



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

<b>PCN #:</b> <b>A1905-02</b> <b>Product Affected:</b> COL-8, COL-16 (Refer to Attachment II for the affected part#)  <b>Date Effective:</b> <b>11-Sep-2019</b>	<b>DATE:</b> <b>11-Jun-2019</b>	<b>MEANS OF DISTINGUISHING CHANGED DEVICES:</b> <input type="checkbox"/> Product Mark      Lot # will have: <input checked="" type="checkbox"/> Back Mark        "MS" prefix for Carsem, Malaysia (S <input type="checkbox"/> Date Code            site) <input type="checkbox"/> Other
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<b>Contact:</b> IDT PCN DESK  <b>E-mail:</b> <a href="mailto:pcndesk@idt.com">pcndesk@idt.com</a>	<b>Attachment:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>Samples:</b> Please contact your local sales representative for sample request.
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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 checked="" type="checkbox"/> Manufacturing Site <input type="checkbox"/> Data Sheet <input type="checkbox"/> Other	<p>This notification is to advise our customers that IDT is adding Carsem, Malaysia (S site) as an alternate assembly facility.</p> <p>There is no change to the moisture performance.</p> <p>Attachment I details the qualification results.</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"/> <b><i>Approval for shipments prior to effective date.</i></b>
Name/Date: _____	E-Mail Address: _____
Title: _____	Phone# /Fax# : _____
<b>CUSTOMER COMMENTS:</b> _____	

**IDT ACKNOWLEDGMENT OF RECEIPT:**

RECD. BY: \_\_\_\_\_ DATE: \_\_\_\_\_

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT I - PCN # : A1905-02

**PCN Type:** Alternate Assembly Location & Change Material Sets

**Data Sheet Change:** None

No change in moisture sensitivity level (MSL)

**Detail Of Change:**

This notification is to advise our customers that IDT is adding Carsem, Malaysia (S site) as an alternate assembly facility.

The material set details of the current and alternate assembly location is as shown in Table 1.

There is no change to the moisture performance rating but the material declaration will differ.

Table 1: Assembly Material Sets for The Existing and Alternate Assembly Location

Material Set / Assembly	Existing	Future	
	UTL - UTAC, Thailand	UTL - UTAC, Thailand	CRSS - Carsem, Malaysia (S site)
Die Attach	8006NS	8006NS	8006NS
Bonding Wire	Copper wire	Copper wire	Copper wire
Mold Compound	G770HCD	G770HCD	G770HCD

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### ATTACHMENT I - PCN # : A1905-02

**Qualification Information and Qualification Data:**

**Affected Packages:** COL-8, COL-16

**Assembly Material:** Shown on page 2 of this attachment.

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

**Qualification Vehicle:** COL-16

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 - biased (130 °C/85% RH, 96 Hrs)	JESD22-A110	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
X-Ray Examination	IDT Spec. MAC-3012	45/5	45/5	45/5
Ball Shear Test	JESD22-B117	0/5	0/5	0/5
Bond Pull Test	MIL-STD-883 (Method 2011)	0/5	0/5	0/5
Moisture Sensitivity Level, MSL	J-STD-20 / MSL 1, 260 °C	0/25	0/25	-

\* Tests were subjected to Preconditioning per JESD22-A113 prior to stress test



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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT II - PCN # : A1905-02

#### Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
524SCMGI	5PB1102CMGI8	5PB1106CMGK8	74FCT38072SCMGI
524SCMGI8	5PB1102CMGK	5PB1108CMGI	74FCT38072SCMGI8
551SCMGI	5PB1102CMGK8	5PB1108CMGI8	74FCT38074SCMGI
551SCMGI8	5PB1104CMG1	5PB1204CMGK	74FCT38074SCMGI8
552-02SCMGI	5PB1104CMG18	5PB1204CMGK8	74FCT38075SCMGI
552-02SCMGI8	5PB1104CMGI	5PB1214CMGK	74FCT38075SCMGI8
553SCMGI	5PB1104CMGI/W	5PB1214CMGK8	9FGV0242-1AKILF
553SCMGI8	5PB1104CMGI8	621SCMGI	9FGV0242-1AKILFT
5P83904CMGK	5PB1104CMGK	621SCMGI8	9FGV0242AKILF
5P83904CMGK8	5PB1104CMGK8	651SCMGI	9FGV0242AKILFT
5P83905CMGK	5PB1106CMGI	651SCMGI8	
5P83905CMGK8	5PB1106CMGI8	6P41348CMGI	
5PB1102CMGI	5PB1106CMGK	6P41348CMGI8	