**601 McCarthy Blvd**

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***Failure Analysis & Corrective Action Report***

***\*Final\****

**RMA Number:** RMA Number

**Device:** Device

|  |  |
| --- | --- |
| **Date:** Date |  |

**Customer Information:**

**Name:**

|  |  |  |
| --- | --- | --- |
| **Contacts** | Name | Email Addresses |
|  |  |  |

### Customer Failure Environment

|  |  |  |
| --- | --- | --- |
|  |  |  |
| **Failing Temperature:** | **Unit Source:** | **Failure Rate:** |
| FailingTemperature | Click here to enter text. | Failure Rate |
|  |  |  |
| **Parts Received Date:** |  |  |
| Parts Received Date |  |  |

**Problem Description:**

**Customer Issue Description:**

Customer Failure Description

### Device Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Device Marking** | Qty | Mfg. Date | Technology Code | Capacity |
|  |  |  |  |  |

**Summary:**

Analysis of the returned units confirmed that they failed to respond to commands from the test host, indicating a data corruption that affecting the functionality of the devices. Direct analysis of the memories on the devices confirmed file system corruptions which occurred on the last update to the memory, which would explain the observed failure. File corruption on the last update to a device is an indication of a write abort failure, which is a failure due to power supply interruption to the device during an active write process. This is considered an application related failure, and not a failure within the device itself.

**Team Members:**

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**Root Cause Analysis Summary:**

**Failure Analysis Results:**

Upon arrival, the units were visually inspected with no obvious external abnormalities found.

At the application level, the unit was recognized on Windows PC with no content in the memory. In addition, it passed logical read testing on the entire data area with no error. The unit also had no issue in its FAT file structures; however it could not be formatted and all file copy operations failed.

At the diagnostic level, the internal error log was found to contain entries indicating read errors had occurred during operation. Further examination found corruption in the most recently written firmware control block. Due to the corruption, critical firmware pointers contained invalid data. The nature of this error resulted in a write failure as the physical location for new data was invalid.

**Root Cause Concusions:**

Based on the analysis above, the units failed as a result of write abort during operation. Write abort occurs when the power supply to the card is interrupted during an active write process.

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