ON Semiconductor

INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION
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23 Jun 2008

SUBJECT: ON Semiconductor Initial Product/Process Change Notification #IPCN16126

TITLE: Addition of PLCC20 / 28 package assembly capabilities at Amkor Technology Philippines (P1) Inc. package assembly site

PROPOSED FIRST SHIP DATE: 23 Oct 2008

AFFECTED CHANGE CATEGORY: High Frequency Products

AFFECTED PRODUCT DIVISION: Standard Products, Computing Products Group

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or Lance James<lance.james@onsemi.com>

NOTIFICATION TYPE:

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 120 days prior to implementation of the change. An IPCN is advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.

The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN).

This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change.

DESCRIPTION AND PURPOSE:

ON Semiconductor is pleased to announce the qualification of Amkor Technology Philippines (P1) Inc. located in Cupang Muntinlupa City as our future new source for assembly of all PLCC20 and PLCC28 devices. Our final test location will remain in ON Semiconductor Philippines, Inc (OSPI) in Carmona, Philippines.

There is a minor dimension change related to the package lead width (see table below). The package case outline documentation will be updated at the time of qualification. ON Semiconductor will update the package drawing for this one change.

	ON SEMI POD				AMKOR POD (00060/14)				REMARKS
	SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX	
leadwidth (external)	F	0.013	-	0.019	-	0.013	-	0.021	not compliant with current dimensions for max specs

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QUALIFICATION PLAN:

Amkor_PLCC_QualPlan_15May2008

#	Test	Qual Point	Test Conditions	End Point Requirements	Sample Size	# of Lots	Total Units	Comments
1	**Electrical Test**		ON Product Specification	See Below	All Devices			
2	**Lot Prep**				All Devices			
3	**HTOL**	1008hrs	Ta=125C	Test @ Room	80	2	160	One of the lot is control.
4	**HTSL**	1000 hrs	Ta=150C	Test @ Room	80	3	240	One of the lot is control
5	**PC**	MSL1 and MSL 3						One of the lot is control
6	**HAST-PC**	96 hrs	130°C/85% RH	Test @ Room	80	3	240	One of the lot is control
7	**AC-PC**	96 hrs	TA = +121°C, RH = 100%, PSIG = 15	Test @ Room	80	3	240	One of the lot is control
8	**TC-PC**	500 cycles	-65°C to +150°C for 100 cycles	Test @ Room	80	3	240	One of the lot is control
9	**SAT-PC**				10	3	30	One of the lot is control
10	**WBS**	AEC-Q100-001	Wire Bond Shear Test	Cpk >1.33		5 parts	3	30 Bonds Minimum
11	**WBP**	AEC-Mil-Std-883 Meth 2011	Wire Bond Pull Test	Cpk >1.33		5 parts	3	30 Bonds Minimum

Note: Control lot will be run at ON Semiconductor, OPSI Philippines

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AFFECTED DEVICE LIST:

PART

MC100E016FNG
MC100E016FNR2G
MC100E101FNG
MC100E101FNR2G
MC100E104FNG
MC100E104FNR2G
MC100E107FNG
MC100E107FNR2G
MC100E111FNG
MC100E111FNR2G
MC100E112FNG
MC100E112FNR2G
MC100E116FNG
MC100E116FNR2G
MC100E131FNG
MC100E131FNR2G
MC100E136FNG
MC100E136FNR2G
MC100E137FNG
MC100E137FNR2G
MC100E141FNG
MC100E141FNR2G
MC100E142FNG
MC100E142FNR2G
MC100E143FNG
MC100E143FNR2G
MC100E150FNG
MC100E150FNR2G
MC100E151FNG
MC100E151FNR2G
MC100E157FNG
MC100E157FNR2G
MC100E158FNG
MC100E158FNR2G
MC100E163FNG
MC100E163FNR2G
MC100E164FNG
MC100E164FNR2G
MC100E171FNG
MC100E171FNR2G
MC100E175FNG
MC100E175FNR2G
MC100E195FNG
MC100E195FNR2G
MC100E196FNG
MC100E196FNR2G
MC100E210FNG
MC100E210FNR2G
MC100E211FNG
MC100E211FNR2G
MC100E241FNG
MC100E241FNR2G

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MC100E310FNG
MC100E310FNR2G
MC100E404FNG
MC100E404FNR2G
MC100E416FNG
MC100E416FNR2G
MC100E431FNG
MC100E431FNR2G
MC100E445FNG
MC100E445FNR2G
MC100E446FNG
MC100E446FNR2G
MC100E451FNG
MC100E451FNR2G
MC100E452FNG
MC100E452FNR2G
MC100E457FNG
MC100E457FNR2G
MC100H600FNG
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MC100H601FNG
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MC100H602FNG
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MC100H642FNR2G
MC100H643FNG
MC100H643FNR2G
MC100H646FNG
MC100H646FNR2G
MC100H680FNG
MC100LVE111FNG
MC100LVE111FNR2G
MC100LVE210FNG
MC100LVE210FNR2G
MC100LVE310FNG
MC100LVE310FNR2G
MC10E016FNG
MC10E016FNR2G
MC10E101FNG
MC10E101FNR2G
MC10E104FNG
MC10E104FNR2G

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MC10E107FNG
MC10E107FNR2G
MC10E111FNG
MC10E111FNR2G
MC10E112FNG
MC10E112FNR2G
MC10E116FNG
MC10E116FNR2G
MC10E122FNG
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MC10E131FNG
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MC10E166FNG
MC10E166FNR2G
MC10E167FNG
MC10E167FNR2G
MC10E171FNG
MC10E171FNR2G
MC10E175FNG
MC10E175FNR2G
MC10E195FNG
MC10E195FNR2G
MC10E196FNG
MC10E196FNR2G

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MC10E211FNG
MC10E211FNR2G
MC10E404FNG
MC10E404FNR2G
MC10E411FNG
MC10E411FNR2G
MC10E416FNG
MC10E416FNR2G
MC10E431FNG
MC10E431FNR2G
MC10E445FNG
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MC10E452FNG
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MC10H116FNG
MC10H116FNR2G
MC10H117FNG
MC10H117FNR2G
MC10H121FNG
MC10H121FNR2G
MC10H123FNG
MC10H123FNR2G
MC10H124FNG
MC10H124FNR2G
MC10H125FNG
MC10H125FNR2G
MC10H130FNG
MC10H130FNR2G

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MC10H131FNG
MC10H131FNR2G
MC10H135FNG
MC10H135FNR2G
MC10H136FNG
MC10H136FNR2G
MC10H141FNG
MC10H141FNR2G
MC10H158FNG
MC10H158FNR2G
MC10H159FNG
MC10H159FNR2G
MC10H160FNG
MC10H161FNG
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MC10H330FNG
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MC10H332FNG
MC10H332FNR2G
MC10H334FNG
MC10H334FNR2G
MC10H350FNG
MC10H350FNR2G
MC10H351FNG
MC10H351FNR2G
MC10H352FNG

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MC10H352FNR2G
MC10H424FNG
MC10H424FNR2G
MC10H600FNG
MC10H600FNR2G
MC10H601FNG
MC10H601FNR2G
MC10H602FNG
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NBC12430FNG
NBC12430FNR2G
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NBC12439FNR2G
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SC64046BFNR2G
SC64046FNG
SC64046FNR2G
VMC10E111FNG