ON Semiconductor



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20142

Generic Copy

Issue Date: 31-Jul-2013

TITLE: Qualification of ASE Kunshan, Kunshan, Jiangsu, China for Assembly of PDIP-8

PROPOSED FIRST SHIP DATE: 27-Nov-2013

AFFECTED CHANGE CATEGORY(S): Subcontractor Assembly Location

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or <<u>J.Flynn@onsemi.com</u>>

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or <<u>ken.fergus@onsemi.com</u>>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 days prior to implementation of the change.

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

This is a Final Product Change Notice to alert customers of the qualification of ASE Kunshan, Kunshan, China, (ISO/TS certified) to assemble PDIP 8 lead packages. ASE Kunshan will provide additional capacity to supplement ON Semiconductors' other PDIP assembly facilities. ASE Kunshan is currently qualified for assembly to run SOIC 8 and 14 lead packages within ON Semiconductor.



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RELIABILITY DATA SUMMARY:

Reliability Test Results: NCP1200P60G

#	Test	Name	Test	End	Test	(rej/ ss)	(rej/ss)	(rej/ ss)	(rej/ ss)
π.	TEST	roume	Condition		Result	(16) 35)	(16)/ 55/	(16) 38)	(16)/ 00)
			s	Tout	result				
					Read	Lot A	Lot B	Lot C	Lot D
					Point	ASE KS	ASE KS	ASE KS	control
1	Prep	Sample	various	—	Initial	done	done	done	done
	_	prep and			Electric				
		initial part testing			al				
		testing							
2	HTBB	High Temp	TA = 125C,	c = 0,	504 Hrs	0/80	0/80	0/80	0/80
		Blocking	450 V bias	Room					
		Bias			1008	0/80	0/80	0/80	0/80
					Hrs	0.00	0.00	0.00	0.00
						0.00	0.000	0.50	0.000
3	HVTHB	High Voltage	TA=85C, 60% RH,	c = 0, Room	168hrs	0/80	0/80	0/80	0/80
		Temperatur	450V bias	KOOM					
		e Humidity							
		Bias							
4	HTOL	High Temp	TA = 125C,	c = 0,	504 hrs	0/80	0/80	0/80	0/80
		Operating	200 V bias	Room					
		Life							
					1008 hrs	0/80	0/80	0/80	0/80
					шs				
5	HTSL	High	TA=150C	c = 0,	504 hrs	0/80	0/80	0/80	0/80
		Temperatur e Storage		Room					
		e Storage life							
					1008	0/80	0/80	0/80	0/80
					hrs				
7	TC	Temp Cycle	-65/+150 C	c = 0,	500 cyc	0/80	0/80	0/80	0/80
1	10	remp cycle	-08/-150 0	Room	south	0.00	0.00	0.00	0.00
					1000	0/80	0/80	0/80	0/80
					cyc				
8	UHAST	UHAST	TA=+130C,	c = 0,	96 hrs	0/80	0/80	0/80	0/80
[[RH = 85%,	Room					
			PSIG=18.8,						
			no bias						
9	HAST	HAST	TA=+130C,	c = 0,	96 hrs	0/80	0/80	0/80	0/80
			RH = 85%,						
			PSIG=18.8,						
			20V bias						



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#	Test	Name	Test Conditions	End Point Req's	Test Results	(rej/ ss)	(rej/ ss)	(rej/ ss)
					Read Point	<i>,</i>		Lot C
	Visual	External Visual	40X	In Line		0/10	0/10	0/10
	BS	Ball shear	12.0 Gmf Min	In Line		0/16	0/16	0/16
	WP	Wire Pull	3.5 Gmf Min	In Line		0/16	0/16	0/16
	SD	Physical dimensions		In Line		0/10	0/10	0/10
	PD	Solderability		In Line		0/15	0/15	0/15

ELECTRICAL CHARACTERISTIC SUMMARY:

The electrical specifications will remain identical. A full electrical characterization over temperature will be performed for each device to ensure device functionality and electrical specifications.

CHANGED PART IDENTIFICATION:

Devices assembled by ASE Kunshan will include the character 'AK' as the identifier in the trace code. Upon expiration of the PCN devices may be sourced from either ASE Kunshan, or previously qualified assembly locations. Manufacturing traceability will be maintained to allow identification of the assembly source.

List of affected General Parts:

MC33151PG	NCP1203P60G	UC2842BNG
MC33152PG	NCP1207APG	UC2843BNG
MC33153PG	NCP1252APG	UC2844BNG
MC33262PG	NCP1653APG	UC2845BNG
MC34151PG	NCP1653PG	UC3842BNG
MC34152PG	NCP5104PG	UC3843BNG
MC34262PG	NCP5106APG	UC3843BVNG
NCP1200P100G	NCP5106BPG	UC3844BNG
NCP1200P40G	NCP5111PG	UC3844BVNG
NCP1200P60G	NCP5181PG	UC3845BNG
NCP1203P100G	NCP5304PG	UC3845BVNG
NCP1203P40G		