



Visual cosmetic change to product appearance  
for various ATKH QFP packages  
Attachment to CIN 202202017IU01 (Updated CIN 202202017)

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## 1. Introduction

This document is attached to the CIN 202202017IU01. This update for CIN 202202017I is issued because NXP decided not to convert part of the change as communicate before. The reason for this is that due changes to internal loading, part of the program was cancelled.

For the products in TQFP64, LQFP64, LQFP32 and part of products in HTQFP64 the below described change will not be introduced.

The information below the heading 'Original Change Description' is copied for reference from the original CIN 202202017I from February 2022. The single update is in Table 1 on the next page, where the cancelation of the change for the above-mentioned 3 packages is shown.

Just for clarity, the change for all the other packages in line with the plan as communicated by the original CIN 202202017I from February 2022 has meanwhile been made, as is also shown in Table 1.

## Original Change Description

NXP would like to inform you of a visual cosmetic change to the appearance of various products in QFP (Quad Flat Package) packages, manufactured in our ATKH Kaohsiung, Taiwan assembly site.

The affected products are encapsulated in a plastic housing, consisting of baked/hardened mould compound, applied to the products during the moulding process. ATKH will transfer to newer generation moulding machines, which use ejector pins to facilitate removal of the moulded devices from the machine after the mould process. These ejector pins will leave dimple impressions on the package. This constitutes a visual cosmetic change to the product appearance, which NXP is committed to inform you on.

This is the only change to the product, there is no change to:

- The product's Bill of Material (BoM)
- The mould compound
- The moulding process
- The existing top-side bottom-left dimple that identifies the product's pin 1

## 2. Why do you get this notification?

You get this notification because you have bought or are still buying one or more of the affected NXP products.

## 3. Explanation of the change and potential customer impact

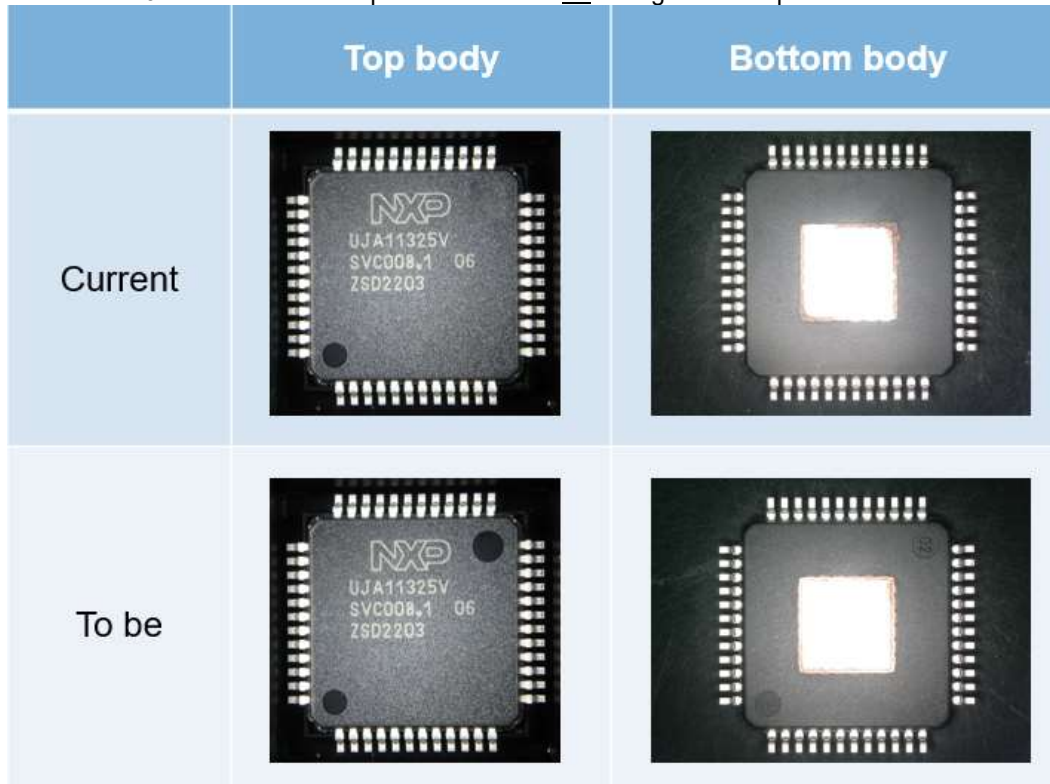
Affected by this change are the NXP products manufactured in ATKH in the following QFP packages:

- 7x7 mm package body size: LQFP32, LQFP48 (L=1.2-1.7mm thickness, 32 and 48 pins)
- 10x10 mm package body size: HTQFP48, LQFP64, TQFP64, HTQFP64 (T=1.0-1.2 mm thickness, H=heatsink, 48 and 64 pins)

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Below pictures show top and bottom side of an example affected product in HTQFP48, before and after the change:

- All above-mentioned affected products get two bottom-side ejector pin dimples
- The 10x10 mm products get one additional top-side dimple on the corner opposite to the existing pin 1 dimple
  - For the 7x7 mm products there is no change to the top side



**Figure 1:** Example top- and bottom-side affected product in 10x10mm HTQFP48, before and after the change. For the products in 7x7mm QFP there is no change to the top-side and only the bottom-side will change.

The addition of dimples has no influence on any customer handling or processing of the product. The additional top-side dimple at the top-right product corner for 10x10 mm QFP package products could however potentially impact customer-performed PCB/module Automatic Optical Inspection (AOI). NXP cannot make statements on this, only customer can judge this for their application(s).

#### 4. Specific product changes and timing

Table 1 below shows the NXP product families, the specific change (top and bottom, or bottom only) and single switch-over datecodes. The detail NXP product names, 12NC ordering codes and the relation to customer-specific product names and/or ordering codes can be found in the excel file attached to this NXP Customer Information Notification (CIN) mail.

NXP Product (family)	Package body size	Package type	Change (Bottom only, or top and bottom)	Switch-over datecode	Update July 2022
UJA113*	10x10 mm	HTQFP48	Top and bottom	wk2216	Implemented
SC16*, TDA80007BHL/C*	7x7 mm	LQFP48	Bottom only	wk2219	Implemented
PC*	10x10 mm	LQFP64, TQFP64	Top and bottom	wk2231	LQFP64, TQFP64 Cancelled
TDA802*	7x7 mm	LQFP32, LQFP48	Bottom only	wk2249	LQFP32 Cancelled
LPC*	10x10 mm	HTQFP64	Top and bottom	wk2212	Implemented
	7x7 mm	LQFP48	Bottom only	wk2219	Implemented
	10x10 mm	LQFP64, HTQFP64	Top and bottom	wk2231	LQFP64, HTQFP64 Cancelled

**Table 1:** Specific product changes and timing, Updated planning August 2022.

The swich-over datecode wk2216 (wk 16 of 2022) means that all products up to and including wk15 of 2022 will be the current/old/unchanged material, and all products with wk16 2022 and onwards will be the new/changed material. For all affected products, the datecode can be read from the last line (or two) of the product's top-side marking. For the example product shown in Figure 1 the datecode is 2203 (wk 03 of 2022), as can be read from the 3<sup>rd</sup> and final line of marking.

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