

INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION # 16622

Generic Copy

Issue Date: 07-Apr-2011

TITLE: Initial notice of intent to qualify ASE Kunshan for SOIC 14/16 capacity expansion

PROPOSED FIRST SHIP DATE: 24-Oct-2011

AFFECTED CHANGE CATEGORY(S): Subcontractor Assembly & Test Site

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Shannon Riggs (<u>Shannon.Riggs@onsemi.com</u>) for Analog devices Won Kang (<u>Won.Kang@onsemi.com</u>) for Logic devices

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:

This is an Initial Product Change Notice to make customers aware that ASE, located in Kunshan, China is being qualified as a supplemental assembly source for ON Semiconductor's Analog and Logic SOIC14 and SOIC16 products. ASE is a fully certified ISO9001 and TS16949 supplier. These packages are currently manufactured in ON Semiconductor's facility in Carmona, Philippines. This is not a transfer but a capacity expansion.

Device parameters will continue to meet all Data Book specifications, and reliability will meet or exceed ON Semiconductor established standards. Upon expiration of the FINAL PCN(s), the affected devices may be processed at either location depending on capacity requirements.

FINAL PCN(s) will be issued as needed to accommodate the varying qualification schedules for the affected devices.

Samples will be available once the FINAL PCN(s) is(are) published.



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QUALIFICATION PLAN:

Estimated Date for Qualification Completion: 06/15/2011 Samples should be available after completion of Qualification.

Qualification will include the following tests as necessary to provide appropriate coverage and consideration for all differences in die sizes and wafer technologies.

Reference	Test Conditions
JESD22 A113 J-STD-020	Preconditioning: (Test @R) SMD only; Moist. Precond.
JESD22 A102 or A118	Autoclave: (Test @R) 121°C/100% RH/ 15 PSIG for 192hrs
JESD22 A104	Temp Cycle: (Test @R/H) -65°C to+150°C; for 1500 cycles
JESD22 A108	High Temp Storage Life: TA=150°C(R/H) for 1008 hrs.
JEDEC JESD22A108	High Temperature op Life: (Test @ R) Ta=150C fo 1008 Hrs
JESD22 A101 or A110	High Accel Stress Test: (Test @R/H) 130°C/85% RH for 144hrs
JESD22 B102	Solderability
Jedec B-106	Resistance to Solder Heat
AEC-Q100-001	Wire Bond Shear Test: Cpk >1.33
JESD22 B100,B108	Physical Dimension: Critical Cpk>1.33



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List of affected General Parts:

Logic MC14001BDG MC14001BDR2G MC14001UBDG MC14001UBDR2G MC14007UBDG MC14007UBDR2G MC14008BDR2G MC14011BDG MC14011BDR2G MC14011BDR2GH MC14011UBDG MC14011UBDR2G MC14012BDG MC14012BDR2G MC14013BDG MC14013BDR2G MC14014BDG MC14014BDR2G MC14015BDG MC14015BDR2G MC14016BDG MC14016BDR2G MC14017BDG MC14017BDR2G MC14018BDG MC14018BDR2G MC14020BDG MC14020BDR2G MC14021BDG MC14021BDR2G MC14022BDG MC14022BDR2G MC14023BDG MC14023BDR2G MC14024BDG MC14024BDR2G MC14025BDG MC14025BDR2G MC14027BDG MC14027BDR2G

MC14028BDG MC14028BDR2G MC14029BDR2G MC14040BDG MC14040BDR2G MC14042BDG MC14042BDR2G MC14043BDG MC14043BDR2G MC14044BDG MC14044BDR2G MC14049BDG MC14049BDR2G MC14049UBDG MC14049UBDR2G MC14050BDG MC14050BDR2G MC14051BDG MC14051BDR2G MC14051BDR2H MC14052BDG MC14052BDR2G MC14052BDR2GH MC14053BDG MC14053BDR2G MC14053BDR2H MC14060BDG MC14060BDR2G MC14066BDG MC14066BDR2G MC14069UBDG MC14069UBDR2G MC14070BDG MC14070BDR2G MC14071BDG MC14071BDR2G MC14073BDG MC14073BDR2G MC14076BDG MC14076BDR2G

MC14077BDG MC14077BDR2G MC14081BDG MC14081BDR2G MC14082BDG MC14082BDR2G MC14093BDG MC14093BDR2G MC14094BDG MC14094BDR2G MC14106BDG MC14106BDR2G MC14174BDR2G MC14175BDG MC14175BDR2G MC14503BDG MC14503BDR2G MC14504BDG MC14504BDR2G MC14511BDG MC14511BDR2G MC14512BDG MC14512BDR2G MC14516BDG MC14516BDR2G MC14521BDG MC14521BDR2G MC14528BDG MC14528BDR2G MC14532BDG MC14532BDR2G MC14538BDG MC14538BDR2G MC14541BDG MC14541BDR2G MC14543BDG MC14543BDR2G MC14551BDG MC14551BDR2G MC14555BDG

MC14555BDR2G MC14556BDR2G MC14572UBDG MC14572UBDR2G MC14584BDG MC14584BDR2G MC14585BDG MC14585BDR2G MC74HC00ADG MC74HC00ADR2G MC74HC02ADG MC74HC02ADR2G MC74HC03ADG MC74HC03ADR2G MC74HC04ADG MC74HC04ADR2G MC74HC05ADG MC74HC05ADR2G MC74HC08ADG MC74HC08ADR2G MC74HC10ADG MC74HC10ADR2G MC74HC112ADG MC74HC112ADR2G MC74HC11ADG MC74HC11ADR2G MC74HC125ADG MC74HC125ADR2G MC74HC126ADG MC74HC126ADR2G MC74HC132ADG MC74HC132ADR2G MC74HC138ADG MC74HC138ADR2G MC74HC139ADG MC74HC139ADR2G MC74HC139ADR2H MC74HC14ADG MC74HC14ADR2G MC74HC151ADG



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Logic (continued) MC74HC151ADR2G MC74HC153ADG MC74HC153ADR2G MC74HC157ADG MC74HC157ADR2G MC74HC160ADG MC74HC160ADR2G MC74HC161ADG MC74HC161ADR2G MC74HC163ADG MC74HC163ADR2G MC74HC164ADG MC74HC164ADR2G MC74HC165ADG MC74HC165ADR2G MC74HC174ADG MC74HC174ADR2G MC74HC175ADG MC74HC175ADR2G MC74HC20ADG MC74HC20ADR2G MC74HC238ADG MC74HC238ADR2G MC74HC251ADG MC74HC251ADR2G MC74HC259ADG MC74HC259ADR2G MC74HC30ADG MC74HC30ADR2G MC74HC32ADG MC74HC32ADR2G MC74HC365ADG MC74HC365ADR2G MC74HC367ADG MC74HC367ADR2G MC74HC368ADG MC74HC368ADR2G MC74HC390ADG MC74HC390ADR2G MC74HC393ADG

MC74HC393ADR2G MC74HC4020ADG MC74HC4020ADR2G MC74HC4040ADG MC74HC4040ADR2G MC74HC4051ADG MC74HC4051ADR2G MC74HC4051ADR2H MC74HC4052ADG MC74HC4052ADR2G MC74HC4053ADG MC74HC4053ADR2G MC74HC4066ADG MC74HC4066ADR2G MC74HC4066ADR2H MC74HC4094ADG MC74HC4094ADR2G MC74HC4851ADG MC74HC4851ADR2G MC74HC4852ADG MC74HC4852ADR2G MC74HC589ADG MC74HC589ADR2G MC74HC595ADG MC74HC595ADH MC74HC595ADR2G MC74HC595ADR2H MC74HC597ADG MC74HC597ADR2G MC74HC73ADG MC74HC73ADR2G MC74HC74ADG MC74HC74ADR2G MC74HC86ADG MC74HC86ADR2G MC74HCT04ADG MC74HCT04ADR2G MC74HCT08ADG MC74HCT08ADR2G MC74HCT08ADR2H

MC74HCT125ADG MC74HCT125ADR2G MC74HCT132ADG MC74HCT132ADR2G MC74HCT138ADG MC74HCT138ADR2G MC74HCT14ADG MC74HCT14ADR2G MC74HCT14ADR2GH MC74HCT32ADG MC74HCT32ADR2G MC74HCT366ADG MC74HCT366ADR2G MC74HCT4051ADG MC74HCT4051ADR2G MC74HCT4051ADR2H MC74HCT4066ADG MC74HCT4066ADR2G MC74HCT4851ADG MC74HCT4851ADR2G MC74HCT4852ADG MC74HCT4852ADR2G MC74HCT74ADG MC74HCT74ADR2G MC74HCT86ADG MC74HCT86ADR2G MC74HCU04ADG MC74HCU04ADR2G MC74VHC4051DR2G MC74VHC4052DR2G MC74VHC4053DR2G MC74VHC4066DR2G

Analog

LM224DG LM224DR2G LM2902DG LM2902DR2G LM2902VDG LM2902VDR2G LM324DG LM324DR2G LM239DG LM239DR2G LM2901DG LM2901DR2G LM2901VDG LM2901VDR2G LM339DG LM339DR2G MC3302DG MC3302DR2G MC1413BDG MC1413BDR2G MC1413DG MC1413DR2G ULN2003ADR2G