



PRODUCT/PROCESS CHANGE NOTIFICATION

PCN MPA-DIS/06/2044
Notification Date 10/20/2006

MPA - ASD & IPAD Division
AC Switches and Ignitors in TO-92
Additional assembly and test location in China
DIS - ASD & IPAD

Table 1. Change Identification

Product Identification (Product Family/Commercial Product)	ACS102-xxA and ACS108-xxA series and FLC21-135A
Type of change	Package assembly location change
Reason for change	Capacity extension
Description of the change	In order to increase our manufacturing capacity while the market demand is rapidly growing, we have decided to expand the assembly and test of our AC Switches and Ignitors in TO-92 package currently produced in the Philippines, to a new plant in China.
Product Line(s) and/or Part Number(s)	See attached
Description of the Qualification Plan	See attached
Change Product Identification	Product marking - Traceability ensured by QA nbr
Manufacturing Location(s)	

Table 2. Change Implementation Schedule

Forecasted implementation date for change	16-Oct-2006
Forecasted availability date of samples for customer	16-Oct-2006
Forecasted date for STMicroelectronics change Qualification Plan results availability	16-Oct-2006
Estimated date of changed product first shipment	19-Jan-2007

Table 3. Change Responsibility

	Name	Signature	Date
Division Product Manager	S. CHAMARD		Oct.12 ,06
Division Q.A. Manager	A. BESSON		Oct.12 ,06
Division Marketing Manager	J.B. MOREAU		Oct.12 ,06

Table 4. List of Attachments

Customer Part numbers list	
Qualification Plan results	



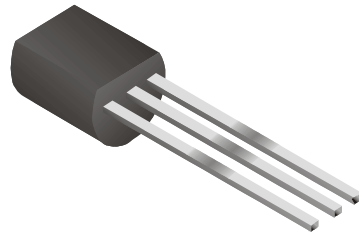
Customer Acknowledgement of Receipt		PCN MPA-DIS/06/2044
Please sign and return to STMicroelectronics Sales Office		Notification Date 10/20/2006
<input type="checkbox"/> Qualification Plan Denied <input type="checkbox"/> Qualification Plan Approved <input type="checkbox"/> Change Denied <input type="checkbox"/> Change Approved	Name:	
	Title:	
	Company:	
	Date:	
	Signature:	
Remark		



MPA - ASD & IPAD Division¹

AC Switches and Ignitors in TO-92:

Additional assembly and test location in China



(1) MPA: Micro, Power, Analog - ASD: Application Specific Device - IPAD: Integrated Passive and Active Devices

WHY THIS CHANGE?

In order to **increase our manufacturing capacity** while the market demand is rapidly growing, we have decided to expand the **assembly and test** of our **AC Switches and Ignitors in TO-92** package currently produced in the Philippines, to a new plant in **China**.

Multi-sourcing	Current	New
Assembly & test location	PHILIPPINES	CHINA PHILIPPINES

WHAT IS THE CHANGE?

This plant located in China is already producing our SCRs and Triacs in TO-92 package. The China TO-92 line is using **same assembly flow** and **same test and finishing process** (lead-free) as the Philippines plant.

There will be **no impact** on the **electrical, dimensional** and **thermal parameters** of the products with respect to the product datasheet. This was verified in the qualification program.

There will be **no change** in the **packing modes** and the standard **delivery quantities**. The products will be delivered in compliance with the RoHS* as per PCN DSG/03/368.

The **products** involved in this production extension are listed below.

Product Family	TO-92 devices
AC Switches	ACS102-5TA(-TR) ACS102-6TA(-TR) ACS108-5SA(-AP)(-TR) ACS108-6SA(-AP)(-TR)
Ignitors	FLC21-135A

(* Restriction of the use of certain Hazardous Substances)

HOW AND WHEN?Qualification and test results:

The **reliability tests plan** supporting the qualification program for the China assembly line is provided in **appendix 1** of the present document. The production ramp-up will be monitored with a **pre-launch control plan** implemented on selected parameters.

The **reliability test report** of the qualification program is available on request **now**.

Sampling:

Qualification samples of the following device produced in China are **available** on request as indicated below:

Product Family	Salestypes	Availability
AC Switches	ACS108-6SA	Now

Other samples of the involved parts are available on request for delivery within PCN notice if ordered within 30 days.

Change implementation schedule:

The **production start** and **first shipments** will be implemented according to our work in progress and materials availability as indicated in the schedule below:

Salestypes	Production Start	1st Shipments
ACS10x-xxA(-AP)(-TR) FLC21-135A	From Week 41-2006	From Week 03-2007

Lack of acknowledgement of the PCN within **30 days** will constitute acceptance of the change. After acknowledgement, lack of additional response within the **90 day** period will constitute acceptance of the change (Jedec Standard No. 46-B). In any case, **first shipments** may start earlier with customer's **written agreement**.

Marking and Traceability:

Parts assembled in the new plant will have a **differentiated marking** as indicated below:

Assembly location	Assy plant	3 last digits	
Philippines (current location)	7S	YWW	Y = 1 digit indicating the year WW = 2 digits indicating the week number
China (new location)	GE		

The **traceability** for the new assembly plant will be ensured by the **country of origin**, by an **internal codification**, and by the **Q.A. number**.

Appendix 1: Reliability tests for qualification program of AC Switches and Ignitors in TO-92



AC Switches in TO-92: Additional assembly and test location in China

Reliability tests plan for QUALIFICATION PROGRAM

Product Family	Test Vehicle Salestypes
AC Switches	ACS108-5SA ACS108-6SA

QUALIFICATION TESTS					
TEST	CONDITIONS	DURATION	NBR OF LOTS (*)	SAMPLE SIZE	ACCEPTANCE CRITERIA
Parametric verification	Data sheet specification	Not applicable	3	30 pcs / lot	Datasheet
Temperature Cycling JESD22 A104	-55°C/+150°C - Air/Air	1000 cycles	3	77 pcs / lot	0 failure
Temperature Humidity Bias JESD22 A101	Tamb = 85°C RH = 85% V = 100V max	1000 hours	3	77 pcs / lot	0 failure
High Temperature Reverse Bias JESD22-A108	V = V _{ac peak} Tj = 125°C	1000 hours	1	77 pcs / lot	0 failure
Construction analysis	Random samples	Not applicable	1	5pcs	Assembly rules
Physical dimension JESD22 B100	As per package dimensions & tolerances	Not applicable	1	30pcs	0/30
Solderability SnPb & SnAgCu JESD22-B102D	Dry ageing 16hrs / 220°C & 245°C – 5 sec dip. Steam aging 8hrs / 220°C & 245°C – 5 sec dip.	Not applicable	3	10 pcs / lot	0/30

(*) Lots selected among test vehicles indicated above or of other devices presenting sufficient technological similarities.

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