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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1111-03** DATE: **January 15, 2012**

Product Affected: QVSOP-40 & QVSOP-80
QSOP-48

Date Effective: **April 15, 2012**

MEANS OF DISTINGUISHING CHANGED DEVICES:

☐ Product Mark
☒ Back Mark
☐ Date Code
☐ Other

Assembly lot marked on the device provides traceability to the material used

Contact: Mary Vesey
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Attachment: ☒ Yes ☐ No

Samples: Please contact Product Line Marketing for sample request & availability.

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 plans to convert QVSOP-40, QVSOP-80 and QSOP-48 packages to a smaller Gold bonding wire diameter. The new Gold bonding wire diameter is 0.8 mil compared to current 1.0 mil. This change is applicable to OSET (Orient Semiconductor Electronics, Taiwan) assembly sub-contractor of the affected part numbers.

Please refer to the following attachments for additional information.
Attachment 1 outlines the qualification results.
Attachment 2 shows the affected part numbers.

RELIABILITY/QUALIFICATION SUMMARY:

There is no expected change to the product quality or reliability performance.

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 90 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: ______________________

ATTACHMENT 1 - PCN # : A1111-03

PCN Type:	Assembly Material Change - Gold Bonding Wire Diameter
Data Sheet Change:	None
Details Of Change:	This notification is to advise our customers that IDT plans to convert QVSOP-40, QVSOP-80 and QSOP-48 packages to a smaller Gold bonding wire diameter. The new Gold bonding wire diameter is 0.8 mil compared to current 1.0 mil. This change is applicable to OSET (Orient Semiconductor Electronics, Taiwan) assembly sub-contractor of the affected part numbers. There is no change to the moisture performance or RoHS compliance.

Description	Current	New
Gold Bonding Wire Diameter	1.0 mil	0.8 mil

ATTACHMENT 1 - PCN # : A1111-03

Qualification Test Plans and Results:

Qual Vehicle: QVSOP (Qual vehicles - QVSOP-80)

Test Description	Test Method	Sample Size / Reject
* High Accelerated Stress Test (Biased, 130 °C/85% RH, 100 Hrs)	JESD22-A110	25/0
* Temperature Cycling (-55°C to 125°C, 700 cycle)	JESD22-A104	25/0
* Auto Clave (121 °C, 2 ATM, 168 Hrs)	JESD22-A102	25/0
High Temperature Storage Test (150°C, 1000 hours)	JESD22-A103	25/0
Physical Dimensions	JESD22-B100	30/0
Internal Visual Inspection	MIL-STD-883, M 2010	5/0
External Visual Inspection	JESD22-B101	25/0
Resistance to Solvents	MIL-STD-883, M 2015	5/0
Ball Shear Test	JESD22-B116	5/0
Solderabiilty Test	JESD22-B102	5/0
Bond Pull Test	MIL-STD-883, M 2011	5/0
X-ray Examination	MIL-STD-883, M 2015	25/0
Moisture Sensitivity Classification	J-STD-020	50/0

Notes: * Test requires moisture pre-conditioning sequence per JESD22-A113.

ATTACHMENT 2 - PCN #: A1111-03

Affected Part Number

IDT Part Number	IDT Part Number	IDT Part Number	IDT Part Number
QS32X2245Q2G	QS32X861Q1G	QS32XVH384Q1G	QS34X383Q3G
QS32X2245Q2G8	QS32X861Q1G8	QS32XVH384Q1G8	QS34X383Q3G8
QS32X2384Q1G	QS32XL384Q1G	QS33X257Q1G	QS34XVH2245Q3G
QS32X2384Q1G8	QS32XL384Q1G8	QS33X257Q1G8	QS34XVH2245Q3G8
QS32X245Q2G	QS32XVH2245Q2G	QS34X2245Q3G	QS34XVH245Q3G
QS32X245Q2G8	QS32XVH2245Q2G8	QS34X2245Q3G8	QS34XVH245Q3G8
QS32X384Q1G	QS32XVH245Q2G	QS34X245Q3G	QS4A215Q1G
QS32X384Q1G8	QS32XVH245Q2G8	QS34X245Q3G8	QS4A215Q1G8