHC device family due to significant similarity between the designs. ESD testing was recently done separately on the AF54RHC family and performance differences were observed.

## 5. Change Risk Assessment

Medium. This change may impact ESD control requirements.

## 6. Qualification Plan

Description	Specification	Acceptance criteria	Sample Size (Failures allowable)
ESD Human Body Model (HBM)	JS-001	Classification	3(0)

## 7. Qualification Report

Description	Test Level	Specification	Pass/Fail
ESD Human Body Model (HBM)	1000V	JS-001	3/0

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## 8. Summary

See change description.

## 9. Impacted Device - Document - Process List

AF54RHC132ALT, AF54RHC132BLT, AF54RHC132CLT, AF54RHC132ELT.

AF54RHC14ALT, AF54RHC14BLT, AF54RHC14CLT, AF54RHC14ELT.

# 10. Sample Availability Date and Projected Production Shipment

N/A - This change is due to new qualification data and not a result of changed material. For concerns or samples please reach out to quality@apogeesemi.com.

#### 11. File Attachment