

Public Products List

Publict Products are off the shelf products. They are not dedicated to specific customers, they are available through ST Sales team, or Distributors, and visible on ST.com

PCN Title : ASE Kaohsiung (Taiwan) additional source for UQFPN 5x5 32L and UQFPN 7x7 48L package - on listed products PCN Reference : MDG/22/13615

Subject : Public Products List

Dear Customer,

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

STM32G051C6U6	STM32G031C6U6	STM32L451CEU6
STM32G473CEU3	STM32G431KBU6	STM32G031K4U3
STM32L552CCU6	STM32G0B1CEU6N	STM32G0B1CCU6NTR
STM32L412C8U6TR	STM32G0B1CCU6N	STM32L562CEU6
STM32G031C8U3TR	STM32G051K8U7	STM32G031K8U7
STM32G0B1CBU6N	STM32G051C8U6	STM32G441CBU6
STM32G031C8U6	STM32G051K6U7	STM32G031K4U6TR
STM32G031K8U6TR	STM32L431CCU6TR	STM32L442KCU6
STM32G431K8U6TR	STM32L451CCU6	STM32L562CEU6P
STM32G031C4U6	STM32G431CBU3	STM32L432KCU3
STM32G061C6U6	STM32L451CCU3TR	STM32L442KCU6TR
STM32G474CCU3	STM32G441KBU6	STM32G431C6U6
STM32L433CCU6TR	STM32G0B1KCU7	STM32G0B1CCU6
STM32L452CEU3	STM32G473CCU6TR	STM32L422CBU6
STM32G041C8U6	STM32L412CBU6	STM32G061C8U6
STM32G431C8U3	STM32G0B1CBU6TR	STM32G431KBU3
STM32G0C1CCU6	STM32L431CCU6	STM32G0C1CEU6
STM32G0B1CEU6	STM32L4Q5CGU6	STM32G031C8U6TR
STM32G031C8U7	STM32L431KCU6TR	STM32G0B1KBU6N
STM32G0B1KEU7	STM32G031K8U7TR	STM32G431C8U6
STM32L412CBU6TR	STM32G474CEU6	STM32G473CCU6
STM32G431K8U6	STM32G071CBU6TR	STM32L4P5CEU6
STM32G071K8U6	STM32G0C1KEU6N	STM32G031K4U3TR
STM32G031K4U6	STM32G031C8U3	STM32G0B1KBU3NTR
STM32L443CCU6	STM32G0B1KEU6	STM32G071KBU6TR
STM32G031C8U7TR	STM32L552CEU6P	STM32L432KCU6
STM32G0C1KEU6	STM32G0B1KBU6	STM32G474CBU6
STM32G431CBU6	STM32G473CEU6F	STM32G071KBU6
STM32L412C8U6	STM32G061K6U6	STM32G491CEU3TR
STM32G0B1KCU6	STM32G041K8U6	STM32G061K8U6
STM32L432KBU6	STM32G081CBU6	STM32G473CCU3TR
STM32G0C1KCU6	STM32G071C8U3	STM32G0B1KCU7TR
STM32G071KBU7	STM32G0C1CEU6TR	STM32L4Q5CGU6P
STM32L431CBU6TR	STM32G071CBU6	STM32L552CEU6
STM32G051K6U6	STM32G031K6U6	STM32G0B1CBU6
STM32G081KBU6	STM32G483CEU6	STM32L412KBU6TR

Public Products List

		0714000004//514014
STM32G0B1CCU6TR	STM32G051K8U7TR	STM32G0B1KEU6N
STM32G071C8U7TR	STM32G0C1KCU6N	STM32G473CBU6
STM32L431KBU6TR	STM32G051K6U7TR	STM32G0B1KCU6N
STM32L433CCU3	STM32G0B1CBU7	STM32G071C8U6TR
STM32L412K8U6	STM32L433CCU3TR	STM32G0B1KBU3N
STM32G0B1KEU7TR	STM32L412KBU3	STM32G491CCU6
STM32L451CCU6TR	STM32G0B1CBU3	STM32L452CEU6
STM32G0B1CBU7TR	STM32G031K8U6	STM32L451CEU6TR
STM32G473CEU3F	STM32G051K8U6	STM32G431K6U3
STM32G491CEU6	STM32L422KBU6	STM32L451CCU3
STM32L431KBU3	STM32L562CEU3	STM32L431KBU3TR
STM32G473CEU6	STM32L562CEU6TR	STM32G071CBU3
STM32G484CEU6	STM32L431KCU6	STM32G071KBU3
STM32G474CCU6	STM32L431KBU6	STM32L412KBU6
STM32G491CEU3	STM32L432KBU6TR	STM32G431K6U6
STM32L462CEU6	STM32L462CEU6TR	STM32G071C8U3TR
STM32L433CCU6	STM32G071KBU7TR	STM32G474CEU6TR
STM32L433CBU6	STM32G071KBU6N	STM32L412K8U6TR
STM32L462CEU6F	STM32L431CBU6	STM32L412CBU6P
STM32L452CCU6	STM32G473CEU3TR	STM32L4P5CGU6
STM32G071C8U7	STM32L4P5CGU6P	STM32G4A1CEU6
STM32G473CCU3		

IMPORTANT NOTICE - PLEASE READ CAREFULLY

Subject to any contractual arrangement in force with you or to any industry standard implemented by us, STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics - All rights reserved



PRODUCT/PROCESS CHANGE NOTIFICATION PCN13615

- Additional information

ASE Kaohsiung (Taiwan) additional source for UQFPN 5x5 32L and UQFPN 7x7 48L package - on listed of products

MDG - Microcontrollers Division (MCD)

What are the changes?

Changes described in table below:

	Existing back-end sites	Added back-end site
Assembly site	Stats ChipPAC JSCC	ASE
	Jiangyin China	Kaohsiung Taiwan
Leadframe	Copper Frame	Copper Frame
	Double Ring Ag Plating	Double Ring Ag Plating
Leadfinishing	Pure Tin (e3)	Pure Tin (e3)
Resin (1)	Sumitomo G770	Sumitomo G631H
Glue	Ablebond 8290	Hitachi EN4900GC
	Hitachi EN4900GC	
Wire	Gold 0.8mil	Gold 0.8mil
Enhanced Traceability in marking	2 digits	2 digits

(1) Package darkness changes depending on molding compound.

Pin1 identifier can change in terms of form and positioning. Marking position and size could be different upon assembly site, without any loss of information.



How can the change be seen?

The standard marking is:



PP code indicates assembly traceability plant code.

Please refer to <u>DataSheet</u> for marking details.

The marking is changing as follows:

Existing		Additional				
PP code	Fab	PP code	Fab			
GQ	Stats ChipPAC JSCC Jiangyin China	AA	ASE Kaohsiung Taiwan			



How to order samples?

- For all samples request linked to this PCN, please: place a <u>Non-standard</u> sample order (choose Sample Non Std Type from pull down menu) •
- insert the PCN number "PCN13615" into the NPO Electronic Sheet/Regional Sheet ٠
- request sample(s) through Notice tool, indicating a single Commercial Product for each request •

	rtial Ship	01 -	Price F	Pol: 05 Sta	atus: 01 I	Canc:	- 1			
	*: 0	San	nple Type	e: Sample I	Non Std Ty	pe 💌	1			
			sing Type	0 1 0	and the second se					
		CIU	ang type	Sample N	ion Std Ty	pe				
					Ion Std w	Spl Test	\$			
			Lab She	et:	<u> </u>					
						~				
Courses -										0
SO NPO Sample						1			(O)	
📭 🖌 K P 🖡 🤧						1				
Header										
SO Nr: 8018502433 Cu	stomer: 9977020	0 01 51	-TOKYO	SO Type	: 30 Sample	e Order	Cost	Center: JT3125	SAMPLES /	SALES
PO Nr.		Carrier Co	de: 0001	Price Policy:	05 Currency	02 4.5.	DOLLAR	- Reg Name		
Notes:	Status: 01	All items	pending.ni	Issuing Date:	25-JUN-2018	ord Vat	0.0000	Sample Req	Date: 25-Jun	2018
Sch I Nr PO I. Nr. F	inished Good	Comm Qty	Open Qty	Plant Open Q	Read Qty	Unit Price	RD	CD	EDD	St .
	H32F429NIH6	30	30	30	30		25-Jun-18	01-Mar-59	01-Mar-59	01
<[_]										
Final Cust			-			10.5	and the second	No maran		
PO Item: 000001 Comm Prod	R 5TM32F429N	не с	ath: 30	RD: 25	Jun-18 U	Init Price: 0	.0000 Fin	al Cust 880036	7006 SANSI	IIN/NPC
Cust Part Nr:	Finishd G	ood:		Partial	Ship: 01 👻	Price Pot	05 Status	D1 Canc:		
Notes:	TAM K Pi	eces: 0		Our Share %: 0	Sam	ple Type:	ample Non S	td Type +		
Project Name:			Clotin	g Date:		ing Type:				
Tropect trains.	-	_		g conc. j				•		
Regio	nal Sheet:				1	ab Sheet				
PCN 10595)								
	1000 C									



IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics International NV and its affiliates ("ST") reserve the right to make changes corrections, enhancements, modifications, and improvements to ST products and/or to this document any time without notice. This document is provided solely for the purpose of obtaining general information relating to an ST product. Accordingly, you hereby agree to make use of this document solely for the purpose of obtaining general information relating to the ST product. You further acknowledge and agree that this document may not be used in or in connection with any legal or administrative proceeding in any court, arbitration, agency, commission or other tribunal or in connection with any action, cause of action, litigation, claim, allegation, demand or dispute of any kind. You further acknowledge and agree that this document shall not be construed as an admission, acknowledgement or evidence of any kind, including, without limitation, as to the liability, fault or responsibility whatsoever of ST or any of its affiliates, or as to the accuracy or validity of the information contained herein, or concerning any alleged product issue, failure, or defect. ST does not promise that this document is accurate or error free and specifically disclaims all warranties, express or implied, as to the accuracy of the information contained herein. Accordingly, you agree that in no event will ST or its affiliates be liable to you for any direct, indirect, consequential, exemplary, incidental, punitive, or other damages, including lost profits, arising from or relating to your reliance upon or use of this document.

Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement, including, without limitation, the warranty provisions thereunder.

In that respect please note that ST products are not designed for use in some specific applications or environments described in above mentioned terms and conditions.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

Information furnished is believed to be accurate and reliable. However, ST assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license, express or implied, to any intellectual property right is granted by ST herein. Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously in any prior version of this document.

© 2022 STMicroelectronics - All rights reserved



RERGPM2216 for PCN13615 ASE Kaohsiung (Taiwan) –UQFPN 5x5 32L and UQFPN 7x7 48L package GOLD wire

Reliability Evaluation Plan

8th September, 2022

MDG GPM Quality & Reliability Department





RERGPM2216 – ASE Kaohsiung (Taiwan) - Additional source for UQFPN 5x5 32L and UQFPN 7x7 48L package Package Test Vehicles

Package line	Assembly Line	Package	Device (RawLine Code+FG)	Diffusion Plant & Process	Number of Reliability Lots
	UFQFPN	32L	E4MG*435ZZXZ ZZ32L442KCU6\$E2		ESD/CDM only on Sumitomo PC+TC/HTSL/uHAST on Shinko
	5X5	32L	E0MG*456QEXA QE32G051K8U6\$E1		ESD/CDM only on Sumitomo
UFQFPN	UFQFPN 7X7	48L	E0MI*460QEXB QE32G071CBU6\$E2	TSMC90 N90eF / 6M1T TSMC Fab14	1 full reliability lot on Sumitomo
			E0MI*466ZZXZ ZZ32G031C66\$E2		1 full reliability lot on Sumitomo
			E0MI*471QEXZ QE32L4P5CGU6\$E2		1 full reliability lot on Sumitomo





RERGPM2216 – ASE Kaohsiung (Taiwan) - Additional source for UQFPN 5x5 32L and UQFPN 7x7 48L package Package Reliability Trials

Reliability Trial & Standards		Test Conditions	Pass	Unit per	43 Lot (45 Lot (460 Lot Qty	466 Lot Qty	47 Lot	
			Criteria	Lot	Sumitomo	Shinko	Sumitomo	Shinko	Sumitomo	Sumitomo	Sumitomo	Shinko
РС	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	3 passes MSL3	231 or 308	-	1 (231u)	-	-	1 (308u)	1 (308u)	1 (308u)	-
Uhast(*)	UnBiased Highly Accelerated Temperature and Humidity Stress JESD22 A118	130°C, 85%RH, 2.3 atm	96h	77	-	1	-	-	1	1	1	-
тс(*)	Thermal Cycling JESD22 A104	-65°C +150°C	500cy	77	-	1	-	-	1	1	1	-
THB(*)	Biased temperature & humidity stress JESD22 A101	85°C, 85% RH bias	1000h	77	-	-	-	-	1	1	1	-
HTSL(*)	High Temperature Storage Life JESD22 A103	150°C- no bias	1000h	77	-	1	-	-	1	1	1	-
Construction analysis	JESD 22B102 JESDB100/B108	Internal ST specifications	0 reject	50	1	1	1	1	-	1	-	1
ESD	ESD Charge Device Model JESD22-C101	Aligned with device datasheet	Aligned with device datasheet	3	1	1	1	-	1	1	1	-







IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics International NV and its affiliates ("ST") reserve the right to make changes corrections, enhancements, modifications, and improvements to ST products and/or to this document any time without notice.

This document is provided solely for the purpose of obtaining general information relating to an ST product. Accordingly, you hereby agree to make use of this document solely for the purpose of obtaining general information relating to the ST product. You further acknowledge and agree that this document may not be used in or in connection with any legal or administrative proceeding in any court, arbitration, agency, commission or other tribunal or in connection with any action, cause of action, litigation, claim, allegation, demand or dispute of any kind. You further acknowledge and agree that this document shall not be construed as an admission, acknowledgement or evidence of any kind, including, without limitation, as to the liability, fault or responsibility whatsoever of ST or any of its affiliates, or as to the accuracy or validity of the information contained herein, or concerning any alleged product issue, failure, or defect. ST does not promise that this document is accurate or error free and specifically disclaims all warranties, express or implied, as to the accuracy of the information contained herein. Accordingly, you agree that in no event will ST or its affiliates be liable to you for any direct, indirect, consequential, exemplary, incidental, punitive, or other damages, including lost profits, arising from or relating to your reliance upon or use of this document.

Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement, including, without limitation, the warranty provisions thereunder. In that respect please note that ST products are not designed for use in some specific applications or environments described in above mentioned terms and conditions. Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

Information furnished is believed to be accurate and reliable. However, ST assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license, express or implied, to any intellectual property right is granted by ST herein. Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and ST logo are trademarks of ST. All other product or service names are the property of their respective owners. Information in this document supersedes and replaces information previously in any prior version of this document.

© 2022 STMicroelectronics - All rights reserved

