



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20170308000
Add Cu as Alternative Wire Base Metal for Selected Device(s)
Change Notification / Sample Request

Date: March 22, 2017
To: TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

20170308000
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
DS90LV047ATMTCX/NOPB	null
DS90LV048ATMTCX/NOPB	null
DS90LV804TSQ/NOPB	null
LM27313XMF/NOPB	null
LM3404HVMRX/NOPB	null
LM5017MRE/NOPB	null
LM5069MM-1/NOPB	null
LM50BIM3/NOPB	null
LM5110-1MX/NOPB	null
LMV2011MF/NOPB	null
LM2651MTC-3.3/NOPB	null
LM2704MF-ADJ/NOPB	null
LM2853MH-3.3/NOPB	null
LMH0302SQE/NOPB	null
LMH0356SQE/NOPB	null
LM5113SDE/NOPB	null
LMH0074SQE/NOPB	null
LM25017MRX/NOPB	null
LM26400YMHX/NOPB	null
LM2651MTCX-ADJ/NOPB	null
LM2700MT-ADJ/NOPB	null
LM3492MHX/NOPB	null
LM3671MF-3.3/NOPB	null
LM4838MTEx/NOPB	null
LM50BIM3X/NOPB	null
LM50CIM3X/NOPB	null
LMP2011MF/NOPB	null
LMR62014XMF/NOPB	null
LMR10510YSDE/NOPB	null
DS90LV032ATMTC	null
DS90LV048ATMTC	null
LM2660MX/NOPB	null
LM2832YSD/NOPB	null
LM2852YMXAX-3.3/NOPB	null
LM5018MR/NOPB	null
LM5018MRX/NOPB	null
LM5019MRX/NOPB	null
LM4871MM/NOPB	null
LM2611BMF/NOPB	null
LM2655MTC-ADJ/NOPB	null
LM2731YMF/NOPB	null
LM5101CMA/NOPB	null
LM2655MTCX-ADJ/NOPB	null
LM2731XMF/NOPB	null
LM25574MTX/NOPB	null
LM27313XMF/NOPB	null
LM2731XMF/NOPB	null
LM3410XSDE/NOPB	null
LM3671MF-1.2/NOPB	null
LM5069MMX-1/NOPB	null
LM5574MTX/NOPB	null
LMH0044SQE/NOPB	null
LMR14203XMKX/NOPB	null
LMR62014XMF/NOPB	null
LP3982IMMX-1.8/NOPB	null
TPS92641PWPT/NOPB	null
DS15BR401TSQ/NOPB	null

LM3402MRX/NOPB	null
LM3404MRX/NOPB	null
LM3671MFX-2.5/NOPB	null
LM5017MR/NOPB	null
LMH0344SQE/NOPB	null
LM2842XMKX-ADJL/NOPB	null
LM25574MT/NOPB	null
LM2852YMXA-1.2/NOPB	null
LM3670MF-3.3/NOPB	null
LM50CIM3/NOPB	null
LM2733XMF/NOPB	null
LM5574MT/NOPB	null
LMR64010XMF/NOPB	null
LM5104M/NOPB	null
LM2852XMXA-1.8/NOPB	null
LM2611AMF/NOPB	null
LM4836MTEX/NOPB	null
LM2660M/NOPB	null
LM2853MHX-1.2/NOPB	null
LM2853MHX-1.5/NOPB	null
LM25017SD/NOPB	null

Technical details of this Product Change follow on the next page(s).

PCN Number:	20170308000		PCN Date:	Mar 21 2017																						
Title:	Add Cu as Alternative Wire Base Metal for Selected Device(s)																									
Customer Contact:	PCN Manager	Dept:	Quality Services																							
Proposed 1st Ship Date:	Jun 21 2017		Estimated Sample Availability:	Date provided at sample request																						
Change Type:																										
☐	Assembly Site	☐	Design	☐	Wafer Bump Site																					
☒	Assembly Process	☐	Data Sheet	☐	Wafer Bump Material																					
☒	Assembly Materials	☐	Part number change	☐	Wafer Bump Process																					
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Site																					
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Materials																					
				☐	Wafer Fab Process																					
PCN Details																										
Description of Change:																										
Texas Instruments is pleased to announce the qualification of Cu as an additional bond wire option for selected devices listed in "Product affected" section below. Devices will remain in current assembly facilities and there will be no other piece part changes: <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Pkg Family</th> <th>Current Wire</th> <th>Additional Wire</th> </tr> </thead> <tbody> <tr> <td>SOIC</td> <td>Au, 1.3 mils or 1.0 mils</td> <td>Cu, 1.3 mils or 0.96 mils</td> </tr> <tr> <td>SOT</td> <td>Au, 1.3 mils or 1.0 mils</td> <td>Cu, 1.3 mils or 0.96 mils</td> </tr> <tr> <td>TSSOP</td> <td>Au, 1.3 mils or 1.0 mils</td> <td>Cu, 1.3 mils or 0.96 mils</td> </tr> <tr> <td>VSSOP</td> <td>Au, 1.3 mils or 1.0 mils</td> <td>Cu, 1.3 mils or 0.96 mils</td> </tr> <tr> <td>QFN</td> <td>Au, 1.3 mils or 1.0 mils</td> <td>Cu, 1.3 mils or 0.8 mils</td> </tr> <tr> <td>SON</td> <td>Au, 1.3 mils or 1.0 mils</td> <td>Cu, 1.3 mils or 0.8 mils</td> </tr> </tbody> </table>						Pkg Family	Current Wire	Additional Wire	SOIC	Au, 1.3 mils or 1.0 mils	Cu, 1.3 mils or 0.96 mils	SOT	Au, 1.3 mils or 1.0 mils	Cu, 1.3 mils or 0.96 mils	TSSOP	Au, 1.3 mils or 1.0 mils	Cu, 1.3 mils or 0.96 mils	VSSOP	Au, 1.3 mils or 1.0 mils	Cu, 1.3 mils or 0.96 mils	QFN	Au, 1.3 mils or 1.0 mils	Cu, 1.3 mils or 0.8 mils	SON	Au, 1.3 mils or 1.0 mils	Cu, 1.3 mils or 0.8 mils
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Reason for Change:																										
Continuity of supply. 1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties 2) Maximize flexibility within our Assembly/Test production sites. 3) Cu is easier to obtain and stock																										
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																										
None																										
Anticipated impact on Material Declaration																										
☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI ECO website .																							
Changes to product identification resulting from this PCN:																										
None																										

Product Affected:

Device	Package Family	Device	Package Family
DS15BR400TSQ	QFN	LM3492HCMHX/NOPB	TSSOP
DS15BR400TSQ/NOPB	QFN	LM3492MH/NOPB	TSSOP
DS15BR401TSQ/NOPB	QFN	LM3492MHX/NOPB	TSSOP
DS15EA101RGH-P	QFN	LM3497M/NOPB	SOIC
DS15EA101SQ/NOPB	QFN	LM3497MX/NOPB	SOIC
DS15EA101SQE/NOPB	QFN	LM3519MK-20/NOPB	SOT
DS15EA101SQX/NOPB	QFN	LM3670MF-1.2/NOPB	SOT
DS30BA101SQ/NOPB	QFN	LM3670MF-1.5/NOPB	SOT
DS30BA101SQE/NOPB	QFN	LM3670MF-1.6/NOPB	SOT
DS30BA101SQX/NOPB	QFN	LM3670MF-1.8/NOPB	SOT
DS90LV031ATMTC	TSSOP	LM3670MF-1.875/NOPB	SOT
DS90LV032ATMTC	TSSOP	LM3670MF-3.3	SOT
DS90LV032ATMTCX	TSSOP	LM3670MF-3.3/NOPB	SOT
DS90LV047ATMTC	TSSOP	LM3670MF-ADJ/NOPB	SOT
DS90LV047ATMTCX/NOPB	TSSOP	LM3670MFX-1.2/NOPB	SOT
DS90LV048ATMTC	TSSOP	LM3670MFX-1.8/NOPB	SOT
DS90LV048ATMTCX	TSSOP	LM3670MFX-ADJ/NOPB	SOT
DS90LV048ATMTCX/NOPB	TSSOP	LM3671MF-1.2	SOT
DS90LV804TSQ	QFN	LM3671MF-1.2/NOPB	SOT
DS90LV804TSQ/NOPB	QFN	LM3671MF-1.25/NOPB	SOT
DS90LV804TSQX/NOPB	QFN	LM3671MF-1.375/NOPB	SOT
EMB1466MME/NOPB	VSSOP	LM3671MF-1.5/NOPB	SOT
EMB1487MM/NOPB	VSSOP	LM3671MF-1.6/NOPB	SOT
EMB1487MME/NOPB	VSSOP	LM3671MF-1.8/NOPB	SOT
HPA02292SQ/NOPB	QFN	LM3671MF-1.875/NOPB	SOT
LDC3941HVMY/NOPB	VSSOP	LM3671MF-2.5/NOPB	SOT
LDC3941HVMYE/NOPB	VSSOP	LM3671MF-2.8	SOT
LDC3941HVMYX/NOPB	VSSOP	LM3671MF-2.8/NOPB	SOT
LM1086ILD-3.3/NOPB	SON	LM3671MF-3.3/NOPB	SOT
LM1117ILD-ADJ/NOPB	SON	LM3671MF-ADJ/NOPB	SOT
LM1117LD-1.8/NOPB	SON	LM3671MFX-1.2/NOPB	SOT
LM1117LD-2.5/NOPB	SON	LM3671MFX-1.25/NOPB	SOT
LM1117LD-3.3/NOPB	SON	LM3671MFX-1.8/NOPB	SOT
LM1117LD-ADJ/NOPB	SON	LM3671MFX-1.875/NOPB	SOT
LM1117LDX-1.8	SON	LM3671MFX-2.5/NOPB	SOT
LM1117LDX-1.8/NOPB	SON	LM3671MFX-2.8/NOPB	SOT
LM1117LDX-ADJ/NOPB	SON	LM3671MFX-3.3/NOPB	SOT
LM25017MR/NOPB	SOIC	LM3671MFX-ADJ/NOPB	SOT
LM25017MRE/NOPB	SOIC	LM3674MF-1.2/NOPB	SOT

LM25017MRX/NOPB	SOIC	LM3674MF-1.5/NOPB	SOT
LM25017SD/NOPB	SON	LM3674MF-1.8/NOPB	SOT
LM25017SDE/NOPB	SON	LM3674MF-1.875/NOPB	SOT
LM25017SDX/NOPB	SON	LM3674MF-2.8/NOPB	SOT
LM25018MR/NOPB	SOIC	LM3674MF-ADJ	SOT
LM25018MRE/NOPB	SOIC	LM3674MF-ADJ/NOPB	SOT
LM25018MRX/NOPB	SOIC	LM3674MFX-1.2/NOPB	SOT
LM25018SD/NOPB	SON	LM3674MFX-1.5/NOPB	SOT
LM25018SDE/NOPB	SON	LM3674MFX-1.8/NOPB	SOT
LM25018SDX/NOPB	SON	LM3674MFX-1.875/NOPB	SOT
LM25019MR/NOPB	SOIC	LM3674MFX-ADJ/NOPB	SOT
LM25019MRE/NOPB	SOIC	LM3743MM-1000/NOPB	VSSOP
LM25019MRX/NOPB	SOIC	LM3743MM-300/NOPB	VSSOP
LM25019SD/NOPB	SON	LM4666SD/NOPB	SON
LM25019SDE/NOPB	SON	LM4670SD/NOPB	SON
LM25019SDX/NOPB	SON	LM4809LDX/NOPB	SON
LM2502SQ/NOPB	QFN	LM4819LD/NOPB	SON
LM2502SQX/NOPB	QFN	LM4835MTX/NOPB	TSSOP
LM25101AM/NOPB	SOIC	LM4836LQ/NOPB	QFN
LM25101AMX/NOPB	SOIC	LM4836MTEX/NOPB	TSSOP
LM25101BMA/NOPB	SOIC	LM4838MTE/NOPB	TSSOP
LM25101BMAX/NOPB	SOIC	LM4838MTEX/NOPB	TSSOP
LM25101CMA/NOPB	SOIC	LM4838MTX/NOPB	TSSOP
LM25101CMAX/NOPB	SOIC	LM4853LD/NOPB	SON
LM25574MT	TSSOP	LM4855LQ/NOPB	QFN
LM25574MT/NOPB	TSSOP	LM4863LQ/NOPB	QFN
LM25574MTX/NOPB	TSSOP	LM4866MTE/NOPB	TSSOP
LM2611AMF	SOT	LM4866MTEX/NOPB	TSSOP
LM2611AMF/NOPB	SOT	LM4871LD	SON
LM2611AMF/S7002213	SOT	LM4871LD/NOPB	SON
LM2611AMFX/NOPB	SOT	LM4871MM/NOPB	VSSOP
LM2611BMF/NOPB	SOT	LM4871MMX/NOPB	VSSOP
LM2611BMFX/NOPB	SOT	LM4873MTE/NOPB	TSSOP
LM26400YMH/J7002051	TSSOP	LM4873MTEX/NOPB	TSSOP
LM26400YMH/NOPB	TSSOP	LM4879SD/NOPB	SON
LM26400YMHX/J7002052	TSSOP	LM4879SDX/NOPB	SON
LM26400YMHX/NOPB	TSSOP	LM4890LDX/NOPB	SON
LM26480SQ-AA/S7002404	QFN	LM4898LD/NOPB	SON
LM2651MTC-3.3/NOPB	TSSOP	LM4916LD/NOPB	SON
LM2651MTC-ADJ	TSSOP	LM4916LDX/NOPB	SON
LM2651MTC-ADJ/NOPB	TSSOP	LM4927SD/NOPB	SON
LM2651MTCX-3.3/NOPB	TSSOP	LM4970SD/NOPB	SON
LM2651MTCX-ADJ/NOPB	TSSOP	LM4990LD/NOPB	SON
LM2653MTC-ADJ	TSSOP	LM4991LD/HFLF	SON

LM2653MTC-ADJ/NOPB	TSSOP	LM4991LD/NOPB	SON
LM2653MTCX-ADJ/NOPB	TSSOP	LM4991LDX/NOPB	SON
LM2655MTC-3.3/NOPB	TSSOP	LM4992SD/NOPB	SON
LM2655MTC-ADJ/NOPB	TSSOP	LM5000-3MTC	TSSOP
LM2655MTCX-3.3/NOPB	TSSOP	LM5000-3MTC/NOPB	TSSOP
LM2655MTCX-ADJ/NOPB	TSSOP	LM5000-3MTCX	TSSOP
LM2660M	SOIC	LM5000-3MTCX/NOPB	TSSOP
LM2660M/NOPB	SOIC	LM5017MR/NOPB	SOIC
LM2660MX/NOPB	SOIC	LM5017MRE/NOPB	SOIC
LM2671LD-ADJ	SON	LM5017MRX/NOPB	SOIC
LM2671LD-ADJ/NOPB	SON	LM5017SD/NOPB	SON
LM2672LD-ADJ/NOPB	SON	LM5017SDE/NOPB	SON
LM2674LD-ADJ/NOPB	SON	LM5017SDX/NOPB	SON
LM2674LDX-5.0/NOPB	SON	LM5018MR/NOPB	SOIC
LM2675LD-5.0	SON	LM5018MRX/NOPB	SOIC
LM2675LD-5.0/NOPB	SON	LM5018SD/NOPB	SON
LM2675LD-ADJ/NOPB	SON	LM5018SDX/NOPB	SON
LM2694MT/NOPB	TSSOP	LM5019MR/NOPB	SOIC
LM2694MTX/NOPB	TSSOP	LM5019MRX/NOPB	SOIC
LM2700MT-ADJ	TSSOP	LM5019SD/NOPB	SON
LM2700MT-ADJ/NOPB	TSSOP	LM5019SDX/NOPB	SON
LM2700MTX-ADJ/NOPB	TSSOP	LM5067MM-1/NOPB	VSSOP
LM2703MF-ADJ	SOT	LM5067MM-2	VSSOP
LM2703MF-ADJ/NOPB	SOT	LM5067MM-2/NOPB	VSSOP
LM2703MFX-ADJ/NOPB	SOT	LM5067MMX-2/NOPB	VSSOP
LM2704MF-ADJ	SOT	LM5069MM-1/NOPB	VSSOP
LM2704MF-ADJ/NOPB	SOT	LM5069MM-2	VSSOP
LM2705MF-ADJ	SOT	LM5069MM-2/NOPB	VSSOP
LM2705MF-ADJ/NOPB	SOT	LM5069MMX-1/NOPB	VSSOP
LM2705MFX-ADJ/NOPB	SOT	LM5069MMX-2/NOPB	VSSOP
LM2717MT/NOPB	TSSOP	LM50BIM3	SOT
LM2717MT-ADJ/NOPB	TSSOP	LM50BIM3/NOPB	SOT
LM2717MTX/NOPB	TSSOP	LM50BIM3X	SOT
LM2717MTX-ADJ/NOPB	TSSOP	LM50BIM3X/NOPB	SOT
LM27213MTD/NOPB	TSSOP	LM50CIM3	SOT
LM27213MTDX/NOPB	TSSOP	LM50CIM3/NOPB	SOT
LM27222M	SOIC	LM50CIM3X	SOT
LM27222M/NOPB	SOIC	LM50CIM3X/NOPB	SOT
LM27222MX/NOPB	SOIC	LM50CIM3X/S4000183	SOT
LM2722MX/NOPB	SOIC	LM50CIM3X/S7001024	SOT
LM2724AMX/NOPB	SOIC	LM50CIM3X/S7001894	SOT
LM2726M	SOIC	LM5100AM/NOPB	SOIC
LM2726M/NOPB	SOIC	LM5100AMX/NOPB	SOIC
LM2726MX	SOIC	LM5100BMA/NOPB	SOIC

LM2726MX/NOPB	SOIC	LM5100BMAX/NOPB	SOIC
LM27299MTD/NOPB	TSSOP	LM5100CMAX/NOPB	SOIC
LM27313XMF/NOPB	SOT	LM5101AM/NOPB	SOIC
LM27313XMF/NOPB	SOT	LM5101AMX/NOPB	SOIC
LM2731XMF	SOT	LM5101AMX/S7003027	SOIC
LM2731XMF/NOPB	SOT	LM5101BMA/NOPB	SOIC
LM2731XMF/NOPB	SOT	LM5101BMAX/NOPB	SOIC
LM2731YMF	SOT	LM5101CMA/NOPB	SOIC
LM2731YMF/NOPB	SOT	LM5101CMAX/NOPB	SOIC
LM2731YMF/NOPB	SOT	LM5101M/NOPB	SOIC
LM2733XMF	SOT	LM5101MX/NOPB	SOIC
LM2733XMF/NOPB	SOT	LM5104M	SOIC
LM2733XMF/NOPB	SOT	LM5104M/NOPB	SOIC
LM2733YMF	SOT	LM5104MX/NOPB	SOIC
LM2733YMF/NOPB	SOT	LM5107MA/NOPB	SOIC
LM2733YMF/S7002529	SOT	LM5107MAX/NOPB	SOIC
LM2733YMF/NOPB	SOT	LM5109AMA/NOPB	SOIC
LM2735XMY/NOPB	VSSOP	LM5109AMAX/NOPB	SOIC
LM2735XSD/NOPB	SON	LM5109BMA	SOIC
LM2735XSDX/NOPB	SON	LM5109BMA/NOPB	SOIC
LM2735YMY/NOPB	VSSOP	LM5109BMAX/NOPB	SOIC
LM2735YSD/NOPB	SON	LM5109MA/NOPB	SOIC
LM2735YSDX/NOPB	SON	LM5109MAX/NOPB	SOIC
LM2738XMY/NOPB	VSSOP	LM5110-1M/NOPB	SOIC
LM2738XSD/NOPB	SON	LM5110-1MX/NOPB	SOIC
LM2738YMY/J7002666	VSSOP	LM5110-2M/NOPB	SOIC
LM2738YMY/NOPB	VSSOP	LM5110-2MX/NOPB	SOIC
LM2738YMYX/J7002667	VSSOP	LM5110-3M/NOPB	SOIC
LM2738YSD/NOPB	SON	LM5110-3MX/NOPB	SOIC
LM27402MH/NOPB	TSSOP	LM5111-1M/NOPB	SOIC
LM27402MHX/NOPB	TSSOP	LM5111-1MX	SOIC
LM27402SQ/NOPB	QFN	LM5111-1MX/NOPB	SOIC
LM27402SQX/NOPB	QFN	LM5111-2M/NOPB	SOIC
LM27402SQX/S7002580	QFN	LM5111-2MX/NOPB	SOIC
LM2750LD-5.0/NOPB	SON	LM5111-3MX	SOIC
LM2750LD-ADJ/NOPB	SON	LM5111-3MX/NOPB	SOIC
LM2750LDX-5.0/NOPB	SON	LM5111-4M/NOPB	SOIC
LM2750SD-5.0/NOPB	SON	LM5111-4MX/NOPB	SOIC
LM2750SD-ADJ/NOPB	SON	LM5113SD/NOPB	SON
LM2750SDX-5.0/NOPB	SON	LM5113SDE/NOPB	SON
LM2750SDX-ADJ/NOPB	SON	LM5113SDX/NOPB	SON
LM2830ZSD/NOPB	SON	LM5114ASD/NOPB	SON
LM2831XSD	SON	LM5114ASDX/NOPB	SON
LM2831XSD/NOPB	SON	LM5114BSD/NOPB	SON

LM2831XSDX/NOPB	SON	LM5114BSDX/NOPB	SON
LM2831YSD/J7002202	SON	LM5121MH/NOPB	TSSOP
LM2831YSD/NOPB	SON	LM5121MHE/NOPB	TSSOP
LM2831YSDX/J7002203	SON	LM5121MHX/NOPB	TSSOP
LM2831ZSD/NOPB	SON	LM5122MH/NOPB	TSSOP
LM2832XSD/NOPB	SON	LM5122MHE/NOPB	TSSOP
LM2832XSDX/NOPB	SON	LM5122MHX/NOPB	TSSOP
LM2832YSD/NOPB	SON	LM5134ASD/NOPB	SON
LM2832ZSD/NOPB	SON	LM5134ASDX/NOPB	SON
LM2840XMK-ADJL/NOPB	SOT	LM5134BSD/NOPB	SON
LM2840XMKX-ADJL/NOPB	SOT	LM5134BSDX/NOPB	SON
LM2840YMK-ADJL/NOPB	SOT	LM5574MT	TSSOP
LM2841XBMKX/NOPB	SOT	LM5574MT/NOPB	TSSOP
LM2841XMK-ADJL/NOPB	SOT	LM5574MTX/NOPB	TSSOP
LM2841XMKX-ADJL/NOPB	SOT	LM6132BIMX	SOIC
LM2841YMK-ADJL/NOPB	SOT	LM6132BIMX/NOPB	SOIC
LM2841YMKX-ADJL/NOPB	SOT	LM6132BIMX/S7002551	SOIC
LM2841YMKX-ADJL-P	SOT	LM6132BIMX/SL110236	SOIC
LM2842XMK-ADJL/NOPB	SOT	LMH0044SQ/NOPB	QFN
LM2842XMKX-ADJL/NOPB	SOT	LMH0044SQE/NOPB	QFN
LM2842YMK-ADJL/NOPB	SOT	LMH0074SQ/NOPB	QFN
LM2842YMKX-ADJL/NOPB	SOT	LMH0074SQE/NOPB	QFN
LM2852XMXA-0.8/NOPB	TSSOP	LMH0302SQ/NOPB	QFN
LM2852XMXA-1.0/NOPB	TSSOP	LMH0302SQE/NOPB	QFN
LM2852XMXA-1.2/NOPB	TSSOP	LMH0302SQX/NOPB	QFN
LM2852XMXA-1.5/NOPB	TSSOP	LMH0303SQ/NOPB	QFN
LM2852XMXA-1.8/NOPB	TSSOP	LMH0303SQE/NOPB	QFN
LM2852XMXA-2.5/NOPB	TSSOP	LMH0307SQ/NOPB	QFN
LM2852XMXA-3.0/NOPB	TSSOP	LMH0307SQE/NOPB	QFN
LM2852XMXA-3.3/NOPB	TSSOP	LMH0307SQX/NOPB	QFN
LM2852XMXAX-1.2/NOPB	TSSOP	LMH0314SQ/NOPB	QFN
LM2852XMXAX-1.5/NOPB	TSSOP	LMH0314SQE/NOPB	QFN
LM2852XMXAX-1.8/NOPB	TSSOP	LMH0314SQX/NOPB	QFN
LM2852XMXAX-2.5/NOPB	TSSOP	LMH0344SQ/NOPB	QFN
LM2852XMXAX-3.3/NOPB	TSSOP	LMH0344SQE/NOPB	QFN
LM2852YMXA-1.0/NOPB	TSSOP	LMH0344SQX/NOPB	QFN
LM2852YMXA-1.2/NOPB	TSSOP	LMH0356SQ/NOPB	QFN
LM2852YMXA-1.3/NOPB	TSSOP	LMH0356SQE/NOPB	QFN
LM2852YMXA-1.5/NOPB	TSSOP	LMH1251MT	TSSOP
LM2852YMXA-1.8/NOPB	TSSOP	LMH1251MT/NOPB	TSSOP
LM2852YMXA-2.5/NOPB	TSSOP	LMH1251MTX/NOPB	TSSOP
LM2852YMXA-3.3	TSSOP	LMH6514SQ/NOPB	QFN
LM2852YMXA-3.3/NOPB	TSSOP	LMH6514SQE/NOPB	QFN
LM2852YMXAX-1.0/NOPB	TSSOP	LMH6515SQ/NOPB	QFN

LM2852YMXAX-1.2/NOPB	TSSOP	LMH6518SQ/NOPB	QFN
LM2852YMXAX-1.3/NOPB	TSSOP	LMH6518SQ/S7002553	QFN
LM2852YMXAX-1.5/NOPB	TSSOP	LMH6518SQE/NOPB	QFN
LM2852YMXAX-1.8/NOPB	TSSOP	LMH6518SQX/NOPB	QFN
LM2852YMXAX-2.5/NOPB	TSSOP	LMP2011MF	SOT
LM2852YMXAX-3.0/NOPB	TSSOP	LMP2011MF/NOPB	SOT
LM2852YMXAX-3.3/NOPB	TSSOP	LMP2011MFX/NOPB	SOT
LM2853MH-1.0/J7002231	TSSOP	LMR10510YSD/NOPB	SON
LM2853MH-1.0/NOPB	TSSOP	LMR10510YSDE/NOPB	SON
LM2853MH-1.2/J7002086	TSSOP	LMR10510YSDX/NOPB	SON
LM2853MH-1.2/NOPB	TSSOP	LMR10515XSD/NOPB	SON
LM2853MH-1.5/NOPB	TSSOP	LMR10515XSDE/NOPB	SON
LM2853MH-1.8/NOPB	TSSOP	LMR10515YSDX/NOPB	SON
LM2853MH-2.5/NOPB	TSSOP	LMR10515YSD/NOPB	SON
LM2853MH-3.0/NOPB	TSSOP	LMR10515YSDE/NOPB	SON
LM2853MH-3.3/NOPB	TSSOP	LMR10515YSDX/NOPB	SON
LM2853MHX-1.0/J7002232	TSSOP	LMR10520XSD/NOPB	SON
LM2853MHX-1.0/NOPB	TSSOP	LMR10520XSDE/NOPB	SON
LM2853MHX-1.2/J7002087	TSSOP	LMR10520XSDX/NOPB	SON
LM2853MHX-1.2/NOPB	TSSOP	LMR10520YSD/NOPB	SON
LM2853MHX-1.5/NOPB	TSSOP	LMR10520YSDE/NOPB	SON
LM2853MHX-1.8/NOPB	TSSOP	LMR10520YSDX/NOPB	SON
LM2853MHX-2.5/NOPB	TSSOP	LMR14203XMK/NOPB	SOT
LM2853MHX-3.3/NOPB	TSSOP	LMR14203XMKE/NOPB	SOT
LM3402HVMR/NOPB	SOIC	LMR14203XMKX/NOPB	SOT
LM3402HVMRX/NOPB	SOIC	LMR14206XMK/NOPB	SOT
LM3402MR/NOPB	SOIC	LMR14206XMKE/NOPB	SOT
LM3402MRX/J7002927	SOIC	LMR14206XMKX/NOPB	SOT
LM3402MRX/NOPB	SOIC	LMR62014XMF/NOPB	SOT
LM3404HVMA/NOPB	SOIC	LMR62014XMFE/NOPB	SOT
LM3404HVMAX/NOPB	SOIC	LMR62014XMF/NOPB	SOT
LM3404HVMAX/S7002648	SOIC	LMR62421XSD/NOPB	SON
LM3404HVMR/NOPB	SOIC	LMR62421XSDE/NOPB	SON
LM3404HVMRX/NOPB	SOIC	LMR62421XSDX/NOPB	SON
LM3404MA/NOPB	SOIC	LMR64010XMF/NOPB	SOT
LM3404MAX/NOPB	SOIC	LMR64010XMFE/NOPB	SOT
LM3404MR/NOPB	SOIC	LMR64010XMF/NOPB	SOT
LM3404MRX/NOPB	SOIC	LMV2011MF/NOPB	SOT
LM3405AXMY/NOPB	VSSOP	LMV2011MFX/NOPB	SOT
LM3405AXMYX/NOPB	VSSOP	LMV712LD/NOPB	SON
LM3409MY/J7002764	VSSOP	LMV712LDX/NOPB	SON
LM3409MYX/J7002765	VSSOP	LP2966IMM-1833/NOPB	VSSOP
LM3410XMY/NOPB	VSSOP	LP2966IMM-2518/NOPB	VSSOP
LM3410XMYE/NOPB	VSSOP	LP2966IMM-2525/NOPB	VSSOP

LM3410XMYX/NOPB	VSSOP	LP2966IMM-2828/NOPB	VSSOP
LM3410XSD/J7003108	SON	LP2966IMM-3325	VSSOP
LM3410XSD/NOPB	SON	LP2966IMM-3325/NOPB	VSSOP
LM3410XSDE/NOPB	SON	LP2966IMM-5050/NOPB	VSSOP
LM3410XSDX/NOPB	SON	LP2966IMMX-3325/NOPB	VSSOP
LM3410YMY/NOPB	VSSOP	LP2981IM5X-36C	SOT
LM3410YMYE/NOPB	VSSOP	LP2995LQ/NOPB	QFN
LM3410YMYX/NOPB	VSSOP	LP2996LQ/NOPB	QFN
LM3410YSD/NOPB	SON	LP2996LQX/NOPB	QFN
LM3410YSDE/NOPB	SON	LP38690SD-ADJ/J7002355	SON
LM3410YSDX/NOPB	SON	LP3906SQ-VPFP/S7002740	QFN
LM3414HVMR/NOPB	SOIC	LP3907SQ-JXQX/S7001874	QFN
LM3414HVMRX/NOPB	SOIC	LP3982IMM-1.8	VSSOP
LM3414HVSD/NOPB	SON	LP3982IMM-1.8/NOPB	VSSOP
LM3414HVSDX/NOPB	SON	LP3982IMM-2.5/NOPB	VSSOP
LM3414MR/NOPB	SOIC	LP3982IMM-3.0	VSSOP
LM3414MRX/NOPB	SOIC	LP3982IMM-3.0/NOPB	VSSOP
LM3414SD/NOPB	SON	LP3982IMM-3.3	VSSOP
LM3414SD/S7002686	SON	LP3982IMM-3.3/NOPB	VSSOP
LM3414SDX/NOPB	SON	LP3982IMM-ADJ	VSSOP
LM3444MA/NOPB	SOIC	LP3982IMM-ADJ/NOPB	VSSOP
LM3444MAX/NOPB	SOIC	LP3982IMMX-1.8/NOPB	VSSOP
LM3445M/NOPB	SOIC	LP3982IMMX-2.5/NOPB	VSSOP
LM3445MX/NOPB	SOIC	LP3982IMMX-2.82/NOPB	VSSOP
LM3450AMT/NOPB	TSSOP	LP3982IMMX-ADJ	VSSOP
LM3450AMTX/NOPB	TSSOP	LP3982IMMX-ADJ/NOPB	VSSOP
LM3450MT/NOPB	TSSOP	LP8340ILDX-ADJ/AULF	SON
LM3450MTX/NOPB	TSSOP	LP8340ILDX-ADJ/S7002164	SON
LM3463SQ/NOPB	QFN	LV16000MTX/NOPB	TSSOP
LM3463SQX/NOPB	QFN	LV21201YMF/NOPB	SOT
LM3466MR/NOPB	SOIC	LV21201YMF/NOPB	SOT
LM3466MRX/NOPB	SOIC	MAX660M	SOIC
LM3478MA/NOPB	SOIC	MAX660M/NOPB	SOIC
LM3478MAX/NOPB	SOIC	MAX660MX/NOPB	SOIC
LM3478MM/J7001199	VSSOP	SM72482MA-4/NOPB	SOIC
LM34925MR/NOPB	SOIC	SM72482MAE-4/NOPB	SOIC
LM34925MRX/NOPB	SOIC	SM72482MAX-4/NOPB	SOIC
LM34925SD/NOPB	SON	SN1206029HVNGQR/NOPB	SON
LM34925SDX/NOPB	SON	SN1206029NGQR/NOPB	SON
LM34926MR/NOPB	SOIC	TPS92511DDA	SOIC
LM34926MRX/NOPB	SOIC	TPS92511DDAR	SOIC
LM34926SD/NOPB	SON	TPS92640PWP/NOPB	TSSOP
LM34926SDX/NOPB	SON	TPS92640PWPR/NOPB	TSSOP
LM34927MR/NOPB	SOIC	TPS92640PWPT/NOPB	TSSOP

LM34927MRX/NOPB	SOIC	TPS92641PWP/NOPB	TSSOP
LM34927SD/NOPB	SON	TPS92641PWPR/NOPB	TSSOP
LM34927SDX/NOPB	SON	TPS92641PWPT/NOPB	TSSOP
LM3492HCMH/NOPB	TSSOP		



TI Information
Selective Disclosure

Qualification Report

Qualify 1.3 mil PCC wire on ABCD150 Si Tech in VSSOP packages (DGK & DGS) at TI Melaka for devices with > 75 Operating Voltage
Approved 10/13/2016

Product Attributes

Attributes	Qual Device: LM5020MMX1NOPB
Assembly Site	TIEM-AT
Package Family	VSSOP
Flammability Rating	UL 94 V-0
Wafer Fab Site	GFAB
Wafer Fab Process	ABCD150XV1

- QBS: Qual By Similarity
- Qual Device LM5020MMX1NOPB is qualified at LEVEL1-260CG

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: LM5020MMX1NOPB
THB	Biased Temperature and Humidity, 85C/85%RH	1000HRS	2/154/0
AC	Autoclave 121C	96HRS	3/231/0
WBS	Ball Bond Shear	76 Balls/ lots	3/228/0
WBP	Wire Bond Pull	Wire	3/228/0
TC	Temperature Cycle, -65/150C	500 CYC	3/231/0
HTSL	High Temp Storage Bake 170C	420HRS	3/231/0
WBP	Bond Pull	Post 500 Temp CYC	1/5/0
SAM	SAM	Before and After Pre Con	3/66/0
SAM	SAM	Post Temp 500 Temp Cycle	4/88/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass
BPC	Bond Pad Cratering Check	Post 500 Temp Cycle	1/30/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles
Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

Qualification of 1.3 mil PCC wire as alternative bonding material for 5/6p SOT23 DBV package-PVIP050 PRTECH assembled at TIEM

Approve Date 30-Nov-2016

Product Attributes



Attributes	Qual Device: LM2736YMKXNOPB	Qual Device: LM2830XMF/NOPB
Assembly Site	TIEM	TIEM-AT
Package Family	FRAME;SOT23;6L;1.753X0.965;AG;MAT;ETCH	FRAME;SOT23;5L;1.372X1.141;AG;MAT;STAMP
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MFAB	MFAB
Wafer Process	PVIP050	PVIP050

- QBS: Qual By Similarity
- Qual Device LM2830XMF/NOPB is qualified at LEVEL1-260CG
- Qual Device LM2736YMKXNOPB is qualified at LEVEL1-260CG

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: LM2736YMKXNOPB	Qual Device: LM2830XMF/NOPB
AC	Autoclave 121C	96HRS	1/77/0	1/77/0
TC	Temperature Cycle, -65/150C	500CYC	1/77/0	1/77/0
HTSL	High Temp Storage Bake 170C	1000HRS	1/77/0	1/77/0
WBP	Bond Pull	Wire	1/76/0	1/76/0
WBP	Bond Pull-Post 500 Temp Cycle	Post TMCL 500CYC	1/30/0	1/30/0
BPC	Bond pad cratering	Post TMCL 500CYC	1/15/0	1/15/0
SAM	SAM	Post TMCL 500 CYC	1/10/0	1/10/0
VM	Visual Quality Reliability	TMCL 500CYC	1/2/0	1/2/0
MQ	Manufacturability (Assembly)		Pass	Pass

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
 - The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
 - The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours
 - The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles
- Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

Qualification of 1.3 mils Cu wire for CMOS7, CMOS8 and ABCD150 in QFN at TIEMA
Approved Sept 6, 2016

Product Attributes

Attributes	Qual Device: LM48511SQX/NOPB	Qual Device: LM5000SD3NOPB	Qual Device: LP8561B0SQX-F/NOPB
Assembly Site	TIEMA	TIEM	TIEMA
Package Family	QFN	QFN	QFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Site	MFAB	GFAB	MFAB
Wafer Fab Process	CMOS8	ABCD150	CMOS7

- QBS: Qual By Similarity
- Qual Device LM48511SQX/NOPB is qualified at LEVEL1-260C
- Qual Device LM5000SD3NOPB is qualified at LEVEL1-260C
- Qual Device LP8561B0SQX-F/NOPB is qualified at LEVEL1-260C

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

Type	Test Name / Condition	Duration	Qual Device: LM48511SQX/NOPB	Qual Device: LM5000SD3NOPB	Qual Device: LP8561B0SQX-F/NOPB
AC	Autoclave 121C	96HRS	1/77/0	1/77/0	1/77/0
TC	Temperature Cycle, -65/150C	500CYC	1/77/0	1/77/0	1/77/0
HTSL	High Temp Storage Bake 150C	1000 HRS	1/77/0	1/77/0	1/77/0
WBP	Bond Pull- Post 500 Temp Cycle	wires	1/30/0	1/30/0	1/30/0
BPC	Bond pad cratering	Post 500 Temp CYC	1/5/0	1/5/0	1/5/0
SAM	SAM and TSAM	Post 500 Temp CYC	1/22/0	1/22/0	1/22/0
SAM	SAM and TSAM	Before and after Pre Con	1/22/0	1/22/0	1/22/0
VM	Visual Quality Reliability	Post 500 Temp CYC	1/2/0	1/2/0	1/2/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass

- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

1.3 mil Cu wire qualification for TSSOP (PWP) at TIEMA

Approved 5/11/16

Product Attributes

Die Attributes	Qual Device: LM5072MH-80/NOPB	Qual Device: LM3423MHX/NOPB	Qual Device: LM5010MH/NOPB
Die Revision	A	A	A
Wafer Fab Site	GFAB	GFAB	GFAB
Wafer Fab Process	ABCD150XV2	ABCD150XV1	ABCD150XV1
Die Size (mm)	2.59 X 2.57	2.31 X 2.35	1.85 X 2.54
Package Attributes	Qual Device: LM5072MH-80/NOPB	Qual Device: LM3423MHX/NOPB	Qual Device: LM5010MH/NOPB
Assembly Site	TIEMA	TIEMA	TIEMA
Package Family	TSSOP	TSSOP	TSSOP
Package Designator	PWP	PWP	PWP
Package Size (mils)	196.8 X 173.2	255.9 X 173.2	196.8 X 173.2
Body Thickness (mils)	39.37	39.37	39.37
Pin Count	16	20	14
Lead Frame Material	CU	CU	CU
Lead Finish	Matte SN	Matte SN	Matte SN
Lead Pitch (mils)	0.65	0.65	0.65
Bond Wire Composition	Cu	Cu	Cu
Bond Wire Diameter (mils)	33 UM (1.3 MIL)	33 UM (1.3 MIL)	33 UM (1.3 MIL)
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0

- QBS: Qual By Similarity

- Qual Devices qualified at LEVEL1-260CG: LM5072MH-80/NOPB, LM3423MHX/NOPB, LM5010MH/NOPB

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: LM5072MH-80/NOPB	Qual Device: LM3423MHX/NOPB	Qual Device: LM5010MH/NOPB
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	500 Hours	3/231/0	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	3/231/0
HTOL	Life Test, 150C	500 Hours	-	-	2/154/0
WBP	Post Temp. Cycle Bond Pull	500 Cycles	1/5/0	1/5/0	-
VM	Post Temp Cycle. Visual Quality Reliability	500 Cycles	Pass	Pass	Pass
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
WBP	Bond Pull	Wires	3/228/0	3/228/0	3/228/0
WBS	Ball Bond Shear	Wires	3/228/0	3/228/0	3/228/0

Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

1.3 mils PCC Wire Qualification on CS65 (MFAB) in SOIC (D) 8ld, 16lds MSL1 and PSOP (DDA) 8lds MSL3 packages Approved: 02/23/2016

Product Attributes

Attributes	Qual Device: LP2996MX	Qual Device: LP2996MRX	Qual Device: LM3544MX
Assembly Site	TIEMA	TIEMA	TIEMA
Package Family	FRAME;SO;8L;88X90;CU;PRF;ST AMP;MAT;AP4AG	HSOIC	FRAME;SO;16L;JEDEC;.096X. 190;CU;ETCH;MAT;AP4AG
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Site	MAINEFAB	MAINEFAB	MAINEFAB
Wafer Fab Process	CS065	CS065	CS065

Qual Device LP2996MX_TEST LEG is qualified at LEVEL1-260CG
Qual Device LP2996MRX_TEST LEG is qualified at LEVEL3-260CG
Qual Device LM3544MX-L_TEST LEG is qualified at LEVEL1-260CG

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

	Test Name / Condition	Duration	Qual Device: LP2996MX	Qual Device: LP2996MRX	Qual Device: LM3544MX
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0
AC	Autoclave 121C	96 Hours	-	-	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96HRS	3/231/0		-
TC	Temperature Cycle, - 65/150C	500 Cycles	3/231/0	3/231/0	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	3/231/0
WBS	Bond Shear	Ball Bond shear/Post TC	3/15/0	3/15/0	3/15/0
WBP	Bond Pull	Bond Pull Post Temp Cycle	3/15/0	3/15/0	3/15/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	1/Pass	1/Pass	1/Pass
Thermal Path Integrity	Thermal Path Integrity	Level 3-260C	3/36/0		
ED	Electrical Characterization	Per Datasheet Parameters	1/Pass	1/Pass	1/Pass

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
- The following are equivalent Temp Cycle options per JESD47 : -65C/125C/700 Cycles and -65C/150C/500 Cycles
- Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>
- **Green/Pb-free Status:**
- Qualified Pb-Free(SMT) and Green

Qualification Report

0.96 mil Cu wire qual for SOT23 Packages

Product Attributes



Attributes	Qual Device: LM4041AIM3-1.2	Qual Device: LP3985IM5X-5.0	Qual Device: LMC7101AIM5NOPB	Qual Device: LM431CCM3NOPB
Assembly Site	TIEMA	TIEMA	TIEMA	TIEMA
Package Family	SOT	SOT	SOT	SOT
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	GFAB	MFAB	GFAB	GFAB
Wafer Fab Process	BPLFAST-1	CMOS7	P2CMOS	SLM

Qualification Results

Data Displayed as: Number of lots / Total sample size /
Total failed

Type	Test Name / Condition	Duration	Qual Device: LM4041AIM3-1.2	Qual Device: LP3985IM5X-5.0	Qual Device: LMC7101AIM5NOPB	Qual Device: LM431CCM3NOPB
PC	PreCon Level 1	Level 1- 260C	3/693/0	3/462/0	3/693/0	3/462/0
HAST	Biased HAST, 130C/85%RH	96/hrs. @130C	3/231/0	-	3/231/0	-
AC	Autoclave 121C	96HRS	3/231/0	3/231/0	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	TMCL500X	3/231/0	3/231/0	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hrs. @150C	1/77/0	-	1/77/0	1/77/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass
DPA	Destructive Physical Analysis Post 500 Temp Cycle	x-section and de process to examine assembly robustness, Check for stich bond and bond pad integrity	3/15/0	3/15/0	3/15/0	3/15/0
YLD	FTY and Bin Summary	Compare against baseline	Pass	Pass	Pass	Pass

Qualification Report

0.96 mil Cu wire qual for VSSOP & TSSOP Packages

Product Attributes

Attributes	Qual Device: LMV852MMX	Qual Device: LMC6482IMM	Qual Device: LM93C1MT	Qual Device: LM5642MHX
Assembly Site	TIEMA	TIEMA	TIEMA	TIEMA
Package Family	VSSOP	VSSOP	TSSOP	TSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MFAB	GFAB	MFAB	MFAB
Wafer Fab Process	CMOS7	P2CMOS	CMOS7	ABCD150

Qualification Results

Data Displayed as: Number of lots / Total sample size /
Total failed

Type	Test Name / Condition	Duration	Qual Device: LMV852MMX	Qual Device: LMC6482IMM	Qual Device: LM93C1MT	Qual Device: LM5642MHX
PC	PreCon Level 1	Level 1- 260C	3/462/0	3/462/0	-	3/231/0
PC	PreCon Level 2	Level 2- 260C	-	-	3/693/0	-
HAST	Biased HAST, 130C/85%RH	96/hrs. @130C	-	-	3/231/0	-
AC	Autoclave 121C	96HRS	3/231/0	3/231/0	3/231/0	-
TC	Temperature Cycle, -65/150C	TMCL500X	3/231/0	3/231/0	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hrs. @150C	-	-	1/77/0	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	-	-
DPA	Destructive Physical Analysis Post 500 Temp Cycle	x-section and de process to examine assembly robustness, Check for stich bond and bond pad integrity	3/15/0	3/15/0	-	3/15/0
YLD	FTY and Bin Summary	Compare against baseline	Pass	Pass	-	-

Qualification Report

0.8 mils Cu wire qual on BC13, CMOS9T and CMOS7 in WQFN and WSON Packages

Approved 09/23/2014

Product Attributes

Attributes	Qual Device: DP83848T SQ	Qual Device: DS91M040TSQ AW2	Qual Device: DS100DX410EL 16	Qual Device: DS80PCI402A2TT	Qual Device: LMH0366SQENOPB	Qual Device: LMH0394SQ/NOPB
Assembly Site	TIEM-AT	TIEM-AT	TIEM-AT	TIEM-AT	TIEM-AT	TIEM-AT
Package Family	WQFN	WQFN	WQFN	WQFN	WQFN	QFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MAINEFAB	MAINEFAB	MAINEFAB	MAINEFAB	MAINEFAB	MAINEFAB
Wafer Fab Process	CMOS9T	CMOS7	BICMOS13	BICMOS13	BICMOS13	BICMOS13

- QBS: Qual By Similarity
- Qual Device DS100DX410EL16 is qualified at LEVEL3-260C
- Qual Device DS80PCI402A2TT is qualified at LEVEL2-260C
- Qual Device LMH0366SQENOPB is qualified at LEVEL1-260C
- Qual Device LMH0394SQ/NOPB is qualified at -
- Qual Device LMH0394SQ/NOPB REV A is qualified at LEVEL3-260C

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed



Type	Test Name / Condition	Duration	Qual Device: DP83848T SQ	Qual Device: DS91M040TSQAW	Qual Device: DS100DX410EL16	Qual Device: DS80PCI402A2TT	Qual Device: LMH0366SQENOPB	Qual Device: LMH0394SQ/NOPB
PC	PreCon Level 1	Level 1-260C					3/720/0	
PC	PreCon Level 2	Level 2-260C	3/1079/0		-	3/720/0	-	-
PC	PreCon Level 3	Level 3-260C	-	1/255/0	3/720/0	-	-	3/231/0
HAST	Biased HAST, 130C/85%RH	96/hrs. @130C	-	-	-	-	-	3/231/0
AC	Autoclave 121C	96HRS	3/231/0	1/77/0	3/231/0	3/231/0	3/231/0	-
UHA ST	Unbiased HAST 130C/85%RH	unHAST-96 HRS/-	3/231/0	1/77/0	3/231/0	3/231/0	3/231/0	-
TC	Temperature Cycle, -65/150C	TMCL500X	3/231/0	1/77/0	3/231/0	3/231/0	3/231/0	-
HTSL	High Temp Storage Bake 170C	420 hrs. @170C	3/231/0	-	-	3/231/0	-	-

ED	Side By Side Electrical Characterization.	Per Datasheet Parameters	1/30/0	1/30/0	1/30/0	1/30/0	1/30/0	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass	Pass	Pass
MSL	Thermal Path Integrity	Level 2-260C	3/30/0	1/22/0	3/66/0	3/66/0	3/66/0	-
DPA	Destructive Physical Analysis Post 500 Temp Cycle	x-section and de process to examine assembly robustness, Check for stitch bond and bond pad integrity	3/3/0	-	3/15/0	3/15/0	3/15/0	1/5/0 Post 96 hours HAST
YLD	FTY and Bin Summary	Compare against baseline	Pass	Pass	Pass	Pass	Pass	Pass

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

0.96 mil Cu wire qual for SOIC Packages

Product Attributes

Attributes	Qual Device: DS90CP22MXA1CL	Qual Device: LMV324MX	Qual Device: LP2995MXNOPB	Qual Device: LMC6482AIM/NOPB
Assembly Site	TIEMA	TIEMA	TIEMA	TIEMA
Package Family	SOIC	SOIC	SOIC	SOIC
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MFAB	MFAB	MFAB	GFAB
Wafer Fab Process	CMOS7	CS80	CS65	P2CMOS

Qualification Results

Data Displayed as: Number of lots / Total sample size /
Total failed

Type	Test Name / Condition	Duration	Qual Device: DS90CP22MXA1CL	Qual Device: LMV324MX	Qual Device: LP2995MXNOPB	Qual Device: LMC6482AIM/NOPB
PC	PreCon Level 1	Level 1- 260C	3/462/0	-	3/462/0	3/693/0
HAST	Biased HAST, 130C/85%RH	96/hrs. @130C	-	-	-	3/231/0
AC	Autoclave 121C	96HRS	3/231/0	-	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	TMCL500X	3/231/0	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hrs. @150C	-	-	-	1/77/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	-	Pass	Pass	Pass
DPA	Destructive Physical Analysis Post 500 Temp Cycle	x-section and de process to examine assembly robustness, Check for stich bond and bond pad integrity	3/15/0	-	3/15/0	3/15/0
YLD	FTY and Bin Summary	Compare against baseline	-	Pass	Pass	Pass

Qualification Report
**0.96 mils Bare Cu Qual on 0.35 TSMC in TSSOP at
TIEMA
Approved 02/22/2016**
Product Attributes


Attributes	Qual Device: DS90CR287MTD/NOPB	Qual Device: DS90LV032ATMTC/NO
Assembly Site	TIEMA	TIEMA
Package Family	56 Lead TSSOP	16 Lead TSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Site	TSMC WF3	TSMC WF3
Wafer Fab Process	.35 Um TSMC	.35 UM TSMC

- QBS: Qual By Similarity
- Qual Device DS90CR287MTD/NOPB is qualified at LEVEL2-260CG
- Qual Device DS90LV032ATMTC/NO is qualified at LEVEL1-260CG

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: DS90CR287MTD/NOPB	Qual Device: DS90LV032ATMTC/NO
AC	Autoclave 121C	96HRS	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	500CYC	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	500HRS	3/231/0	3/231/0
WBS	Wire Bond Shear	Post TC/500CYC	-	3/228/0
WBP	Bond Pull	Post TC/500CYC	-	3/90/0
VM	Visual Quality Reliability	Post TC	1/3/0	1/3/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	1/Pass	1/Pass
ED	Electrical Characterization	Side by Side	1/Pass	1/Pass
ILD	ILD Check		1/3/0	1/3/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
 - The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours
 - The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles
- Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

**1.3 mils PCC wire qualification on ABCD150 (GFAB - 8 inch) in VSSOP package
Approved 10/30/2015**

Product Attributes

Attributes	Qual Device: LM2682MM/NOPB	Qual Device: LM3445MM/NOPB
Assembly Site	TIEMA	TIEMA
Package Family	VSSOP	VSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Site	GFAB 200MM	GFAB 200MM
Wafer Fab Process	ABCD150	ABCD150

- QBS: Qual By Similarity

- Qual Devices qualified at LEVEL1-260CG: LM2682MM/NOPB, LM3445MM/NOPB

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: LM2682MM/NOPB	Qual Device: LM3445MM/NOPB
AC	Autoclave 121C	96HRS	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	500CYC	3/231/0	3/231/0
WBS	Bond Shear	Ball Bond shear/Post TC	3/15/0	3/15/0
WBP	Bond Pull	Post T/C	3/15/0	3/15/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass
VQR	Visual Quality Inspection	Post Temp Cycle	Pass	Pass

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

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