





**PRODUCT/PROCESS CHANGE NOTICE (PCN)**

**ATTACHMENT 1 - PCN # : A1901-01**

**PCN Type:** Change Assembly Location

**Data Sheet Change:** N/A

**Detail Of Change:**

This notification is to advise our customers that IDT is transferring product currently assembled at Amkor Philippines (ATP) to Carsem, Malaysia as a result of ATP discontinue the assembly process on the automotive products.

The material set details of the current and new Assembly locations is shown in the tables below. The die attach, mold compound and bonding wire used at the new assembly site are qualified IDT materials. There is no change from the existing qualified lead frame material and lead finish for this alternate assembly site.

There is no change to the moisture performance rating.

Qualified Material Sets, by Assembly Subcontractor

	<b>Existing</b>	<b>New</b>
Material Set / Assembly	ATP - Amkor, Philippines	CRSM - Carsem Malaysia
Die Attach	Ablestik 8290	Ablestik 8290
Bonding Wire	1.3 mils Gold Wire	1.3 mils Gold Wire
Mold Compound	G600	G700HA
Lead Finish	100% Sn	100% Sn



Integrated Device Technology, Inc.

## Package Qualification Test Report SOIC

**Packages Covered** SOIC 28  
**Assembly Location** Carsem  
**Report Date** January 24, 2019

### Qual Vehicle Information

	Lot 1	Lot 2	Lot 3
<b>Package Type</b>	SOIC 28	SOIC 28	SOIC 28
<b>Package Dimension</b>	17.9 x 7.6 x 2.34mm	17.9 x 7.6 x 2.34 mm	17.9 x 7.6 x 2.34 mm
<b>Lead Pitch</b>	1.27mm	1.27mm	1.27mm
<b>Lead Frame Material</b>	C194	C194	C194
<b>Die Attach Material</b>	Ablestik 8290	Ablestik 8290	Ablestik 8290
<b>Wire Bond Material</b>	1.3mil Au	1.3mil Au	1.3mil Au
<b>Mold Compound Material</b>	Sumitomo G700HA	Sumitomo G700HA	Sumitomo G700HA
<b>Plating Finish</b>	100% Sn, Matte	100% Sn, Matte	100% Sn, Matte

### Qualification Test and Results (Reference AEC-Q100)

Stress Tests	Reference Spec / Conditions	Sample Size/Reject		
		Lot 1	Lot 2	lot 3
		SOIC 28		
High Temperature Operating Life (HTOL)	JESD22-A108, JESD85 / Vcc=6.0V, Ta=125°C, 1000 hours	77/0	77/0	77/0
Early Life Failure Rate (ELFR)	JESD22-A108 / JESD74 / Vcc=6.0V, Ta=125°C, 48 hours	800/0	800/0	800/0
High Temperature Storage Test (HTSL)	JESD22-A103 / 150 °C, 1000 hours	45/0	-	-
Temperature Humidity Bias* (HAST)	JESD22-A110 / 130 °C, 85% RH, Vccmax, 96 hours	77/0	77/0	77/0
Temperature Cycling* (TC)	JESD22-A104 / . 55 °C to +125 °C, 1000 cycles	77/0	77/0	77/0
Moisture Sensitivity Level, MSL	IPC/JEDEC J-STD-20, MSL 3, 260 °C	25/0	25/0	-
Wire Bond Pull (WBP)	MIL883 M2011 / Pre-stress	5/0	5/0	5/0
	Post PC + 1000cyc TC	5/0	5/0	5/0
Wire Bond Shear (WBS)	AEC Q100-001	5/0	5/0	5/0
Solderbility test (SD)	MIL-STD-883 (Method 2003), J-STD-002D, solder bath SAC 245°C	15/0	-	-
Physical Dimension (PD)	JESD22-B100 (Per applicable IDT Package Outline Drawing)	10/0	10/0	10/0

\* Preconditioning sequence according to JESD22-A113 prior to stress test.