



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20150505003
Add Cu as Alternative Wire Base Metal for Selected Device(s)
Change Notification / Sample Request

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

PCN # 20150505003
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.

Japan Affected Devices

ADC0804LCWM/NOPB	DS16EV5110SQX/NOPB	LM337LMX/NOPB	LME49710MAX/NOPB	LMH6672MAX/NOPB
ADC0804LCWMX/NOPB	DS25BR100TSD/NOPB	LM3411M5-5.0/NOPB	LME49713MA/NOPB	LMH6672MR/NOPB
ADC081C021CIMK/NOPB	DS25BR110TSD/NOPB	LM3475MF/NOPB	LME49723MAX/NOPB	LMH6672MRX/NOPB
ADC081C027CIMK/NOPB	DS25BR120TSD/J7002819	LM3475MFX/NOPB	LMF100CIWM/NOPB	LMH6682MA/NOPB
ADC081C027CIMKX/NOPB	DS25BR120TSD/NOPB	LM3704XCMM-308/NOPB	LMF100CIWMX/NOPB	LMH6682MAX/NOPB
ADC081S021CIMF/NOPB	DS25BR204TSQ/NOPB	LM3704YCMM-308/NOPB	LMH0001SQ/NOPB	LMH6682MM/NOPB
ADC081S021CIMFX/NOPB	DS25BR440TSQ/NOPB	LM3710XQMM-308/NOPB	LMH0001SQE/NOPB	LMH6682MMX/NOPB
ADC081S051CIMF/NOPB	DS25BR440TSQX/NOPB	LM3710YQMM-232/NOPB	LMH0002SQ/NOPB	LMH6683MA/NOPB
ADC081S101CIMF/NOPB	DS25CP102TSQ/NOPB	LM3880MF-1AA/NOPB	LMH0002SQE/NOPB	LMH6683MAX/NOPB
ADC081S101CIMFX/NOPB	DS25CP104ATSQ/NOPB	LM3880MF-1AB/NOPB	LMH0384SQ/NOPB	LMH6702MA/NOPB
ADC0820BCWMX/NOPB	DS25CP114TSQ/NOPB	LM3880MF-1AC/NOPB	LMH0384SQE/NOPB	LMH6702MAX/NOPB
ADC0820CCWM/NOPB	DS25CP114TSQE/NOPB	LM3880MF-1AD/NOPB	LMH1980MM/NOPB	LMH6702MF/NOPB
ADC0820CCWMX/NOPB	DS26C31TM	LM3880MF-1AE/NOPB	LMH1982SQ/NOPB	LMH6702MFX/NOPB
ADC0831CCWM/NOPB	DS26C31TM/NOPB	LM3880MF-1AF/NOPB	LMH1982SQE/NOPB	LMH6703MA/NOPB
ADC0831CCWMX/NOPB	DS26C31TMX/NOPB	LM3880MFE-1AA/NOPB	LMH1983SQ/NOPB	LMH6703MAX/NOPB
ADC0832CCWM/NOPB	DS26C32ATM	LM3880MFE-1AB/NOPB	LMH1983SQE/NOPB	LMH6703MF/NOPB
ADC0834CCWM/NOPB	DS26C32ATM/NOPB	LM3880MFE-1AC/NOPB	LMH1983SQX/NOPB	LMH6704MF/NOPB
ADC0834CCWMX/NOPB	DS26C32ATMX/NOPB	LM3880MFE-1AE/NOPB	LMH6502MA/NOPB	LMH6704MFX/NOPB
ADC0838CCWM/NOPB	DS26LV31TM	LM3880MFX-1AA/NOPB	LMH6502MAX/NOPB	LMH6714MA/NOPB
ADC0838CCWMX/NOPB	DS26LV31TM/NOPB	LM3880MFX-1AE/NOPB	LMH6503MA/NOPB	LMH6714MAX/NOPB
ADC0838CIWM/NOPB	DS26LV31TMX	LM4120AIM5-2.0/NOPB	LMH6503MAX/NOPB	LMH6714MF/NOPB
ADC0838CIWMX/NOPB	DS26LV31TMX/NOPB	LM4120AIM5-2.5/NOPB	LMH6503MT/NOPB	LMH6714MFX/NOPB
ADC084S021CIMM/J7001218	DS26LV32ATM	LM4120AIM5-3.0/NOPB	LMH6504MA/NOPB	LMH6715MA/NOPB
ADC084S021CIMM/NOPB	DS26LV32ATM/NOPB	LM4120AIM5-3.3/NOPB	LMH6505MA/NOPB	LMH6720MA/NOPB
ADC084S021CIMMX/NOPB	DS26LV32ATMX	LM4120AIM5-4.1/NOPB	LMH6505MAX/NOPB	LMH6720MF/NOPB
ADC084S101CIMM/NOPB	DS26LV32ATMX/NOPB	LM4120AIM5-5.0/NOPB	LMH6505MM/NOPB	LMH6722MAX/NOPB
ADC10154CIWM/NOPB	DS32EV100SD/NOPB	LM4120AIM5X-3.3/NOPB	LMH6505MMX/NOPB	LMH6723MA/NOPB
ADC101C021CIMK/NOPB	DS32EV400SQ/NOPB	LM4120IM5-1.8/NOPB	LMH6550MA/NOPB	LMH6723MF/NOPB
ADC101S021CIMF/NOPB	DS34C86TM/NOPB	LM4120IM5-2.0/NOPB	LMH6550MAX/NOPB	LMH6723MFX/NOPB
ADC101S021CIMFX/NOPB	DS34C86TMX/NOPB	LM4120IM5-2.5/NOPB	LMH6551MA/NOPB	LMH6724MA/NOPB
ADC101S051CIMF/NOPB	DS34C87TM/NOPB	LM4120IM5-3.0/NOPB	LMH6551MAX/NOPB	LMH6732MA/NOPB
ADC101S051CIMFX/NOPB	DS34C87TMX/NOPB	LM4120IM5-3.3/NOPB	LMH6551MM/NOPB	LMH6732MAX/NOPB
ADC101S101CIMF/NOPB	DS34LV86TM	LM4120IM5-4.1/NOPB	LMH6551MMX/NOPB	LMH6732MF/NOPB
ADC104S021CIMM/NOPB	DS34LV86TM/NOPB	LM4120IM5-5.0/NOPB	LMH6552MA/NOPB	LMH6732MFX/NOPB
ADC104S021CIMMX/NOPB	DS34LV86TMX	LM4121AIM5-1.2/NOPB	LMH6552MAX/NOPB	LMH7220MK/NOPB
ADC104S051CIMM/NOPB	DS34LV86TMX/NOPB	LM4121IM5-ADJ/NOPB	LMH6553MR/NOPB	LMH7322SQ/NOPB
ADC104S101CIMM/NOPB	DS34LV87TM	LM431ACM/NOPB	LMH6553SD/NOPB	LMH7322SQE/NOPB
ADC10738CIWM/NOPB	DS34LV87TM/NOPB	LM431ACMX/NOPB	LMH6553SDE/NOPB	LMH7324SQ/NOPB
ADC12030CIWM/NOPB	DS34LV87TMX/NOPB	LM431AIM/NOPB	LMH6555SQ/NOPB	LMK00105SQ/NOPB
ADC12130CIWMX/NOPB	DS36276M/NOPB	LM431AIMX/NOPB	LMH6555SQE/NOPB	LMK00105SQE/NOPB
ADC121C021CIMK/NOPB	DS36276MX/NOPB	LM431BIMX/NOPB	LMH6559MA/NOPB	LMK00105SQX/NOPB
ADC121C027CIMK/NOPB	DS36277TMX/NOPB	LM431CIM/NOPB	LMH6559MF/NOPB	LMK00301SQ/NOPB
ADC121C027CIMKX/NOPB	DS36954M/NOPB	LM4667MM/NOPB	LMH6574MA/NOPB	LMK00304SQ/NOPB
ADC121S021CIMF/NOPB	DS3695AM/NOPB	LM4673SD/NOPB	LMH6609MA/NOPB	LMK00304SQE/NOPB

ADC121S021CIMFX/NOPB	DS3695AMX/NOPB	LM4674SQ/NOPB	LMH6609MF/NOPB	LMK00306SQ/NOPB
ADC121S021CISDX/NOPB	DS3695ATM/NOPB	LM4675SD/NOPB	LMH6609MFX/NOPB	LMK00306SQE/NOPB
ADC121S051CIMF/NOPB	DS3695ATMX/NOPB	LM48310SD/NOPB	LMH6611MK/NOPB	LMK00308SQ/NOPB
ADC121S051CIMFX/NOPB	DS38EP100SD/NOPB	LM4853MM/NOPB	LMH6611MKE/NOPB	LMK00308SQE/NOPB
ADC121S101CIMF/NOPB	DS64EV400SQ/NOPB	LM4876MM/NOPB	LMH6611MKX/NOPB	LMK00334RTVR
ADC121S101CIMFX/NOPB	DS75176BM/NOPB	LM4879MMX/NOPB	LMH6612MA/NOPB	LMK00338RTAR
ADC124S021CIMM/NOPB	DS75176BMX/NOPB	LM4901MMX/NOPB	LMH6612MAX/NOPB	LMP7701MA/NOPB
ADC124S021CIMMX/NOPB	DS75176BTM/NOPB	LM4911MM/NOPB	LMH6618MK/NOPB	LMP7701MAX/NOPB
ADC124S051CIMM/NOPB	DS75176BTMX/NOPB	LM4916MM/NOPB	LMH6618MKE/NOPB	LMP7701MF/NOPB
ADC124S051CIMMX/NOPB	DS8921AM/NOPB	LM4924MM/NOPB	LMH6618MKX/NOPB	LMP7701MFX/NOPB
ADC124S101CIMM/NOPB	DS8921AMX/NOPB	LM4930LQ/NOPB	LMH6619MA/NOPB	LMP7707MF/NOPB
ADC12QS065CISQ/NOPB	DS8921ATM/NOPB	LM4941SD/NOPB	LMH6619MAX/NOPB	LMS202ECM/NOPB
ADC141S626CIMM/NOPB	DS8921M/NOPB	LM4995SD/NOPB	LMH6622MA/NOPB	LMS202ECMX/NOPB
ADC161S626CIMM/NOPB	DS8921MX/NOPB	LM5001MA/NOPB	LMH6622MAX/NOPB	LMS202EIM/NOPB
ADC161S626CIMME/NOPB	DS8922AM/NOPB	LM5001MAX/NOPB	LMH6622MM/NOPB	LMS202EIMX/NOPB
ADCS7476AIMF/NOPB	DS8922AMX/NOPB	LM5060MMX/NOPB	LMH6622MMX/NOPB	LMV552MM/NOPB
ADCS7476AIMFE/NOPB	DS8923AM	LM5102MM/NOPB	LMH6624MA/NOPB	LMV602MAX/NOPB
ADCS7476AIMFX/NOPB	DS8923AM/NOPB	LM5102MMX/J7000845	LMH6624MAX/NOPB	LMV641MFE/NOPB
ADCS7477AIMF/NOPB	DS8923AMX/NOPB	LM5106MM/NOPB	LMH6624MF	LMV652MM/NOPB
ADCS7477AIMFE/NOPB	DS89C21TM/NOPB	LM6511M/NOPB	LMH6624MF/NOPB	LMV652MMX/J7002597
ADCS7477AIMFX/NOPB	DS89C21TMX/J7002999	LM6584MA/NOPB	LMH6624MFX/NOPB	LMV654MTX/NOPB
ADCS7478AIMF/NOPB	DS89C21TMX/NAK2	LM6588MA/NOPB	LMH6626MA/NOPB	LMV654MTX/S7002584
ADCS7478AIMFE/NOPB	DS89C21TMX/NOPB	LM6588MAX/NOPB	LMH6626MM/NOPB	LMV712MM/J7002923
ADCS7478AIMFX/NOPB	DS92LV0411SQ/NOPB	LM6588MT/NOPB	LMH6626MMX/NOPB	LMV712MM/NOPB
CLC006BM/NOPB	DS92LV0411SQE/NOPB	LM6588MTX/NOPB	LMH6628MA/NOPB	LMV712MMX/NOPB
CLC007BM/NOPB	DS92LV0412SQE/NOPB	LM7121IM/NOPB	LMH6628MAX/NOPB	LMV761MF/NOPB
DAC081S101CIMK/NOPB	DS92LV0421SQ/NOPB	LM7121IMX/NOPB	LMH6639MA/NOPB	LMV761MFX/NOPB
DAC081S101CIMKX/NOPB	DS92LV0421SQE/NOPB	LM7301IM/NOPB	LMH6639MAX/NOPB	LMV791MK/NOPB
DAC082S085CIMM/NOPB	DS92LV0422SQ/NOPB	LM7301IMX/NOPB	LMH6639MF/NOPB	LMV791MKX/NOPB
DAC082S085CIMMX/NOPB	DS92LV0422SQE/NOPB	LM78L05ACM/NOPB	LMH6639MFX/NOPB	LMV792MM/NOPB
DAC0832LCWM/NOPB	DS92LV2411SQ/NOPB	LM78L05ACMX/NOPB	LMH6642MA/NOPB	LMV792MMX/NOPB
DAC0832LCWMX/NOPB	DS92LV2411SQE/NOPB	LM78L05AIM/NOPB	LMH6642MAX/NOPB	LMV793MF/NOPB
DAC084S085CIMM/NOPB	DS92LV2412SQ/NOPB	LM78L05AIMX/NOPB	LMH6642MF/NOPB	LMV794MM/NOPB
DAC084S085CIMMX/NOPB	DS92LV2412SQE/NOPB	LM78L12ACM/NOPB	LMH6642MFX/NOPB	LMV796MF/NOPB
DAC101S101CIMK/NOPB	DS92LV2421SQ/NOPB	LM78L12ACMX	LMH6643MA/NOPB	LMV797MM/NOPB
DAC102S085CIMM/NOPB	DS92LV2421SQE/NOPB	LM78L12ACMX/NOPB	LMH6643MAX/NOPB	LMV797MMX/NOPB
DAC102S085CIMMX/NOPB	DS92LV2422SQ/NOPB	LM78L15ACM/NOPB	LMH6643MM/NOPB	LMV842MA/NOPB
DAC104S085CIMM/NOPB	DS92LV2422SQE/NOPB	LM78L15ACMX/NOPB	LMH6643MMX/NOPB	LMV842MAX/NOPB
DAC104S085CIMMX/NOPB	DS92LX1621SQ/NOPB	LM79L05ACM/NOPB	LMH6644MA/NOPB	LMV842MM/NOPB
DAC121S101CIMK/NOPB	DS92LX1621SQE/NOPB	LM79L05ACMX/NOPB	LMH6644MAX/NOPB	LMV842MMX/NOPB
DAC121S101CIMKX/NOPB	DS92LX1622SQ/NOPB	LM79L12ACM/NOPB	LMH6645MA/NOPB	LMV844MA/NOPB
DAC122S085CIMM/NOPB	DS92LX1622SQE/NOPB	LM79L12ACMX/NOPB	LMH6645MF/NOPB	LMV844MT/NOPB
DAC122S085CIMMX/NOPB	DS92LX2121SQE/NOPB	LM79L15ACM/NOPB	LMH6645MFX/NOPB	LMV844MTX/NOPB
DAC124S085CIMM/NOPB	DS92LX2122SQE/NOPB	LM79L15ACMX/NOPB	LMH6646MA/NOPB	LMV951MK/NOPB
DS10BR150TSD/NOPB	DS99R103TSQX/J7002359	LM8261M5/NOPB	LMH6646MAX/NOPB	LMV981MF/NOPB
DS10BR254TSQ/NOPB	DS99R103TSQX/J7003014	LM8261M5X/J7002376	LMH6646MM/NOPB	LMV982MM/NOPB
DS10CP154ATSQ/NOPB	DS99R104TSQX/J7002360	LM8261M5X/NOPB	LMH6646MMX/NOPB	LMV982MMX/NOPB
DS14185WM/NOPB	LDC1612DNTT	LM833MX	LMH6647MA/NOPB	LMX2485ESQ/NOPB
DS14185WMX/NOPB	LM10CWM/NOPB	LM833MX/NOPB	LMH6647MF/NOPB	LMX2485SQ/NOPB
DS14C232CM/NOPB	LM1972M/NOPB	LM9061M/NOPB	LMH6647MFX/NOPB	LMX2485SQX/NOPB
DS14C232CMX/NOPB	LM1972MX/NOPB	LM9061MX/NOPB	LMH6654MA/NOPB	LMX2486SQ/NOPB
DS14C232TM/NOPB	LM1973MX/NOPB	LM98516CCMT/NOPB	LMH6654MAX/NOPB	LMX2487SQ/NOPB
DS14C232TMX/NOPB	LM25101CMYX/NOPB	LM98516CCMTX/NOPB	LMH6654MF/NOPB	LPV324M/NOPB
DS14C238WMX/NOPB	LM25101CMYX/NOPB	LMC567CM/NOPB	LMH6654MFX/NOPB	LPV7215MF/NOPB
DS14C88MX/NOPB	LM2641MTCX-ADJ/NOPB	LMC567CMX/NAK2	LMH6655MA/J7001152	MF10CCWM/NOPB
DS14C89AM/NOPB	LM317LM/NAK2	LMC567CMX/NOPB	LMH6655MA/NOPB	MF10CCWMX/NOPB
DS14C89AMX/NOPB	LM317LM/NOPB	LMC6082IMX/NOPB	LMH6655MAX/NOPB	SM72375MM/NOPB
DS15MB200TSQ/NOPB	LM317LMX/NOPB	LMC7660IM	LMH6655MM/NOPB	TP3054WM-X/63
DS16EV5110ASQ/NOPB	LM334M/NOPB	LMC7660IM/NOPB	LMH6655MMX/NOPB	TP3054WMX/NOPB
DS16EV5110ASQE/NOPB	LM334MX/NOPB	LMC7660IMX/NAK2	LMH6657MF/NOPB	TPL5000DGSR

DS16EV5110ASQX/NOPB	LM337LM/NOPB	LMC7660IMX/NOPB	LMH6658MM/NOPB	TPL5000DGST
DS16EV5110SQ/NOPB	LM337LMX	LME49710MA/NOPB	LMH6672MA/NOPB	

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

PCN Number:	20150505003		PCN Date:	05/14/2015																			
Title:	Add Cu as Alternative Wire Base Metal for Selected Device(s)																						
Customer Contact:	PCN Manager	Dept:	Quality Services																				
Proposed 1st Ship Date:	08/14/2015		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 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>SOT23</td> <td>Au, 1.0 mil</td> <td>Cu, 0.96 mil</td> </tr> <tr> <td>SOIC</td> <td>Au, 1.0 mil</td> <td>Cu, 0.96 mil</td> </tr> <tr> <td>VSSOP</td> <td>Au, 1.0 mil</td> <td>Cu, 0.96 mil</td> </tr> <tr> <td>TSSOP</td> <td>Au, 1.0 mil</td> <td>Cu, 0.96 mil</td> </tr> <tr> <td>QFN</td> <td>Au, 1.0 mil</td> <td>Cu, 0.80 mil</td> </tr> </tbody> </table>						Pkg Family	Current Wire	Additional Wire	SOT23	Au, 1.0 mil	Cu, 0.96 mil	SOIC	Au, 1.0 mil	Cu, 0.96 mil	VSSOP	Au, 1.0 mil	Cu, 0.96 mil	TSSOP	Au, 1.0 mil	Cu, 0.96 mil	QFN	Au, 1.0 mil	Cu, 0.80 mil
Pkg Family	Current Wire	Additional Wire																					
SOT23	Au, 1.0 mil	Cu, 0.96 mil																					
SOIC	Au, 1.0 mil	Cu, 0.96 mil																					
VSSOP	Au, 1.0 mil	Cu, 0.96 mil																					
TSSOP	Au, 1.0 mil	Cu, 0.96 mil																					
QFN	Au, 1.0 mil	Cu, 0.80 mil																					
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																							
Changes to product identification resulting from this PCN:																							
None																							
Product Affected:																							
See Page 2.																							

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 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 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

0.96 mil Cu wire qual for TSSOP Packages

Product Attributes

Attributes	Qual Device: LMH0346MH	Qual Device: LM5037MT	Qual Device: LM3657MH/NOPB	Qual Device: SCANSTA111MTX
Assembly Site	TIEMA	TIEMA	TIEMA	TIEMA
Package Family	TSSOP	TSSOP	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	BICMOS8B+	ABCD150	CMOS7	CMOS7

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LMH0346MH	Qual Device: LM5037MT	Qual Device: LM3657MH/NOPB	Qual Device: SCANSTA111MTX
PC	PreCon Level 1	Level 1- 260C	-	3/693/0	3/462/0	-
PC	PreCon Level 2	Level 2- 260C	-	-	-	3/462/0
PC	PreCon Level 3	Level 3- 260C	3/231/0	-	-	-
THBT	THBT 85C, 85%RH	1000/hrs. @85C	-	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	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

- 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

0.8 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: DS91M040TS QAW	Qual Device: DS100DX410 EL16	Qual Device: DS80PCI402 A2TT	Qual Device: LMH0366SQEN OPB	Qual Device: LMH0394SQ/N OPB
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	TMCL500 X	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 stich 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

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com