PCN Number:		2018	20180627001				PCN Date:		:e:	June 28, 2018	
Title: Leadframe Die Pad Offse			et change for Select SOIC package Devices				ices				
Customer Contact: PCN Manage			er Dept: Quality		Services						
Propo	osed 1 <sup>st</sup> Ship Da	ite:	Dec 2	28, 2	2018	3	Estima Availal	ated Sample bility:		le	Provided upon Request
Chang	Change Type:										
<b>A</b>	ssembly Site				D	esign			Wafer Bump Site		
<b>A</b>	ssembly Process				Da	ata Shee	t				Nafer Bump Material
Α 🛛	ssembly Material	S			Pa	art numb	er chang	е			Nafer Bump Process
M	lechanical Specifi	cation	1		Te	est Site				\	Wafer Fab Site
Pa	acking/Shipping/	Labeli	ng		Te	est Proce	SS				Wafer Fab Materials
										1	Wafer Fab Process
						PCN De	etails				
Descr	ription of Chang	je:									
The pu for sel	urpose of this no lect devices on th	tificati ne Proc	on is t duct A	to pr Affect	ovid ted	de inform section.	nation on Details a	the lea re prov	adfr ide	am d be	e die pad offset change elow.
						From	1				То
	Leadframe	Part I	No.	4212077				4221268			
	Die Pad Off	set		0.008 inch				0.00 inch			
Reaso	on for Change:										
Standa	ardize leadframe	die pa	ad off	set d	lesig	gn for Iso	plation de	evices			
Antici	ipated impact o	n Fit,	Forn	n, Fu	inc	tion, Ou	ality or	Reliab	ility	/ (r	ositive / negative):
None	<u> </u>			-							
Anticipated impact on Material Declaration											
No Impact to the Material DeclarationMaterial Declarations or Product Content reports are driven production data and will be available following the production release. Upon production release the revised reports can be obtained from the <u>TI Eco-Info website</u> . There is no impact to material meeting current regulatory compliance requiremen with this PCN change.					t reports are driven from lowing the production evised reports can be There is no impact to the npliance requirements						
Chang	ges to product i	identi	ficati	on r	esi	ulting fr	om this	PCN:			
None	None										
Produ	ict Affected:										
IS07421MDREP V62/16605-01XE											

# Qualification Report ISO1540D and ISO721MD families with Sumitomo LF 4221268

Approve Date 20-Nov-2015

Attributes Qual Device: ISO1540D		Qual Device: ISO721MD	QBS Package Reference: DAC7744EB	QBS Package Reference: INA2126E
Assembly Site	TAI	TAI	MLA	MLA
Package Family	SOIC	SOIC	SSOP	SSOP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	DMOS5	DFAB	SFAB	HFAB/TFAB
Wafer Fab Process	50HPA07ISO	LBC4	JIBBC-HV7	635G

## **Product Attributes**

Attributes	QBS Package Reference: ISO1540D	QBS Package Reference: ISO1541D	QBS Package Reference: OPA2277U	QBS Package Reference: TPA2085D
Assembly Site	TAI	TAI	MLA	TAI
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	DMOS5	DMOS5	HFAB/TFAB	DFAB
Wafer Fab Process	50HPA07ISO	50HPA07ISO	635G	LBC4

- QBS: Qual By Similarity
- Qual Device ISO1540D is qualified at LEVEL2-260C
- Device ISO1540D contains multiple dies.

## **Qualification Results**

Data Dianta			$(\mathbf{T}_{\mathbf{a}}) = [\mathbf{a}_{\mathbf{a}}] = [\mathbf{a}_{\mathbf{a}}]$	! /!	
Data Display	ved as: iNu	mper of lots	/ Total sample	e size /	l otal falled

Туре	Test Name / Condition	Duration	Qual Device: ISO1540D	Qual Device: ISO721MD	QBS Package Reference: DAC7744EB	QBS Package Reference: INA2126E
AC	Autoclave 121C	96 Hours	-	-	1/77/0	1/77/0
FLAM	Flammability (IEC 695-2-2)		-	-	1/5/0	-
FLAM	Flammability (UL -1694)		-	-	1/5/0	-
FLAM	Flammability (UL 94V-0)		-	-	1/5/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0	1/7/0
HTOL	Life Test, 125C	1000 Hours	-	-	1/77/0	1/77/0
HTOL	Life Test, 155C	240 Hours	-	-	-	-
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	1/77/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-
LI	Lead Fatigue	Leads	1/22/0	1/22/0	-	-
LI	Lead Pull	Leads	1/22/0	1/22/0	-	-
SD	Surface Mount Solderability	Pb Free Solder	1/22/0	1/22/0	-	-
SD	Surface Mount Solderability.	Pb Solder	1/22/0	1/22/0	-	-
тс	Temperature Cycle, - 65/150C	500 Cycles	-	-	1/77/0	1/77/0

Туре	Test Name / Condition	Duration	Qual Device: ISO1540D	Qual Device: ISO721MD	QBS Package Reference: DAC7744EB	QBS Package Reference: INA2126E
TS	Thermal Shock -65C/+150C	500 Cycles	-	-	-	-
WBP	Bond Pull	Wires	1/76/0	1/76/0	-	-
WBS	Ball Bond Shear	Wires	1/76/0	1/76/0	-	-

Туре	Test Name / Condition	Duration	QBS Package Reference: ISO1540D	QBS Package Reference: ISO1541D	QBS Package Reference: OPA2277U	QBS Package Reference: TPA2085D
AC	Autoclave 121C	96 Hours	2/154/0	1/68/0	1/77/0	3/231/0
FLAM	Flammability (IEC 695- 2-2)		-	-	1/5/0	-
FLAM	Flammability (UL - 1694)		-	-	1/5/0	-
FLAM	Flammability (UL 94V- 0)		-	-	1/5/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/76/0	2/80/0
HTOL	Life Test, 125C	1000 Hours	-	-	1/77/0	-
HTOL	Life Test, 155C	240 Hours	-	-	-	2/80/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	1/77/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	3/231/0
LI	Lead Fatigue	Leads	-	-	-	-
LI	Lead Pull	Leads	-	-	-	-
SD	Surface Mount Solderability	Pb Free Solder	-	-	-	-
SD	Surface Mount Solderability.	Pb Solder	-	-	-	-
тс	Temperature Cycle, - 65/150C	500 Cycles	2/154/0	1/77/0	1/77/0	3/231/0
TS	Thermal Shock - 65C/+150C	500 Cycles	-	-	1/77/0	3/231/0
WBP	Bond Pull	Wires	1/76/0	1/76/0	-	-
WBS	Ball Bond Shear	Wires	1/76/0	1/76/0	-	-

- 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

### 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
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