



Public Products List

PCN Title : ST Shenzhen (China) new assembly site - TSSOP 20 products

PCN Reference : MDG/16/9299

PCN Created on : 19-Jun-2015

Subject : Public Products List

Dear Customer,

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

STM32F038F6P6	STM32F031F6P6TR	STM8S903F3P3
STM32F031F6P6	STM32F031F6P7TR	STM8S103F2P3TR
STM8S103F3P6TR	STM8S103F3P3TR	STM32F031F6P7
STM32F030F4P6	STM8S903F3P6	STM32F030F4P6TR
STM8S103F3P3	STM8S903F3P6TR	STM32F031F4P6
STM8S103F2P6	STM32F031F4P7	STM8SPLNB1P6
STM8S003F3P6TR	STM8S103F3P6	STM8S103F2P6TR
STM8S003F3P6	STM32F038F6P6TR	STM8S103F2P3
STM32F031F4P6TR		



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PRODUCT/PROCESS CHANGE NOTIFICATION PCN 9299 - Additional information

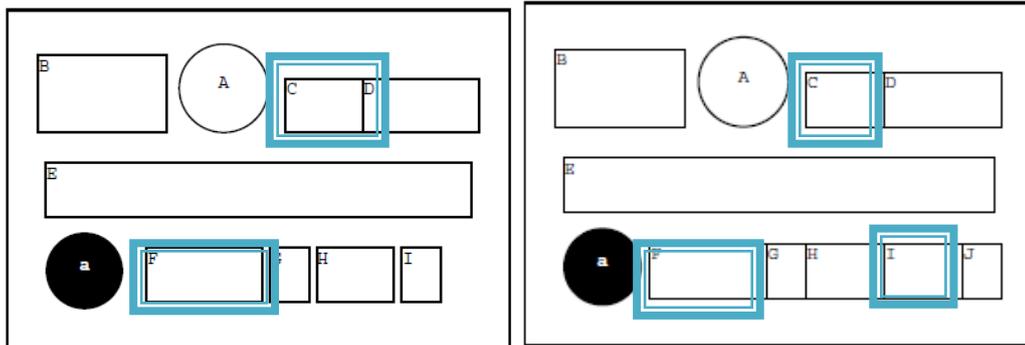
ST Shenzhen (China) new assembly site – TSSOP 20 products

MMS - Microcontrollers Division (MCD)

How can the changes be seen?

The marking instruction indicated on the products is changing from:

- Assembly plant changes from 7B (in C) to GK (in C)
- Country Of Origin change from PHL (in F) to CHN (in F)
- 2 digits are added for enhanced traceability (in I)



Previous marking

New marking

When ?

The production will start from:

Products	Date of Final Qualification Report Availability	Date of first Shipment
STM8x	Week 35 2016	Week 39 2016
STM32x	Week 43 2016	Week 48 2016

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 9299" into the remarks of your order.
- place **non standard** sample order using the following field in your system.

The screenshot shows the 'SO NPO Sample' window. The 'Header' section includes fields for SO No., Customer, SO Type (Sample Order), PO No., Carrier Code, Price Policy, Currency, Issuing Date, and Ord Val (0.0000). Below the header is a table with columns: Sch 1 Nr, PO 1 Nr, Finished Good, Comm Qty, Open Qty, Plant Open Qty, Req'd Qty, Unit Price, RD, CD, EDD, St. The 'PO Item' section shows PO Item, Comm Prod, Qty (0), RD (06-Jan-15), Unit Price (0.0000), and Final Cust. The 'Cust Part Nr' section includes Finished Good, Partial Ship (01), Price Pol, Status (01), and Csec. The 'Notes' section has TAM K Pieces (0) and Our Share% (0). The 'Sample Type' dropdown menu is highlighted in red and set to 'Sample Non Std Type'. Below the notes are fields for Project Name, Closing Date, and Closing Type. At the bottom, there are sections for 'Regional Sheet' and 'Lab Sheet'.

The screenshot shows the 'SO Remark Details' window. The main window displays order information: SO No. 7075S05890, Customer 99800200, SGS-TH/USA, PO No. Mos/TPapay/RBC-Ullmer, Company STM, Issuing Date 23-JUL-2015 12:07:00, Ship To 9980020081, SGS/USANPO, Price Policy 05, and Curr Code 02 U.S. DOLLAR. Other fields include Carrier Code 0001, Carriage Code F1 F.I.S., Transportn Mode 01 AIR FREIGHT, Payment Term 0006 FREE OF CHARGE, Bill To 9980020001 SGS-TH/USA, Confirm To 01, Sales Rep. ID 07R00C NO COMMISSION, and Cust Serv Rep ID 11A000 Dummy FSA SwISS.

The 'SO Remark Details' window is open, showing a table of remarks for SO No. 7075S05890. The table has columns: SO Remark Type, Text, Status Co, and Last Update. The first row is highlighted:

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



RERMCD1512 reliability plan for STS TSSOP20 - PCN 9299

Reliability Evaluation Plan

June 13th, 2016

MMS MCD Quality & Reliability Department-ST Rousset

PCN9299- RERMCD1512 reliability plan ST Shenzhen TSSOP20

- Context :

Today production is only issued from AMKOR ATP (Philippines). In order to ensure top class service for our customers, given the continued growth of the STM32 & STM8 families, ST Microcontrollers Division will increase production capacity and improve flexibility through the qualification of an additional assembly source.

- What are the changes?

4. Description of change		
	Old	New
4.1 Description	Current assembly plant : AMKOR ATP (Philippines) Current Bill Of Materials : - Wire Bonding : 0.8 mil Au - Glue : 8290 Ablestik - Resin : G700K - Leadfinishing : Rough PPF	Current assembly plant, AMKOR ATP (Philippines), remains unchanged. Additional assembly plant : ST Shenzhen (China) Additional Bill Of Materials : - Wire Bonding : 0.8 mil Ag - Glue : 8601-S25 Ablestik - Resin : G700KC - Leadfinishing : PPF
4.2 Anticipated Impact on form, fit, function, quality, reliability or processability?	Lead color and surface finish change depending on lead finishing.	

RERMCD1512 STM8S & STM32 TEST VEHICLES

Package line	Package	Device (Partial RawLine Code)	Diffusion Process	Number of Lots
TSSOP	20L	STM8S (YA*767)	F9GO1	3
		STM32 (YA*444)	TSMC 0.18 μ m	3

RERMCD 1512 STM8S-STM32 TSSOP20

RELIABILITY TRIALS

(*) tests performed after preconditioning

Reliability Trial	Test Conditions	Pass Criteria	Unit per Lot	Lot qty
PC	Pre Conditioning: Moisture Sensitivity Jedec Level 1 J-STD-020/ JESD22-A113	Bake (125°C / 24 hrs) Soak (85°C / 85% RH / 168 hrs) for level 1 Convection reflow: 3 passes with Jedec level 3	308	3/ device
AC (*)	Autoclave JESD22 A102	121°C, 100% RH, 2 Atm	77	3/ device
TC(*)	Thermal Cycling JESD22 A104	-65°C, +150°C	77	3/ device
WBS/ WPT after TC 500cy	Mil Std 883 Method 2011 AEC Q100-001		3 / 30 wires	3/ device
THB(*)	Temperature Humidity Bias JESD22 A101	85°C, 85% RH, biased	77	3/ device
HTSL	High Temperature Storage Life JESD22 A103	150°C- no bias	77	3/ device
ESD	ESD Charge Device Model ANSI/ESD STM5.3.1	500V or 750V depending on device datasheet	3	1/ device
Construction analysis including Physical dimension	Dimension measurement JESD 22B100/B108		10	1/ device
Solderability	Lead solderability JESD 22B102		45 leads/ 3 parts	1/ device

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