



// INCOMING INSPECTION REPORT

Micron 4GB eMMC Managed NAND

MTFC4GACAALT-4M IT

REPORT NO.

RH-IIR-_____

INSPECTION DATE

August 4, 2026

CUSTOMER

CUSTOMER PO

SUPPLIER

RH SALES ORDER

FINAL RESULT

**ACCEPTED**INSPECTION STATUS
PASSCOUNTERFEIT
INDICATORS
NONE OBSERVEDLOT CONDITION
NEW / UNUSEDADDITIONAL TESTING
NONE REQUIRED

INSPECTED

125

PCS SAMPLED

DATE / LOT · 2 LOTS

2212 · BY578RX 31

2206 · BY2XLPY 31





// COMPONENT IDENTIFICATION

Incoming Inspection Report

● ACCEPTED · PASS

Manufacturer	Micron Technology
Manufacturer Part Number	MTFC4GACAALT-4M IT
Device Type	4GB eMMC Managed NAND Flash
Package	100-Ball TBGA · 14.0 × 18.0 mm
Temperature Grade	Industrial, -40 °C to +85 °C
Expected Device Marking	JZ116
Date Code(s)	2212 · 2206
Lot Code(s)	BY578RX 31 · BY2XLPY 31 (two manufacturer lots received)
MSL	Level 3
RoHS	Compliant
Lifecycle	Obsolete / EOL
Quantity Inspected	125 PCS (sample drawn from multiple locations in lot)

AUTHENTICITY

Consistent with
manufacturer
specifications

LOT CONDITION

New / Unused

LOT CONSISTENCY

Consistent — no mixed
devices

ADDITIONAL TESTING

None required

// INSPECTION SUMMARY — 21 CHECKS

Manufacturer Identification	PASS	BGA / Termination Inspection	PASS
Manufacturer Part Number	PASS	Evidence of Prior Use	NONE
Device Marking Verification	PASS	Lot Homogeneity	PASS
Date / Lot Code Verification	PASS	Moisture Barrier Packaging	PASS
Manufacturer Label Inspection	PASS	Humidity Indicator Card	PASS
Package Verification	PASS	Desiccant	PASS
Dimensional Inspection	PASS	MSL Compliance	PASS
High-Magnification Visual Inspection	PASS	ESD Packaging	PASS
Surface / Blacktop Examination	PASS	RoHS Verification	PASS
Solvent / Swab Test	PASS	Traceability Review	PASS
Marking Permanency	PASS		



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SECTION 01

Manufacturer Label & Traceability

● PASS

Manufacturer packaging and labels were examined for accuracy, consistency and evidence of alteration. No relabeling, label-over-label application, altered printing, erased information or traceability discrepancies were observed.

- | | | |
|---|--|-------------------------------|
| ✓ Micron Technology manufacturer identification | ✓ Manufacturer part number MTFC4GACAALT-4M IT | ✓ Quantity |
| ✓ Date codes 2212 and 2206 | ✓ Lot identification BY578RX 31 and BY2XLPY 31 | ✓ Country of origin |
| ✓ MSL designation | ✓ RoHS / lead-free identification | ✓ Barcode and 2D-code quality |
| ✓ Label print quality and format | ✓ Component markings match packaging labels | |

SECTION 02

Device Marking Verification

● PASS

Representative devices were inspected under magnification. No inconsistent fonts, ghost markings, double markings, abnormal laser penetration or evidence of remarking were observed.

EXPECTED MICRON MARKING

JZ116

OBSERVED MARKING

JZ116

- | | | |
|--------------------------------------|-----------------------------|-------------------------------|
| ✓ Micron logo | ✓ Device identification | ✓ Date / revision information |
| ✓ Manufacturing location information | ✓ 2D identification marking | ✓ Character spacing |
| ✓ Character alignment | ✓ Laser characteristics | ✓ Marking location |
| ✓ A1 orientation indicator | | |

SECTION 03

External Visual Inspection

● PASS

Component surfaces and package construction were examined under high magnification.

- | | | |
|-------------------------|------------------------------|-------------------------------------|
| ✓ Uniform mold compound | ✓ Consistent package texture | ✓ Uniform package coloration |
| ✓ Clean package edges | ✓ Normal mold features | ✓ No evidence of prior installation |

NOT OBSERVED

- | | | | |
|------------------|-----------------------|----------------|-----------------------|
| ⊘ Sanding marks | ⊘ Resurfacing | ⊘ Blacktopping | ⊘ Coating transitions |
| ⊘ Ghost markings | ⊘ Excessive scratches | ⊘ Cracks | ⊘ Chips |
| ⊘ Contamination | ⊘ Corrosion | | |

**SECTION 04****Dimensional Inspection****PASS**

Measurements were compared with the applicable Micron mechanical package specifications. All sampled components were within expected dimensional tolerances and consistent with the manufacturer package drawing.

Characteristic	Specification	Result
Package Length	18.0 mm nominal	PASS
Package Width	14.0 mm nominal	PASS
Package Height	Approx. 1.2 mm	PASS
Ball Pitch	1.0 mm	PASS
BGA Construction	100 Ball	PASS

SECTION 05**BGA / Termination Inspection****PASS**

Bottom-side BGA terminations were inspected under magnification. No evidence of reballing or rework.

- ✓ Uniform solder balls
- ✓ Correct BGA pattern
- ✓ Consistent ball diameter
- ✓ Proper ball alignment
- ✓ Clean termination surfaces

NOT OBSERVED

- ⊘ Oxidation
- ⊘ Corrosion
- ⊘ Missing balls
- ⊘ Flattened balls
- ⊘ Abnormal solder residue
- ⊘ Flux residue from prior installation
- ⊘ Reballing or rework

SECTION 06**Surface / Blacktop Inspection****PASS**

Package surfaces were inspected specifically for indicators associated with resurfacing or remarking. Surfaces were consistent with normal original manufacturer mold compound. Not observed:

- ⊘ Sanding
- ⊘ Grinding
- ⊘ Surface coating
- ⊘ Blacktop material
- ⊘ Overspray
- ⊘ Mold-texture inconsistencies
- ⊘ Covered markings
- ⊘ Ghost characters
- ⊘ Surface transitions

SECTION 07**Solvent / Swab Test****PASS**

Representative devices were subjected to a controlled surface swab test. No evidence of blacktopping, resurfacing or non-original surface coating was detected.

- ✓ No black residue transferred to swab
- ✓ No coating removed
- ✓ No markings transferred
- ✓ No abnormal surface discoloration
- ✓ No surface texture change
- ✓ No marking degradation



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SECTION 08**Marking Permanency****PASS**

Device markings remained intact following inspection and surface testing. Not observed:

- ☐ Smearing
 ☐ Fading
 ☐ Character removal
 ☐ Ink transfer
 ☐ Coating removal

SECTION 09**Lot Consistency****PASS**

Two manufacturer lots were received (BY578RX 31 / date code 2212 and BY2XLPY 31 / date code 2206). Samples were selected from multiple locations within each lot and compared. No mixed devices, mixed manufacturers or abnormal package variations were identified. Material was consistent in:

- ☒ Manufacturer marking
 ☒ Device code
 ☒ Date / lot identification
 ☒ Package size
☒ Mold texture
 ☒ Package color
 ☒ Laser-marking characteristics
 ☒ A1 indicators
☒ BGA construction
 ☒ Overall workmanship

SECTION 10**MSL / Dry Packaging****PASS**

Manufacturer Moisture Sensitivity Level: **MSL 3**. Packaging inspection confirmed the following. **Bake required: NO.**

- ☒ Sealed moisture barrier packaging
 ☒ Proper MSL identification
 ☒ Humidity Indicator Card present
☒ HIC within acceptable limits
 ☒ Desiccant present
 ☒ Moisture barrier bag intact
☒ No indication of excessive moisture exposure

SECTION 11**RoHS / Environmental Compliance****PASS**

Material was verified as consistent with manufacturer RoHS / lead-free specifications. Manufacturer and supplier documentation were consistent with the received material.

ROHS	COMPLIANT	LEAD-FREE	YES	TERMINATION	SAC305
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SECTION 12**ESD Packaging & Handling****PASS**

Components were received in appropriate protective packaging and inspected using ESD-controlled handling procedures under RH's ESD control program, built to ANSI/ESD S20.20-2021.

- ☒ ESD-safe packaging
 ☒ Proper ESD labeling
 ☒ ESD-controlled workstation
☒ Grounded handling equipment
 ☒ Proper component handling



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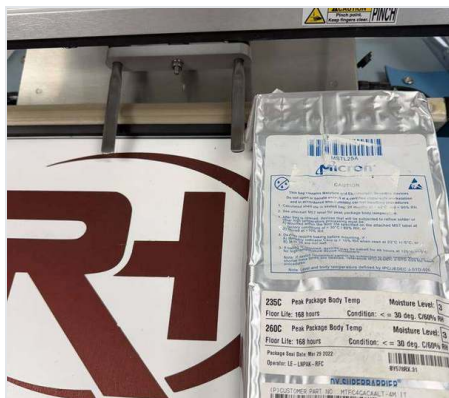
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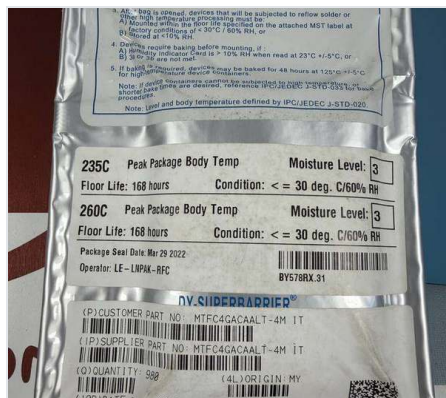
// PHOTOGRAPHIC RECORD

Representative images from the 125-piece sample, captured during high-magnification inspection.

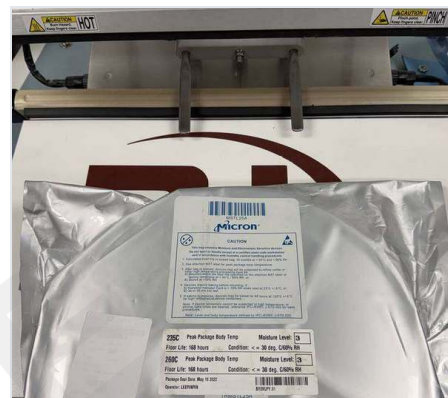
Inspection Photographs



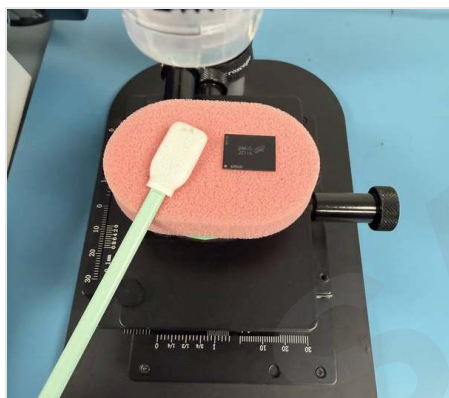
01 Original incoming packaging — lot BY578RX 31 / 2212



02 Manufacturer label



03 Moisture barrier bag — lot BY2XLPY 31 / 2206



04 Solvent / swab test



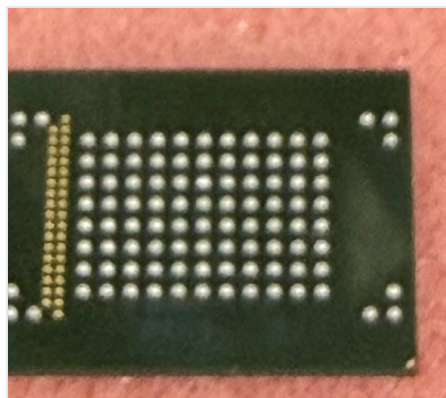
05 Representative component top surface



06 Micron logo and JZ116 marking



07 Date / lot markings — 2212 · BY578RX 31



08 BGA terminations — 100-ball underside



09 A1 indicator and device 2D code



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// INSPECTION SCOPE & DISPOSITION

Scope, Methods & Sign-Off

IN-HOUSE INSPECTION PERFORMED

Documentation and provenance review, microscopy to 3000×, marking-permanency and pin-print checks. Every shipment is inspected on receipt under RH's ISO 9001:2015 quality management system and counterfeit-mitigation controls.

AVAILABLE THROUGH ACCREDITED INDEPENDENT LABS

XRF, FTIR, X-ray, decapsulation and electrical / curve-trace testing are performed by accredited independent laboratories to RH's protocol and reviewed in-house. None were required for this lot; available on request at customer direction.

DISPOSITION

ACCEPTED ● ALL 21 CHECKS PASS

All 21 inspection criteria passed. Material is consistent with Micron Technology manufacturer specifications, shows no evidence of prior use, remarking, resurfacing or rework, and is homogeneous within each of the two manufacturer lots received. Certificate of Conformance with date and lot codes is provided when provided by the manufacturer and required by the customer.

Field	Value	Field	Value
Manufacturer Part Number	MTFC4GACAALT-4M IT	Date Codes	2212 · 2206
Quantity Inspected	125 PCS	Lot Codes	BY578RX 31 · BY2XLPY 31
Report No.	RH-IIR-_____	Inspection Date	August 4, 2026

INSPECTED BY

REVIEWED / APPROVED BY

DATE

ISO 9001:2015 certified by NQA (ANAB-accredited)

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ANSI/ESD S20.20-2021 ESD control program

The freedom to say yes.