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ADVANCE PRODUCT CHANGE NOTIFICATION

APCN: PCN173705B

Date: February 05, 2018

Subject: Addendum to APCN173705A - Planned Qualifications of Fab 25 and SMIC Fab B1 as Additional Wafer Fab Sites and a New Bill of Materials at J-Devices for Select MCU and Analog Products

To: TOKYO ELECTRON DEVICE
TELDEVICE
cy-inside@teldevice.co.jp

Description of Change:

The purpose of addendum *B is to add the plan to qualify SMIC Fab B1 as an additional wafer fab site for select MM MCU products.

The purpose of addendum *A was to update the affected parts list and provide more details on the top mark change associated with the part number changes.

This is an advance notification, no immediate action on your part is necessary. Once samples are available (see approximate schedule in the attached file), we would appreciate an expeditious qualification.

These changes to select Automotive MCU and Mass Market (MM) MCU products include qualification of Fab 25 and SMIC Fab B1 as additional wafer fab sites, migration from gold to copper wire, introduction of an improved mold compound, and conversion from etched to stamped lead-frames. These changes are not all implemented on all affected parts—the table below groups the number of parts that are affected for each combination of changes.

		J-Devices												
A MPN change	B Fab Qual	C Mold change	D Wire change	E L/F change	No. of MPN	Group (GR)	Planned PCNs							
							1Q/2018	2Q/2018	3Q/2018	4Q/2018	1Q/2019	2Q/2019	3Q/2019	4Q/2019
CY (w/o Logo)	Fab 25	Yes	Yes	No	0	1	GR1-A							
		No	No	No	440	2	GR2-A	GR2-B	GR2-C	GR2-D	GR2-E	GR2-F	GR2-G	GR2-H
		No	No	54	3	GR3-A	GR3-B	GR3-C	GR3-D			GR3-F		
	No	Yes	Yes	Yes	86	4	GR4-A							
			No	No	1,038	5	GR5-A							
			No	No	19	6	GR6-A							
			Yes	Yes	1	7	GR7-A							
		No	No	1,456	8	GR8-A								
	SMIC	Yes	Yes	No	10	9	GR9-A			GR9-B	GR9-C			
			No	No	41	10	GR10-A			GR10-B				
		No	No	No	253	11	GR11-A	GR11-B	GR11-C	GR11-D				
	No change	No	No	No	130									
total					3,528		11	3	3	5	2	1	2	1

So, for example, a total of 1,038 Marketing Part Numbers (MPNs) representing Group 5 (GR5) will get the marking change (MPN change) and will be assembled with the improved mold compound

and copper wires; this group of parts will not be qualified at Fab 25, nor will there be any change in leadframe. These 1,038 MPNs will be qualified in GR5-A, with PCNs going out in Q118.

There are a few things to note regarding Groups 10. Unlike for other Groups, not all changes are implemented at the same time, in any given quarter. For example, there may be some parts in GR10-A which will receive the Mold and Wire changes, but will not receive the SMIC Fab qual; these parts will receive the SMIC Fab qual in GR10-B. By the time the PCN for GR10-B is issued, all four changes will have been qualified for all 41 parts comprising that Group.

A new reel format has been announced separately through PIN 180404. This affects a subset of the devices listed in the table above. Since this does not involve a change in supplier, materials, or dimensions, notification was done through a Product Information Notification (PIN). The purpose of the new reel format is to standardize it to IEC60286-3, which is the standard reel format used by our subcontractor J-Devices.

Marketing part numbers will change from an MB prefix to a CY prefix for 3,398 products. This will include removal of the “F-logo” or “Spansion-logo.”

Marketing part numbers and device marking will not change for 130 products that were previously included in Product Termination Notifications (PTNs) 163704, 171104, 171201 and 172507. The only change for these products will be in the reel format, as described above.

Benefit of Change:

These qualifications will enable Cypress to continue to meet its delivery commitments by having a continued supply from alternate qualified sources.

The primary impetus for this project is to qualify Fab 25 or SMIC Fab B1 as second sources for these products. At the same time, a subset of these products, depending on the package, are currently not utilizing J-Devices’ standard flow with regards to mold compound, leadframes, and bonding wires. These products will be converted to J-Devices’ standard flow.

In order to protect customers from having to qualify the same MPN multiple times, we are consolidating these fab and assembly changes under single PCNs.

Part Numbers Affected: 3,528

See the attached ‘Affected Parts List’ file for a list of all part numbers affected by this change. This file indicates which parts are affected by the Fab 25 qualification or the SMIC Fab B1 qualification, which parts are affected by the new J-Devices’ BOM qualification and the new part numbers for each part where the number is changing. Additional Marketing Part Numbers by revision change are indicated with ‘*A’ in the attached ‘Affected Parts List’. Note that the dates are subject to change. Once complete, the qualifications will be announced through regular PCNs.

Qualification Status:

Cypress qualification will be complete at the time of each PCN issuance, and samples will also be available at that time.

Sample Status:

Samples will be available at the time that the specific PCN is issued. Qualification samples are not built ahead of time for all affected part numbers. Please contact your local Sales Representative to schedule samples.

Approximate Implementation Date:

Implementation dates will be communicated at the time of each PCN issuance.

Anticipated Impact:

Products fabricated at Fab 25 or at SMIC Fab B1 and/or assembled with the new Bill of Materials (mold compound, leadframe, bonding wires) will be completely compatible with existing product from form, fit, functional, parametric and quality performance perspectives.

Method of Identification:

Cypress maintains traceability of product to wafer level, including wafer fabrication location, through the lot number marked on the package. New part numbers will be used to distinguish product from Fab 25. The Fab location marking on the part will be used to reflect the Fab location. The part marking will change to show the new part number.

Response Required:

This is an information only announcement. No response is required.

For additional information regarding this change, contact your local sales representative or contact the PCN Administrator at pcn_adm@cypress.com.

Sincerely,

Cypress PCN Administration