

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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

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PCN #: F1712-01	DATE: 12-Jan-2018	MEANS OF DISTINGUISHING CHANGED DEVICES:				
Product Affected: FCBGA-400 (RoHS5) (80HCPS1616CHR, 8 Date Effective: 12-Apr-2018	0HCPS1616CHRI)	■ Product Mark □ Back Mark □ Date Code □ Other	Change in the top mark and orderable part#			
		<u> </u>				
Contact: IDT PCN DESK E-mail: pcndesk@idt.com		Attachment: Samples: Please con sample rec	Yes No ntact your local sales representative for quest & availability.			
DESCRIPTION AND PURPOSE OF CHA	NGE:					
 □ Die Technology □ Wafer Fabrication Process □ Assembly Process □ Equipment ■ Material □ Testing □ Manufacturing Site □ Data Sheet □ Other 	Green package materia There is no change to t	advise our customers that IDT is converting from RoHS5 to als to meet industry materials requirements. The moisture performance. The discontinued as of the effective date of this PCN. The qualification results.				
RELIABILITY/QUALIFICATION SUMM	MARY:					
Refer to qualification data shown in attachme	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	hone# /Fax# :				
CUSTOMER COMMENTS:						
IDT ACKNOWLEDGMENT OF RECEIR	T:					
RECD. BY:		DATE:				

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ATTACHMENT I - PCN #: F1712-01

PCN Type: Material Change from RoHS 5 to Green

Data Sheet Change: None

No change in moisture sensitivity level (MSL)

Detail Of Change:

This notification is to advise our customers that IDT is converting from RoHS5 to Green package materials to meet industry materials requirements.

The material set details of the current and replacement part is as shown in Table 1.

There is no change to the moisture performance.

Table 1: Assembly Material Sets for The Existing and Replacement Parts

	Current Part (RoHS5)	Replacement Part (Green)	
Assembly Location	Amkor Taiwan ASE Taiwan	ASE Taiwan	
Die bump	63Sn37Pb	Sn1.8Ag	
Solder balls	Sn96.5/Ag3.0/Cu0.5	Sn96.5/Ag3.0/Cu0.5	

Affected Part List

Current Part# (RoHS5)	Replacement Part# (Green)	
80HCPS1616CHR	80HCPS1616CHLG	
80HCPS1616CHRI	80HCPS1616CHLGI	



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ATTACHMENT I - PCN # : F1712-01

Qualification Information and Qualification Data:

Affected Packages: FCBGA-400

Assembly Material: Shown on page 2 of this attachment.

Qual Plan & Results: Tests are in accordance with JEDEC47 recommended tests.

Qualification Vehicle: FCBGA-784

Tost Description	Test Method	Test Results (Rej / SS)		
Test Description	rest Method	Lot 1	Lot 2	Lot 3
* Temperature Cycling (-55°C to 125°C, 700 cycles)	JESD22-A104	0/25	0/25	0/25
* HAST - Unbiased (130 °C/85% RH, 96 Hrs)	JESD22-A118	0/25	0/25	0/25
High Temperature Storage Bake (150°C, 1000 Hrs)	JESD22-A103	0/25	0/25	0/25
Solder Ball Shear Test	JESD22-B117	0/5	0/5	0/5
X Ray	IDT Spec. MAC-3012	0/45	0/45	0/45
Moisture Sensitivity Level, MSL	J-STD-20 / MSL 4, 245 °C	0/25	0/25	0/25

^{*}Note: Tests were subjected to Preconditioning per JESD22-A113 prior to stress test