Integrated Device Technology, Inc.
2975 Stender Way, Santa Clara, CA - 95054

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A-0307-04** DATE: 8/1/2003

Product Affected: PA & DF (TSSOP) packages

Date Effective: 12/29/2003

MEANS OF DISTINGUISHING CHANGED DEVICES:

- ☐ Product Mark
- ☒ Back Mark Lot number will have the "P" prefix.
- ☐ Date Code
- ☐ Other

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Attachment:: ☒ Yes ☐ No

Samples: Available upon request

DESCRIPTION AND PURPOSE OF CHANGE:

- ☐ Die Technology
- ☐ Wafer Fabrication Process
- ☐ Assembly Process
- ☐ Equipment
- ☐ Material
- ☐ Testing
- ☒ Manufacturing Site
- ☐ Data Sheet
- ☐ Other

To qualify assembly line transfer from Amkor Technology Korea (ATK) to Amkor Technology Philippines (ATP), for PA & DF (TSSOP) packages. ATP is a qualified assembly facility for TSSOP package family.

This change is not expected to adversely affect customers as there are no changes in assembly processes, equipments, and assembly material set.

RELIABILITY/QUALIFICATION SUMMARY:

Please see attachment for qualification data.

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 shipments prior to effective date.***

Name/Date: ________________ E-Mail Address: ________________

Title: ________________ Phone# /Fax# : ________________

CUSTOMER COMMENTS: ________________

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: ________________ DATE: ________________

PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT - PCN #: A-0307-04

PCN Type: To qualify assembly site transfer.

Data Sheet Change: There is no change in Moisture Sensitive Level (MSL).

Detail of Change: This notification is to advise our customers that assembly of PA and DF packages will be transferred from ATK (Amkor Technology Korea) to ATP (Amkor Technology Philippines). ATP is a qualified assembly site for TSSOP package family.

ATP will assemble these packages using the same equipment, assembly material set and processes as ATK. No datasheet or Moisture Sensitive Level (MSL) changes are expected due to this assembly site change. Customers are not expected to be adversely impacted by this change.

The affected products are as follow:

IDT74ALVCH162830DF
IDT74ALVCH16832PA
IDT74ALVCH16901PA
IDT74ALVCHS162830DF
IDT74SSTV16859PA
IDT74SSTVF16859PA
IDT74SSTVM16859PA

Conversion Schedule (Estimated)

Sample availability -- 12/1/2003
Production shipment -- 12/29/2003

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ATTACHMENT - PCN #: A-0307-04

I. TSSOP Package Family Qualification Data - ATP Assembly Location

Qualification Plan: P02-01-03

Test Description	Test Method	Sample Size / # of Fails	Test Results
High Accelerated Stress Test (Biased, 130 °C/85% RH, 100 Hrs)	EIA/JESD22-A110	45/0	45/0
Temperature Cycling (-65 °C to 150 °C, 500 cyc)	MIL-STD-883, M 1010 JESD22-A104	45/0	45/0
Auto Clave (121 °C, 2 ATM, 168 Hrs)	EIA/JESD22-A102	45/0	45/0
Physical Dimensions	MIL-STD-883, M 2016 JESD22-B100	5/0	5/0
Bake & Ball Shear Test	EIA/JESD22-B116	5/0	5/0
Solderability Test	MIL-STD-883, M 2003 EIA/JESD22-B102	5/0	5/0
Bond Pull Test	MIL-STD-883, M 2011	5/0	5/0
X-ray Examination	Per IDT specification	45/0	45/0
S.A.M	JEDEC J-STD-035	10/0	10/0
Moisture Sensitivity Classification (Performed on each package type)	JEDEC J-STD-020	22/0	22/0

Note: ATP is a qualified assembly location for TSSOP package family.
Please refer to http://www.idt.com/quality/docs/qr_04_2003.pdf for additional TSSOP package reliability data.