

GSM External Manufacturer (EM) Visual Mechanical Inspection (VMI) Specification for Storage Devices

Overview

This document outlines the Storage Device inspection and handling criteria for the EMs. The EM must use this document to train their Operators and Technicians to ensure that they can follow the Storage Device handling criteria, doing VMI checks, or performing failure verification. This document applies to the whole process in EM, from Storage Device incoming to return material authorization (RMA) return.



Audience

Supplier Engineer (SE) use this document as a specification to monitor the EM Storage Device handling and VMI checks.

–Production and Quality Assurance personnel use this document for inspection procedures.

–Inspector or Technician personnel use this document in assisting in accept or reject decisions.

–Storage Device supplier uses this document as a reference for EM Storage Device handling and VMI checks.

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INSPECTION METHOD

Hold a unit by its sides and do the inspection with your naked eye.



Do not hold or touch the PCBA side of the unit.

HANDLING AND PACKAGING

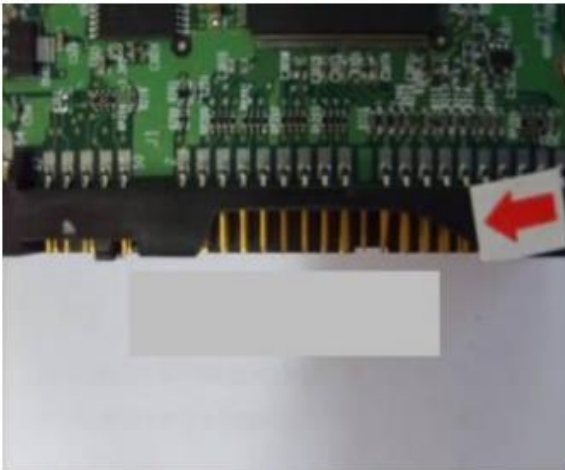
Reference documents: 7358617, Supply Chain Operations: Supplier Engineering Storage Devices Handling and 7078198, Supply Chain Operations Supplier Management: Supplier Engineering Storage Devices Packaging for Vendor Sale, Site Balance, RMA Transfer and Return To Vendor (RTV)

PRINTED CIRCUIT BOARD ASSEMBLY (PCBA)

1. Inspect for any bent/missing pins and any burnt/damaged connectors.
2. Inspect for any missing, damaged or burnt components.
3. Inspect for any PCBA corrosion, contamination and severe scratches.

Unacceptable Samples:

PCBA



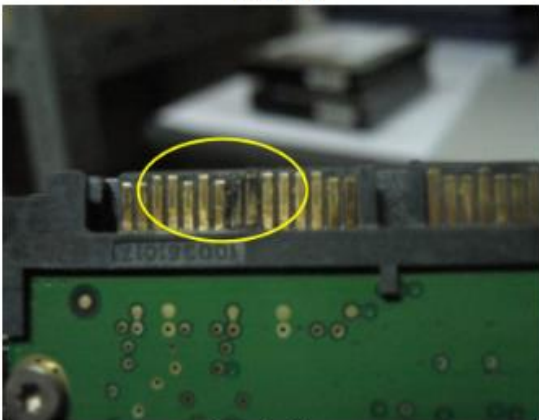
Missing portion of PATA connector

PCBA



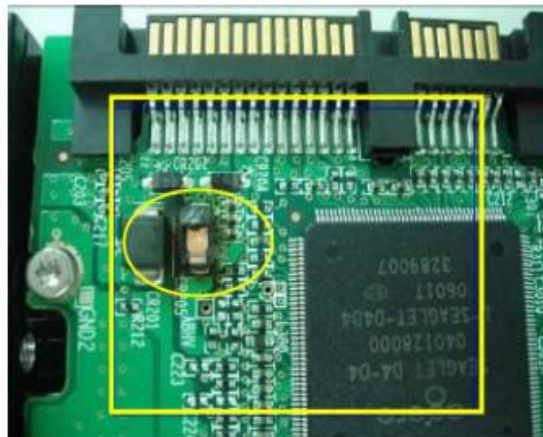
Missing portion of SATA connector

PCBA



Burnt Pins

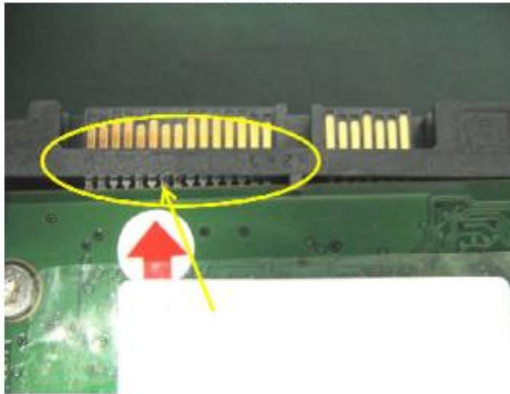
PCBA



Burnt component proximity to power connector (1 ")

More Unacceptable Samples:

PCBA



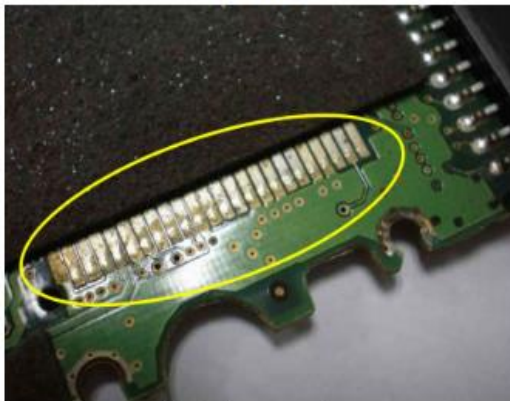
Pulled pins of SATA connector

PCBA



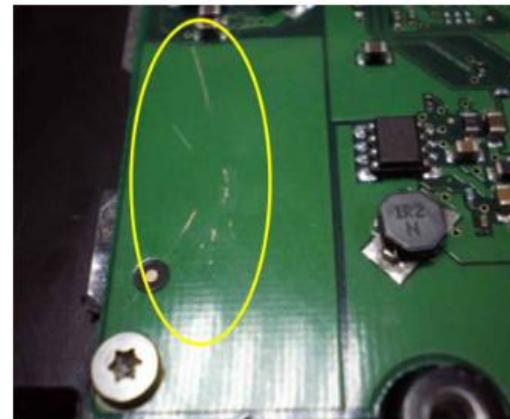
Missing power pins

PCBA



Visible corrosion

PCBA



Heavy PCBA Scratches



Bare copper showing on circuit trace

TOP COVER

Inspect for any dents, scratches or corrosion.

Any scratches with protrusion must be considered a failure. Pass if you cannot feel the protrusion by finger touch, regardless of any width, length, or number of scratches. Also, rubbing marks are visible marks or lines on the top cover without any protrusion. Pass if you cannot feel any marks with your finger.



Dent: Any dent or damage must be considered a failure.

Unacceptable Samples:



Dented Top Cover



Dented Top Cover



Dent/Ding on cover weld



Scraped top cover edge

Corrosion: Any corrosion/contamination must be considered a failure.

Unacceptable Samples



BASE PLATE

Inspect the front, back, left, and right side of the base: Check for any dents, scratches, chip offs, or any other damages.

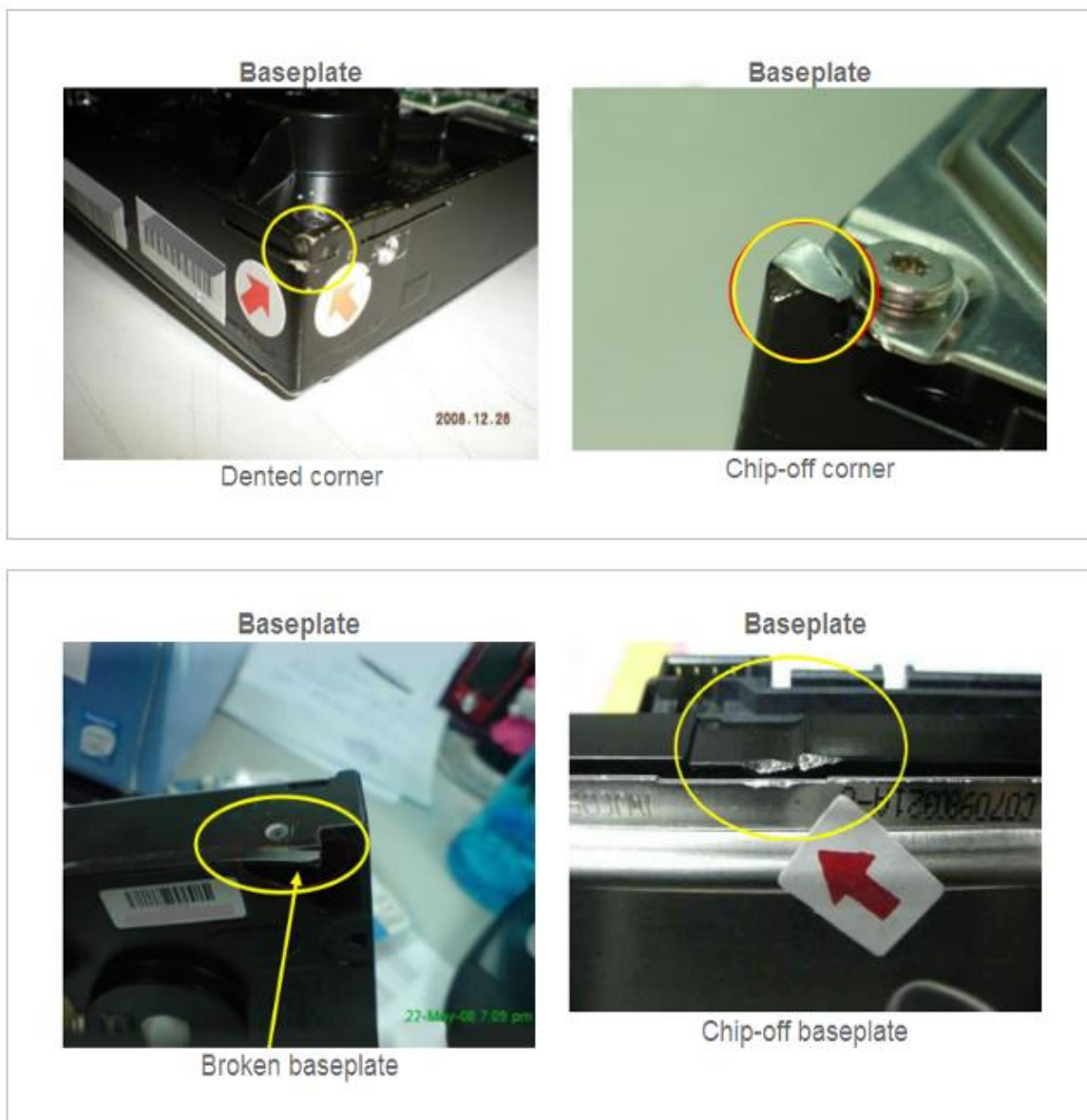
Scratches: Scratches with any protrusion are failures. Pass if you cannot feel the protrusion by finger touch, regardless of any width or length.

Dents: Any visible dents is considered a failure.

Chip off: Any chipped off is considered a failure.

Unacceptable Samples





Related Information

REFERENCE DOCUMENTS

Supplier Engineering Storage Device Packaging For Vendor Sale, Site Balance, RMA Transfer and Return To Vendor (RTV) 7078198

Supplier Engineering Storage Devices Handling 7358617

Document History

<i>Dash</i>	<i>Rev</i>	<i>Date</i>	<i>Description of Change</i>	<i>Originator</i>
01	A	14 Jan 2011	Initial release.	N/A
<i>Agile History</i>				
<i>Rev</i>	<i>Date</i>	<i>Description of Change</i>	<i>Originator</i>	
02	26 Jul 2013	Deleted Appendix A and referenced 923-2500 and 7078198 in Section 2.	N/A	
03	18 Apr 2016	Section 4 - Added pictures of Aries He 8TB top cover.	N/A	
04	11 Apr 2018	Update terms: Change all references from “HDD” to “Storage Device.” Change all references from “WWOPS” to “Supply Chain Operations”. Change all references to reference document number “923-2500-XX” to “7358617”; reference document number “923-2500-XX” has been obsoleted.	N/A	
05	31 Jan 2019	Minor word changes on VMI instructions. Update terms: Change from “HDD” to “Storage Device” and change from “WWOPS” to “Supply Chain Operations” on the reference document number 7078198. Change from “Supplier Management: Supplier Engineering” to “GSM”.	N/A	
06	23 Feb 2022	Remove names from History. Delete SCE since there is no SCE role. Update to comply with current corporate template	N/A	

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