



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

|   |  |
|---|--|
| PCN #: L0007-04<br>Product Affected: 74LVC16244, 74LVC16245<br>74LVCH162244<br>Manufacturing Location Affected: IDT Salinas Fab<br>Date Effective: 10/31/2000 | MEANS OF DISTINGUISHING CHANGED DEVICES:<br><input type="checkbox"/> Product Mark<br><input type="checkbox"/> Back Mark<br><input checked="" type="checkbox"/> Date Code     Prefix from "X" to "XG"<br><input type="checkbox"/> Other |
|---|--|

|  |   |
|--|---|
| Contact: Bimla Paul<br>Title: Product Assurance Manager<br>Phone #: 408-654-6419<br>Fax #: 408-492-8362<br>E-mail: bima.paul@idt.com | Attachment: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><br>Samples: |
|--|---|

**DESCRIPTION AND PURPOSE OF CHANGE:**

- Die Technology
- Wafer Fabrication Process     This change has been implemented to add TSMC (Taiwan) as an alternate fab to IDT fab (Salinas).
- Assembly Process
- Equipment
- Material
- Testing
- Manufacturing Site
- Data Sheet
- Other

**RELIABILITY/QUALIFICATION SUMMARY:**  
 Available upon request.

**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>Approval for shipments prior to effective date.</b> |
| Name/Date: _____ | E-Mail Address: _____   |
| Title: _____     | Phone# /Fax# : _____  |

**CUSTOMER COMMENTS:** \_\_\_\_\_

**IDT ACKNOWLEDGMENT OF RECEIPT:**

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



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### ATTACHMENT - PCN #: L0007-04

#### PCN Summary

**PCN Type:** Fab Site Change

**Commodity** Logic

**Forecast or Execute** Execute

**Planned or Unplanned** Planned

**Data Sheet Change** No Change

#### Detail of Change

This process change has been implemented to add TSMC Fab 9, 0.5µm process for 74LVC16244, 74LVC16245, 74LVCH162244.

#### Process / Design Changes

|                      | <u>Current Die Rev - X</u> | <u>New Die Rev - XG</u> |
|----------------------|----------------------------|-------------------------|
| Wafer Fab Technology | CEMOS 8.0                  | 0.5µm                   |
| Poly Gate            | 0.5µm                      | 0.5µm                   |
| Minimum Gate Oxide   | 140Å                       | 115Å                    |
| Wafer Size           | 6"                         | 8"                      |
| Fab Facility         | Fab 2 (Salinas)            | TSMC Fab 9              |

#### Conversion schedule (Estimated)

|              | <b>Sample Availability</b> | <b>Production Shipments</b> |
|--------------|----------------------------|-----------------------------|
| 74LVC16244   | September, 2000            | October 31, 2000            |
| 74LVC16245   | Available                  | October 31, 2000            |
| 74LVCH162244 | September, 2000            | October 31, 2000            |



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### ATTACHMENT - PCN #: L0007-04

Qualification Plan      QLG-00-07

Test Vehicle:      74LVC16245

Expected Completion Date:

October 31, 2000

| Test   | Lot SS/ Acc # | Lot # 1 | Lot # 2 | Lot # 3 |
|--|---------------|---------|---------|---------|
| <b>Bond Pull</b><br>EIA/JESD22-B116                              | 5/0           |         |         |         |
| <b>Die Shear</b><br>Mil-Std-883, Method 2019                     | 3/0           |         |         |         |
| <b>Ball Shear</b><br>EIA/JESD22-B116                             | 5/0           |         |         |         |
| <b>Operating Life Test (Dynamic)</b><br>Mil-Std-883, Method 1005 | 77/0          |         |         |         |
| <b>85/85(THB) or HAST</b><br>EIA/JESD22-A110                     | 45/0          |         |         |         |
| <b>Pressure Pot</b><br>EIA/JESD22-A102                           | 45/0          |         |         |         |
| <b>Thermal Shock</b><br>Mil-Std-883, Method 1011                 | 45/0          |         |         |         |
| <b>Temperature Cycling</b><br>Mil-Std-883, Method 1010           | 45/0          |         |         |         |
| <b>ESD: HBM</b><br>Mil-Std-883, Method 3015                      | 3/0           |         |         |         |
| <b>ESD: CDM</b>  | 3/0           |         |         |         |
| <b>Latch-Up Immunity</b><br>EIA/JESD78                           | 10/0          |         |         |         |
| <b>Electrical Characterization</b><br>Per Applicable Datasheet   | 10/0          |         |         |         |