

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

PRODUCT/PROCESS CHANGE NOTICE (PCN)						
PCN #: <b>A1312-04</b> D	ATE <b>9-Jan-2014</b>	MEANS OF DISTIN	NGUISHING CHANGED DEVICES:			
Product Affected: 21.0mm x 21.0mm FCF	3GA-400	☐ Product Mark				
25.0mm x 25.0mm FCF	3GA-576	□ Back Mark				
29.0mm x 29.0mm FCF	3GA-784	☐ Date Code Assembly lot marked on the device				
Refer to Attachment II for the affe	cted part numbers	Other	provides traceability to the material			
Date Effective: 9-Apr-2014			used			
Contact: IDT PCN DESK		Attachment:	Yes No			
E-mail: pcndesk@idt.com			ntact your local sales representative for quest & availability.			
DESCRIPTION AND PURPOSE OF CHA	NGE:					
<ul> <li>□ Die Technology</li> <li>□ Wafer Fabrication Process</li> <li>□ Assembly Process</li> <li>□ Equipment</li> <li>■ Material</li> <li>□ Testing</li> <li>□ Manufacturing Site</li> <li>□ Data Sheet</li> <li>□ Other</li> </ul>	changed from Ableth changed from UH12 There is no change to Attachment I details to	o advise our customers that the lid adhesive material will be therm 3185 to Lord MD140. The underfill material will be (Hitachi CEL C3730S) to UA32 (Namic U8410-99).  To the moisture performance.  The qualification data for this change and the affected list of part numbers.				
RELIABILITY/QUALIFICATION SUMMARY:						
Refer to qualification data shown in attachm	ent 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:	□	] Approval for s	shipments prior to effective date.			
Name/Date:	E-	-Mail Address:				
Title:	Pł	none#/Fax#:				
CUSTOMER COMMENTS:						
IDT ACKNOWLEDGMENT OF RECEIR	T:					
RECD. BY:		DATE:				



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# PRODUCT/PROCESS CHANGE NOTICE (PCN)

### 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	То
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 R	esults (S	S / Rej)
Test Description	Test Method	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:

<sup>\*</sup> Test requires moisture pre-conditioning sequence per JESD22-A113 prior to stress test



# PRODUCT/PROCESS CHANGE NOTICE (PCN)

# 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