



Integrated Device Technology, Inc.
6024 Silver Creek Valley Road, San Jose, CA - 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: A1312-04 DATE 9-Jan-2014 Product Affected: 21.0mm x 21.0mm FCBGA-400 25.0mm x 25.0mm FCBGA-576 29.0mm x 29.0mm FCBGA-784 <p style="text-align: center;">Refer to Attachment II for the affected part numbers</p> Date Effective: 9-Apr-2014	MEANS OF DISTINGUISHING CHANGED DEVICES: <input type="checkbox"/> Product Mark <input type="checkbox"/> Back Mark <input type="checkbox"/> Date Code Assembly lot marked on the device provides traceability to the material used <input checked="" type="checkbox"/> Other
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Contact: IDT PCN DESK E-mail: pcndesk@idt.com	Attachment: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Samples: Please contact your local sales representative for sample request & availability.
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DESCRIPTION AND PURPOSE OF CHANGE:

<input type="checkbox"/> Die Technology <input type="checkbox"/> Wafer Fabrication Process <input type="checkbox"/> Assembly Process <input type="checkbox"/> Equipment <input checked="" type="checkbox"/> Material <input type="checkbox"/> Testing <input type="checkbox"/> Manufacturing Site <input type="checkbox"/> Data Sheet <input type="checkbox"/> Other	<p>This notification is to advise our customers that the lid adhesive material will be changed from Abletherm 3185 to Lord MD140. The underfill material will be changed from UH12 (Hitachi CEL C3730S) to UA32 (Namic U8410-99).</p> <p>There is no change to the moisture performance.</p> <p>Attachment I details the qualification data for this change and Attachment II shows the affected list of part numbers.</p>
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RELIABILITY/QUALIFICATION SUMMARY:
Refer to qualification data shown in attachment I.

CUSTOMER ACKNOWLEDGMENT OF RECEIPT:

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.

IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

Customer: _____	<input type="checkbox"/> <i>Approval for shipments prior to effective date.</i>
Name/Date: _____	E-Mail Address: _____
Title: _____	Phone# /Fax# : _____
CUSTOMER COMMENTS: _____	

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: _____ DATE: _____



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ATTACHMENT I - PCN # : A1312-04

PCN Type: Change of Materials
Data Sheet Change: None
 No change in moisture sensitivity level (MSL)

Detail Of Change:

This notification is to advise our customers that the lid adhesive material will be changed from Abletherm 3185 to Lord MD140. The underfill material will be changed from UH12 (Hitachi CEL C3730S) to UA32 (Namic U8410-99).

There is no change to the moisture performance of these packages.

Change of Material Sets

Package	From	To
FCBGA-400	Adhesive: Abletherm 3185	Lord MD140
FCBGA-576 FCBGA-784	Underfill: UH12 (Hitachi CEL C3730S)	UA32 (Namic U8410-99)



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ATTACHMENT I - PCN # : A1312-04

Qualification Test Plans and Results :

Qual Plan & Results: The qualification was performed in accordance with JEDEC47 recommended tests

Qual Vehicle: 29.0mm x 29.0mm FCBGA-784 (3 lots)

Test Description	Test Method	Test Results (SS / Rej)		
		Lot 1	Lot 2	Lot 3
* Temperature Humidity Bias (85 °C/85% RH, 1000 Hrs)	JESD22-A110	25/0	25/0	25/0
* Temperature Cycle / Condition B (-55 °C to +125 °C, 700 Cyc)	JESD22-A104	25/0	25/0	25/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	25/0	25/0	25/0
Solder Ball Shear Test (1000 Hrs)	JESD22-B117	5/0	NA	NA
External Visual Inspection	JESD22-B101	25/0	NA	NA
Internal Visual Inspection	IDT Spec MAC-3001, MAC-3002	5/0	NA	NA
X-ray Examination	IDT Spec MAC-3012	45/0	NA	NA

Note:

* Test requires moisture pre-conditioning sequence per JESD22-A113 prior to stress test



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ATTACHMENT II - PCN # : A1312-04

Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
80HCPS1432CHM	80HCPS1616CRM	80HCPS1848CRM	80HVPS1616CBR
80HCPS1432CHM8	80HCPS1616CRM8	80HCPS1848CRM8	80HVPS1616CBR8
80HCPS1432CHMI	80HCPS1616CRMI	80HCPS1848CRMI	80HVPS1616CBRI
80HCPS1432CHMI8	80HCPS1616CRMI8	80HCPS1848CRMI8	80HVPS1616CBRI8
80HCPS1432CRM	80HCPS1848CBR	80HSPS1616CHR	80HVPS1616RM
80HCPS1432CRM8	80HCPS1848CBR8	80HSPS1616CHR8	80HVPS1616RM8
80HCPS1432CRMI	80HCPS1848CBRI	80HSPS1616CHRI	80HVPS1616RMI
80HCPS1432CRMI8	80HCPS1848CBRI8	80HSPS1616CHRI8	80HVPS1616RMI8
80HCPS1616CHR	80HCPS1848CHM	80HSPS1616CRM	80HVPS1848CRM
80HCPS1616CHR8	80HCPS1848CHM8	80HSPS1616CRM8	80HVPS1848CRM8
80HCPS1616CHRI	80HCPS1848CHMI	80HSPS1616CRMI	80HVPS1848CRMI
80HCPS1616CHRI8	80HCPS1848CHMI8	80HSPS1616CRMI8	80HVPS1848CRMI8