



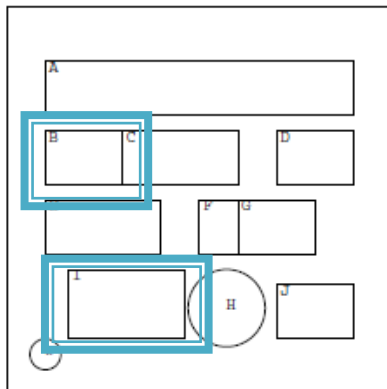
**PRODUCT/PROCESS
CHANGE NOTIFICATION
PCN 9640 - Additional information**

**Transfer of assembly plant from STATS ChipPAC
Shanghai (China) to Amkor ATP (Philippines) -
Products in VFQFPN 36 6x6 package**

MMS - Microcontrollers Division (MCD)

How can the changes be seen?

The marking composition indicated on the products is changing from:



B : Assembly plant changes from GH to 7B

I : Country Of Origin changes
from CHN to PHL

How to order samples?

For all sample request linked to this PCN, please:

- request sample(s) through Notice tool, indicating a single Commercial Product for each request.
- insert "PCN 9640" into the remarks of your order.
- place **non standard** sample order using the following field in your system.

SO | NPO Sample

Header

SO Nr: Customer: SO Type:

PO Nr: Carrier Code: Price Policy: Currency:

Notes: States: Issuing Date: Ord Val: 0.0000

Sch 1 Nr	PO 1 Nr	Finished Good	Comm Qty	Open Qty	Plant Open Qty	Reqd Qty	Unit Price	RD	CD	EDD	St

PO Item: Comm Prdt: Qty: 0 RD: 06-Jan-15 Unit Price: 0.0000 Final Cost:

Cust Part Nr: Finished Good: Partial Ship: 01 Price Pat: States: 01 Cacc:

Notes: TAM K Pieces: 0 Our Share: 0 Sample Type:

Project Name: Closing Date: Closing Type:

Regional Sheet

Lab Sheet

SO Nr: 7075S05890 Customer: 99800200 SGS-TH/USA PO Nr: Mos/TPapay/RBC-Ullmer

Company: STM Issuing Date: 29.JUL.2015 12:07:00 Ship To: 9980020081 SGS/USANPO Price Policy: 05 Curr Code: 02 U.S. DOLLAR

Carrier Code: 0001 Bill To: 9980020001 SGS-TH/USA

Carriage Code: F1 F.I.S. Confirm To: 81

Transport Mode: 01 AIR FREIGHT Sales Rep. ID: 07R00C NO COMMISSION

Payment Term: 0006 FREE OF CHARGE Cust Serv Rep ID: 11A000 Dummy FSA SWISS

SO Remark Details

SO Nr: 7075S05890

SO Remark Type	Text	Status Co	Last Update
01 INVOICE & O/C REMARK	PER PCN 9108: THANK YOU	01	30-Jul-2015



RERMCD1607 reliability plan for ATP VQFN6*6 new project- PCN 9640

Reliability Evaluation Plan

July 6th, 2016

MMS MCD Quality & Reliability Department

PCN 9640- RERMCD1607 reliability plan

for Transfer of assembly plant from
STATS ChipPAC Shanghai (China) to Amkor ATP (Philippines)
Products in VFQFPN 36 6x6 package

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Context:

- Rationalization of Microcontroller packages manufacturing through a centralization of VFQFPN in Amkor ATP (Philippines) production site.

Description of change:

	OLD	NEW
DESCRIPTION	Previous assembly plant : STATS ChipPAC Shanghai (China) Previous Bill Of Materials: - Resin : G770 - Die attach material : Ablebond 8290	Transfer to new assembly plant : Amkor ATP (Philippines) New Bill Of Materials: - Resin : G700Y - Die attach material : Dexter 1234-100

RERMCD1607 STM32 TEST VEHICLES

Package line	Assembly Line	Package	Device (Partial RawLine Code)	Diffusion Process	Number of Lots
QFN	VQFN	VFQFPN 36 6x6	STM32F103(ZR*410)	TSMC 0.18μm	1
			STM32F101(ZR*412)	TSMC 0.18μm	1

RERMCD 1607 – STM32 - VQFN

RELIABILITY TRIALS

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Package Reliability Trials :

(*) tests performed after preconditioning

Reliability Trial		Test Conditions	Pass Criteria	Unit per Lot	Lot qty
PC	Pre Conditioning: Moisture Sensitivity Jedec Level 3 J-STD-020/ JESD22-A113	Bake (125°C / 24 hrs) Soak (30°C / 60% RH / 192 hrs) for level 3 Convection reflow: 3 passes with Jedec level 3	3 passes MSL3	308	1/ device
		Delamination check	No delamination	60	1/ device
TC(*)	Thermal Cycling JESD22 A104	-50°C, +150°C Or equivalent -65°C +150°C	1000Cy 500Cy	77	1/ device
THS(*)	Temperature Humidity Storage JESD22 A110	85°C, 85% RH, no bias	1000h	77	1/ device
HTSL(*)	High Temperature Storage Life JESD22 A103	150°C- no bias	1000h	77	1/ device
Construction analysis including Solderability, Physical dimensions	JESD 22B102 JESDB100/B108			15 10	1/ Front end technology
ESD	ESD Charge Device Model ANSI/ESD STM5.3.1	250V or 500V depending on device	250V or 500V	3	1/ device

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Public Products List

PCN Title : Transfer of assembly plant from STATS ChipPAC Shanghai (China) to Amkor ATP (Philippines) - Products in VFQFPN 36 6x6 package

PCN Reference : MDG/16/9640

PCN Created on : 02-Feb-2016

Subject : Public Products List

Dear Customer,

Please find below the Standard Public Products List impacted by the change.

STM32F103T8U6TR	STM32F101TBU6TR	STM32F103T8U6
STM32F103T8U7TR	STM32F101T6U6ATR	STM32F103T8U7
STM32F103TBU7	STM32F103T6U6A	STM32F103T4U6A
STM32F101T8U6TR	STM32F101TBU6	STM32F101T6U6A
STM32F101T8U6	STM32F103TBU6	STM32F101T4U6ATR
STM32F101T4U6A	STM32F103T6U7A	



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