



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

19-MAY-2005

SUBJECT: ON Semiconductor Initial Product/Process Change Notification #14082

TITLE: Assembly Transfer of PDIP Packages from OSE-P to AIT

EFFECTIVE DATE: 19-Sep-2005

AFFECTED CHANGE CATEGORY:
Subcontractor Assembly Site
Package Change

AFFECTED PRODUCT DIVISION: Analog Products

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Representative or Mohd Ibrahim <FFN3DP@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:

ON Semiconductor is pleased to announce plans to transfer assembly of 8, 14, and 16 lead PDIP packaged parts from OSE-P to Advanced Interconnect Technology (AIT), located in Batam, Indonesia. The transfer is a manufacturing consolidation measure. AIT is QS9000, ISO9002, and TS16949 certified, and it has been a qualified assembly subcontractor for ON Semiconductor since 1990. AIT is qualified and currently assembling other Analog products for ON Semiconductor in 8, 14, 16, 18, 20, and 24 pin PDIP packages. In the case of Analog 14/16 lead PDIP products, AIT is the primary supplier for ON Semiconductor.

The transferred devices will use AIT's standard Build of materials (BOM).

Device parameters will continue to meet all Data Book specifications, and the reliability of the products will continue to meet or exceed ON Semiconductor standards.

**Initial Product/Process Change Notification #14082****QUALIFICATION PLAN:**

The qualification testing will be performed on the SCY994401P device type, a 16 Lead fused-frame PDIP packaged part. This device was selected as the qualification vehicle based upon its large size and the availability of reliability hardware tooling.

Planned Reliability Tests are as follows:

<u>Test</u>	<u>Conditions</u>	<u>Sample Size</u>	<u>Duration</u>
Op-life (HTOL)	Biased at +125C	77 Units/lot	504 Hours
Temperature Cycle (TC)	-65C to +150C	77 Units/lot	500 Cycles
Unbiased HAST (UHAST)	+130C/85% RH	77 Units/lot	96 Hours
Autoclave (AC)	+121C/100% RH/15 PSIG	77 Units/Lot	96 Hours
Wire Bond Pull Strength (BPS)	After TC Test	30 Bonds/5 units	
Solderability (SD)	Steam age at +260C	15 Units/lot	8 Hours
Solderability (SD)	Steam age at +310C	15 Units/lot	8 Hours
Physical Dimensions (PD)	Per case outline	30 Units/lot	

Note: The qualification testing will entail samples from 1 lot for the HTOL, SD, BPS, and PD evaluations and from 3 lots for the TC, UHAST, and AC tests.

There is also extensive generic reliability data already available within ON Semiconductor on the 8, 14 and 16 lead (Nonfused leadframes) PDIP packages assembled at AIT.

AFFECTED DEVICE LIST (WITHOUT SPECIALS)**PART**

CS2841BEBN8
CS4121ENF16
CS5101EN14
CS8151CGN8
CS8151YNF16
CS8190ENF16
NCV7601P