



Product Change Notification

Change Notification #: 116639 - 01
Change Title: Intel ® NAND Flash Memory Wafers, PCN 116639-01, Transport Media, Returning to Single MBB for Wafer Product Shipments and Adding Additional Qualified HWS Carrier,
Reason for Revision: Provide greater PCN detail, share additional information for the added HWS Carrier Achilles and share a product list
Date of Publication: January 14, 2019

Key Characteristics of the Change:

Transport Media

Forecasted Key Milestones:

Date Customer Must be Ready to Receive Post-Conversion Material:	January 14, 2019
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Description of Change to the Customer:

Reason for Revision: Provide greater PCN detail, share additional information for the added HWS Carrier Achilles and share a product list

The current standard for bagging Horizontal Wafer Shippers (HWS) is to use one single Moisture Barrier Bag (MBB). From time to time Intel may have used two MBB to help ensure no bag tearing issues occur. However, after considering the process, Intel made some changes to the packaging and handling of the HWS, creating a new solution designed to help reduce MBB holes/tears and reduce broken wafers received by the customer.

Additionally, Intel has qualified another HWS supplier Achilles so that both Texchem and Achilles will be support wafer shipping immediately.

Based on internal testing and modifications to the internal cushion material, Intel will resume shipping Wafer Product to customers in a single Moisture Barrier Bag, with the intent to improve the overall in transit wafer quality.

Intel performed thorough testing in conjunction with its internal cushion material change to come to this decision. It is expected that these changes will result in Wafer Product Customers experiencing similar shipping media performance as Intel does for its internal manufacturing supply chains.

Pictures below are for example only. Please take note of the outer appearance where the standard single MBB solution will be vacuum sealed, whereas the occasional dual MBB approach of the outer appearance was not as form fitting to the wafer carrier.

Picture of double MBB



Standard, Single Packing Material



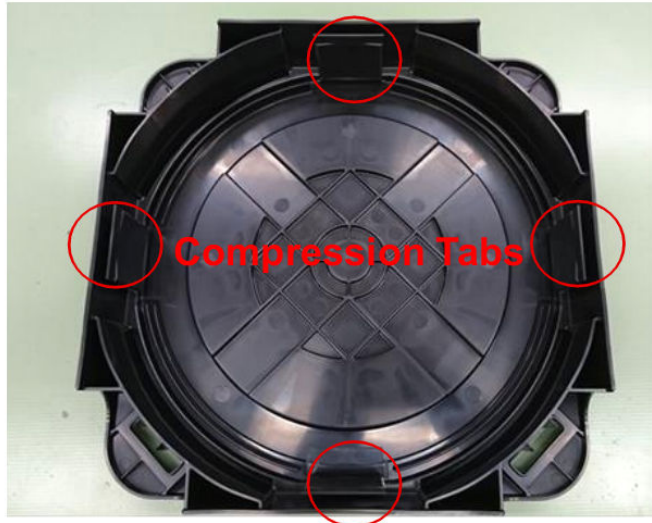
Carrier Texchem was the only qualified supplier supporting wafer shipments. Texchem's supplier part number is HWS-RM-300. Effective immediately, both Texchem HWS and Achilles HWS will be the standard for HWS going forward. Achilles's supplier part number is NA-300LA.

Carrier Achilles information (pictures for reference only)



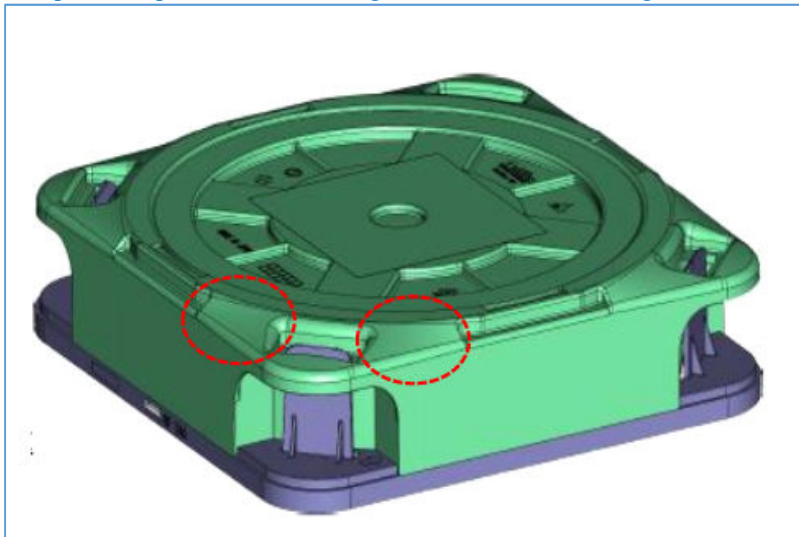
Achilles Wafer Security (Compression Tabs)

Compression tabs engage wafer radius for secure shipment

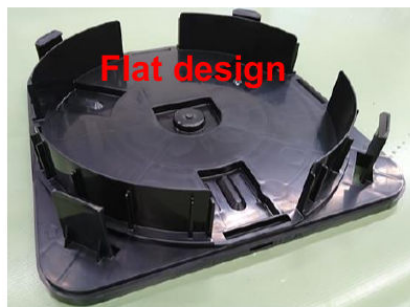


Back side of Top cover

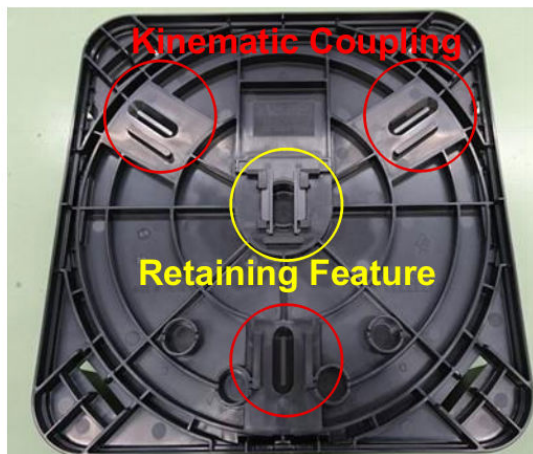
Achilles Improved top cover surface design to reduce risk of Al bag tear or label abrasion



Achilles Flat design bottom surface for stacking, bagging and Automation interface



Bottom case



Back side of Bottom case

Customer Impact of Change and Recommended Action:

There is no change to the form, fit, or function of the product. The new solution should function on any equipment customers currently have which use HWS for transport. However, it is possible that new recipes might need to be created or updated if automated equipment is used. Customers should expect to see the use of the standard single MBB in the use of wafer shipments.

Intel will begin to use this solution today and deplete older packaged material currently on shelves during the transition. Therefore, customers should expect to see a mix of packaging options until older packaged material has been depleted.

Please contact your local Intel Field Sales Representative if you have any further questions about these changes.

Products Affected / Intel Ordering Codes:

All Intel ® NAND Flash Memory Wafer products are affected including but not limited to the following three skus:

Marketing Name	Product Code	S-Spec	MM#
Intel ® NAND Flash Memory Wafers	X29F32B0T3ATH1	S LMKT	975822
Intel ® NAND Flash Memory Wafers	X29F64B0T3ATH1	S LMKU	975823
Intel ® NAND Flash Memory Wafers	X29F01T0T3AQH1	S LMKV	975824

PCN Revision History:

Date of Revision:	Revision Number:	Reason:
January 04, 2019	00	Originally Published PCN
January 14, 2019	01	Provide greater PCN detail, share additional information for the added HWS Carrier Achilles and share a product list



Product Change Notification

116639 - 01

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Should you have any issues with the timeline or content of this change, please contact the Intel Representative(s) for your geographic location listed below. No response from customers will be deemed as acceptance of the change and the change will be implemented pursuant to the key milestones set forth in this attached PCN.

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