



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION
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20 Mar 2007

SUBJECT: ON Semiconductor Initial Product/Process Change Notification #15749

TITLE: Initial PCN for Qualification of Analog SC88A / SC70-5 at ON Seremban

PROPOSED FIRST SHIP DATE: 07 Aug 2007

AFFECTED CHANGE CATEGORY: ON Semiconductor Assembly Site

**AFFECTED PRODUCT DIVISION: Automotive and Power Regulation Group (APRG)
Computing Product Group (CPG)**

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Bett Lofts <Bett.Lofts@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 60 days prior to implementation of the change.

DESCRIPTION AND PURPOSE:

This is the initial PCN announcing qualification of the ON Semiconductor facility located in Seremban, Malaysia as an additional assembly location for Analog devices on SC88A/ SC70-5 packages.

Seremban is currently a qualified site for the assembly and test of SC88A/ SC70-5 packages. There will be no changes in device functionality. Reliability will continue to meet or exceed ON Semiconductor's highest standards.

Final product change notifications will be released with the completion of reliability testing. Upon expiration of the Final PCN, SC88A/ SC70-5 devices will be sourced from both the Seremban facility and the existing facility (Amkor, located in Philippines). Any new devices released after publication of the FPCN for a specific package style/die size will be qualified for assembly in both locations.


Initial Product/Process Change Notification#15749
QUALIFICATION PLAN:

The SC88A/ SC70-5 packages will be qualified at Seremban using appropriate qualification vehicles as defined by the ON Semiconductor Reliability Engineering group. The qualification vehicles will be selected to ensure the largest die size for each package style/size is evaluated. Devices with smaller die sizes will be qualified by similarity to the qual vehicle for each package style. Electrical distribution/characterization evaluations for each device will be performed before that specific device is released to production at the new facility.

Qualification vehicles have been defined to include the following, with qualification tests as indicated for each:

<u>Package</u>		<u>Qual Vehicle</u>	<u>Testing</u>
SC88A /SC70-5		NCP512	PC/AC/TC/HAST/HTOL/HTSL
Test	Description	Conditions	Read Point
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AC-PC	Autoclave	121°C/100% RH/15	Qual point 96hrs
TC-PC	Temperature Cycle	-65C to +150C 500cyl	
HAST	High Accel Stress	TA= +130C, RH = 85%,	Qual point 96 hrs
HTOL	High Temp Op Life	125DegC, 1008hrs	Qual Point 504hrs
HTSL	High Temp Storage Life	150DegC, 1000hrs	Qual Point 500hrs
SD	Solderability	TA= 245 C	>95% coverage
SAT	Scanning Acoustic Compare for Delamination Tomography before and after PC		
Electrical Distributions: Measured for each specific device type.			

AFFECTED DEVICE LIST:

NCP502SQ15T1
 NCP502SQ15T1G
 NCP502SQ18T1
 NCP502SQ18T1G
 NCP502SQ25T1
 NCP502SQ25T1G
 NCP502SQ27T1
 NCP502SQ27T1G
 NCP502SQ28T1
 NCP502SQ28T1G
 NCP502SQ29T1G
 NCP502SQ30T1
 NCP502SQ30T1G
 NCP502SQ31T1G
 NCP502SQ33T1
 NCP502SQ33T1G
 NCP502SQ34T1G
 NCP502SQ35T1
 NCP502SQ35T1G
 NCP502SQ36T1G
 NCP502SQ37T1G
 NCP502SQ50T1
 NCP502SQ50T1G
 NCP512SQ13T1G
 NCP512SQ15T1
 NCP512SQ15T1G
 NCP512SQ18T1
 NCP512SQ18T1G
 NCP512SQ22T1G

**Initial Product/Process Change Notification#15749**

NCP512SQ25T1
NCP512SQ25T1G
NCP512SQ27T1
NCP512SQ27T1G
NCP512SQ28T1
NCP512SQ28T1G
NCP512SQ30T1
NCP512SQ30T1G
NCP512SQ31T1
NCP512SQ31T1G
NCP512SQ33T1
NCP512SQ33T1G
NCP512SQ50T1
NCP512SQ50T1G
NCP612SQ15T1
NCP612SQ15T1G
NCP612SQ18T1
NCP612SQ18T1G
NCP612SQ25T1
NCP612SQ25T1G
NCP612SQ27T1
NCP612SQ27T1G
NCP612SQ28T1
NCP612SQ28T1G
NCP612SQ30T1
NCP612SQ30T1G
NCP612SQ31T1
NCP612SQ31T1G
NCP612SQ33T1
NCP612SQ33T1G
NCP612SQ37T1G
NCP612SQ50T1
NCP612SQ50T1G
NCV612SQ15T1
NCV612SQ15T1G
NCV612SQ18T1
NCV612SQ18T1G
NCV612SQ25T1
NCV612SQ25T1G
NCV612SQ27T1
NCV612SQ27T1G
NCV612SQ28T1
NCV612SQ28T1G
NCV612SQ30T1
NCV612SQ30T1G
NCV612SQ31T1
NCV612SQ31T1G
NCV612SQ33T1
NCV612SQ33T1G
NCV612SQ50T1
NCV612SQ50T1G
NCS2001SQ1T2
NCS2001SQ1T2G
NCS2001SQ2T2
NCS2001SQ2T2G