



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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: F1712-01 Product Affected: FCBGA-400 (RoHS5) (80HCPS1616CHR , 80HCPS1616CHRI) Date Effective: 12-Apr-2018	DATE: 12-Jan-2018	MEANS OF DISTINGUISHING CHANGED DEVICES: <input checked="" type="checkbox"/> Product Mark Change in the top mark and orderable part# <input type="checkbox"/> Back Mark <input type="checkbox"/> Date Code <input type="checkbox"/> Other
--	--------------------------	---

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.
---	---

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 IDT is converting from RoHS5 to Green package materials to meet industry materials requirements.</p> <p>There is no change to the moisture performance.</p> <p>The current part will be discontinued as of the effective date of this PCN.</p> <p>Attachment I details the qualification results.</p>
--	--

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: _____



PRODUCT/PROCESS CHANGE NOTICE (PCN)

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



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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

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

Test Description	Test Method	Test Results (Rej / SS)		
		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