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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1308-01** DATE: **19-Aug-2013**

Product Affected: 10.0mm x 10.0mm VFQFPN-72
Refer to Attachment II for the affected part numbers

Date Effective: **19-Nov-2013**

MEANS OF DISTINGUISHING CHANGED DEVICES:

- ☐ Product Mark
- ■ Back Mark — Lot# will have a "R" prefix
- ☐ Date Code
- ☐ Other

Contact: IDT PCN DESK
E-mail: pcndesk@idt.com

Attachment: ■ Yes ☐ No

Samples: Please contact your local sales representative for sample request.

DESCRIPTION AND PURPOSE OF CHANGE:

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

This notification is to advise our customers that IDT is adding ASE, Taiwan (ASEK) as an alternate assembly facility for the selective devices of the VFQFPN-72 package type. ASEK is a qualified IDT Subcontractor.

There is no change to the moisture performance.

Attachment I details the qualification data for this change and Attachment II shows the affected list of part numbers.

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: _____ ☐ ***Approval for shipments prior to effective date.***

Name/Date: _____ E-Mail Address: _____

Title: _____ Phone# /Fax# : _____

CUSTOMER COMMENTS: _____

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: _____ DATE: _____

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ATTACHMENT I - PCN # : A1308-01

PCN Type: Manufacturing Site - Alternate Assembly Location

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 ASE, Taiwan (ASEK) as an alternate assembly facility for the selective devices of the VFQFPN-72 package type. ASEK is a qualified IDT Subcontractor.

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

IDT has devices being transferred that are currently qualified at the original assembly site using both Cu and Au for wire bonds. There will be no change in wire type as a result of this PCN. Customers ordering and receiving Au wire will continue to receive Au wire. Customers ordering and receiving Cu wire will continue to receive Cu wire.

There is no change to the moisture performance of this package.

Qualified Material Sets, by Assembly Subcontractor

Material Set / Assembly	PTU - Unisem Batam, Indonesia	CHM - ChipMos, Taiwan	ASEK - ASE, Taiwan
Die Attach	CRM1066C	Hitachi EN4900F series	Hitachi EN4900F series
Mold Compound	Sumitomo G770 series	Sumitomo G770 series	Sumitomo G631 series

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ATTACHMENT I - PCN # : A1308-01

Qualification Information and Qualification Data:

Affected Packages: VFQFPN-72

Assembly Material: The affected package type is using ASEK standard materials shown on page 1 of this attachment.

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

Qualification Vehicle: 10.0mm x 10.0mm VFQFPN-72

Test Description	Test Method	Qual# / Wire Type	
		NP3PPA14 / AU	NP3PPA12 / CU
		Rej / SS	Rej / SS
* HAST - biased (130 °C/85% RH, 96 Hrs)	JESD22-A110	0 / 30	0 / 30
* Temperature Cycling (-55°C to 125°C, 700 cycles)	JESD22-A104	0 / 30	0 / 30
High Temperature Storage Test (150°C, 1000 hours)	JESD22-A103	0 / 25	0 / 30
Moisture Sensitivity Classification (Level 3, 125°C)	J-STD-020	0 / 25	0 / 25

Note:
* Test requires moisture pre-conditioning sequence per JESD22-A113 prior to stress test

Test Description	Test Method	Qual# / Wire Type	
		NP3PPA18 / AU	NP3PPA16 / CU
		Rej / SS	Rej / SS
Physical Dimensions	JESD22-B100	0 / 30	0 / 30
Internal Visual Inspection	MIL-STD-883, M 2010	0 / 5	0 / 5
External Visual Inspection	JESD22-B101	0 / 25	0 / 25
Ball Shear Test	JESD22-B116	0 / 5	0 / 5
Bond Pull Test	MIL-STD-883, M 2011	0 / 5	0 / 5
X-ray Examination	MIL-STD-883, M 2015	0 / 45	0 / 45

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ATTACHMENT II - PCN # : A1308-01

Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
6T49278BNLGI	9EPRS488CKLF	9LPR335CKLF	9LVRS387AKLF
6T49278BNLGI8	9EPRS488CKLFT	9LPR335CKLFT	9LVRS387AKLFT
813N252AKI-46LF	9EX21801AKILF	9LPR350AKLF	9VRS4818AKLF
813N252AKI-46LFT	9EX21801AKILFT	9LPR350AKLFT	9VRS4818AKLFT
82V3395BNLG	9EX21801AKLF	9LPRS113AKLF	9VRS4818BKLF
82V3395BNLG8	9EX21801AKLFT	9LPRS113AKLFT	9VRS4818BKLFT
82V3396NLG	9EX21831AKLF	9LPRS133BKLF	9VRS4883BKLF
82V3396NLG8	9EX21831AKLFT	9LPRS133BKLFT	9VRS4883BKLFT
82V3398NLG	9FG1900AK-1LF	9LPRS134BKLF	9ZML1231BKLF
82V3398NLG8	9FG1900AK-1LFT	9LPRS134BKLFT	9ZML1231BKLF-IB0
82V3399BNLG	9FG1900BK-1LF	9LPRS139AKLF	9ZML1231BKLFT
82V3399BNLG8	9FG1900BK-1LFT	9LPRS139AKLFT	9ZML1231BKLFT-IB0
8413S12BKI-100LF	9FG1901CKLF	9LPRS140CKLF	9ZML1232BKLF
8413S12BKI-100LFT	9FG1901CKLFT	9LPRS140CKLFT	9ZML1232BKLFT
8413S12BKILF	9FG1901EKLF	9LPRS325CKLF	9ZX21901BKLF
8413S12BKILFT	9FG1901EKLFT	9LPRS325CKLFT	9ZX21901BKLF-INT
8V41N012NLGI	9FG1901HKLF	9LPRS387BKLF	9ZX21901BKLF-SUN
8V41N012NLGI8	9FG1901HKLFT	9LPRS387BKLFT	9ZX21901BKLFT
8V89307BNLG	9FG1902AKLF	9LPRS395CKLF	9ZX21901BKLFT-INT
8V89307BNLG8	9FG1902AKLFT	9LPRS395CKLFT	9ZX21901BKLFT-SUN
8V89309NLG	9FG1903AK-1LF	9LPRS397DKLF	9ZX21901CKLF
8V89309NLG8	9FG1903AK-1LFT	9LPRS397DKLFT	9ZX21901CKLF-INT
932S310AKLF	9FG1903AKLF	9LPRS397EKLF	9ZX21901CKLFT
932S310AKLFT	9FG1903AKLFT	9LPRS397EKLFT	9ZX21901CKLFT-INT
932S509HKLF	9FG1903CKLF	9LPRS476HKLF	9ZX21902AKLF
932S509HKLFT	9FG1903CKLFT	9LPRS476HKLFT	9ZX21902AKLFT
932S820CKLF	9FG1904BK-1LF	9LPRS478CKLF	9ZX21907BKLF
932S820CKLFT	9FG1904BK-1LFT	9LPRS478CKLFT	9ZX21907BKLFT
932S890CKLF	9FGL1214AKLF	9LPRS488CKLF	9ZXL1930BKLF
932S890CKLFT	9FGL1214AKLFT	9LPRS488CKLFT	9ZXL1930BKLFT
954305DKLF	9FGL1218AKLF	9LPRS914EKLF	9ZXL1932AKLF
954305DKLFT	9FGL1218AKLFT	9LPRS914EKLFT	9ZXL1932AKLFT
954305DKLFT-TRQ1	9FGL1220AKLF	9LPRS918JKLF	CLK503J45KLF
954305EKLF	9FGL1220AKLFT	9LPRS918JKLFT	CLK503J45KLF-TRQ
954305EKLFT	9FGL1222AKLF	9LPRS919BKLF	CLK503J45KLFT
954305EKLFT-TRQ	9FGL1222AKLFT	9LPRS919BKLFT	CLK503J45KLFT-TRQ
9DB1904BKLF	9LPR333CKLF	9LPRS919HKLF	CLK503J45KLFT-TRQ1
9DB1904BKLFT	9LPR333CKLFT	9LPRS919HKLFT	CV145NLG
9DB1933AKLF	9LPR335BKLF	9LPRS929AKLF	CV145NLG8
9DB1933AKLFT	9LPR335BKLFT	9LPRS929AKLFT	