

Customer Service Note

RMA Procedures for Packaged Product and Bare Die Devices

Introduction

Micron's returned material authorization (RMA) procedures are similar for both packaged devices and bare die devices. However, some differences are required because die can be damaged very easily if they are not handled and stored properly. This customer service note outlines standard RMA procedures, as well as the differences associated with bare die RMAs.

When you need to return a Micron product due to potential failure or for credit, you must first contact your Micron customer field representative or customer service analyst. Your representative will provide you with a return materials authorization (RMA) number authorizing your product return or a credit memo, where applicable. Your sales representative will also provide you with the proper shipping address location and any routing instructions.

Obtaining an RMA

- If you purchased the product direct, contact your Micron[®] sales representative.
- If you purchased the product through distribution, contact the distributor.
- Provide the following information:
 - Micron ordering part number
 - Reason for return
 - One of the following: customer purchase order (PO) number, invoice number, or sales order number
 - Preferred reimbursement method: replacement parts, credit only, or refund

Packaged Product Return Procedures

- Package product using all antistatic precautions
- Write RMA number on outside of box for proper routing
- Ship package prepaid according to the instructions provided by your Micron representative

Bare Die/Whole Wafer Return Procedures

Approval is required for all die RMAs, regardless of whether they are nonfailure-related or failure-related, or have application-related problems.

- Package die product in containers that will prevent shipping damage and provide proper electrostatic discharge (ESD) protection
- Write RMA number on outside of box for proper routing
- Ship package prepaid according to the instructions provided by your Micron representative

Processed Die (MCM) Return Procedures

If failures or application problems occur after the die has been processed by the user, it may be necessary to return a packaged part (that is, a multichip module [MCM]) to Micron for failure analysis.

Users who cannot easily rework die should send the module or MCM package back to Micron in appropriate packaging that will prevent shipping damage and provide proper ESD protection.

In the event an MCM must be returned, customers must provide key contact points/schematics so Micron's technical personnel can identify the necessary memory test points and facilitate correlation efforts. Micron's Quality Assurance Department may then decapsulate the die and perform failure analysis on the MCM device.

Micron Accounting Procedures for RMAs

A credit memo is sent upon receipt and verification of the RMA parts, unless a refund has been requested. Micron will issue a refund check for the amount of the return upon arrival and processing of the returned material, provided all invoices are paid and no future business is expected.

Replacement parts are shipped after receipt of the RMA parts, and a billing invoice is sent out the day after shipment. In order to maintain clear communication between accounting departments, please refer to your RMA number and credit memo number as much as possible.

Customer "Ship to" and Product Return Locations

Product can be returned to return centers located in America, Asia, Japan, and Europe. For an exact address contact your customer service representative at Micron.



Revision History

Rev. E	1/14
• Updated procedures and shipping information.	
Rev. D	10/10
• Updated template.	
• Updated failure analysis text.	
Rev. C	8/04
Rev. B	8/04
Rev. A	12/01
• Initial release.	

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