

# PRODUCT CHANGE NOTICE



<b>PCN #</b>	014218	<b>Initiator</b>	Sunny Suen	<b>Date</b>	2020-09-01
<b>PCN Title</b>	Flash memory die shrink from 90nm to 65nm for xCORE-200 integrated flash products				

## LEVEL OF CHANGE

Customer Approval

Customer Information

## CHANGE AFFECTS

Material Change

Process Change

Design Change

Package Change

Datasheet Change  
shrink

Others, please specify: flash memory die

## DESCRIPTION OF CHANGE:

Flash memory die supplier ISSI has die-shrunk their flash memory integrated into XMOS xCORE-200 products from 90nm to 65nm process technology with full functional compatibility between them. As a result, the 90nm flash memory has been discontinued and is EOL.

## ANTICIPATED IMPACT:

The Jedec ID between the 90nm and 65nm flash memories has a 1-bit difference. This will cause production flash programming and Device Firmware Upgrade (DFU) processes to abort without storing data on the device. The solution is to add the Jedec ID of the new 65nm flash memory to the software/firmware of the affected products. XMOS will provide an advisory (XM-014276-DA) regarding the implementation of the solution. If customers shall encounter any problem, please raise a support ticket at [www.xmos.ai](http://www.xmos.ai) under 'SUPPORT' menu item on top of the webpage or contact XMOS Sales for support.

The old and new devices are the same from both form and functionality perspectives.

All new orders should switch to new part numbers as soon as possible.

## XMOS PART NUMBERS AFFECTED:

Please see part numbers table at bottom of this PCN.

## CUSTOMER PART NUMBERS AFFECTED (if applicable):

N/A

## IDENTIFICATION OF CHANGED PRODUCT (if applicable):

The new 65nm flash integrated products will use new part numbers with a suffix 'A'. The table provided below has the mapping between old 90nm flash part numbers and new 65nm flash part numbers for easy cross reference. In addition, the date code line on the top marking of new 65nm integrated flash devices will have 'A' suffix as well.



**PROPOSED CHANGE SAMPLES AVAILABLE:** 2020/08/31

**PROPOSED CHANGE FIRST SHIP DATE: 2020 Q4**

**QUALIFICATION COMPLETION DATE: 2020 Q3**

**SUPPORTING DATA:**

ISSI 65nm flash reliability report:



CGS 8M~256M  
Combo series- Auto

Questions regarding this Product Change Notice should be addressed to [sales@xmos.com](mailto:sales@xmos.com)

<b>Affected Part Number (90nm)</b>	<b>New Part Number (65nm)</b>
XLF208-128-TQ64-C10	XLF208-128-TQ64-C10A
XLF208-128-TQ64-I10	XLF208-128-TQ64-I10A
XLF208-128-TQ128-C10	XLF208-128-TQ128-C10A
XLF208-128-TQ128-I10	XLF208-128-TQ128-I10A
XLF208-128-FB236-C10	XLF208-128-FB236-C10A
XLF208-128-FB236-I10	XLF208-128-FB236-I10A
XLF208-256-TQ64-C10	XLF208-256-TQ64-C10A
XLF208-256-TQ64-I10	XLF208-256-TQ64-I10A
XLF208-256-TQ128-C10	XLF208-256-TQ128-C10A
XLF208-256-TQ128-I10	XLF208-256-TQ128-I10A
XLF208-256-FB236-C10	XLF208-256-FB236-C10A
XLF208-256-FB236-I10	XLF208-256-FB236-I10A
XLF210-256-TQ128-C20	XLF210-256-TQ128-C20A
XLF210-256-TQ128-I20	XLF210-256-TQ128-I20A
XLF210-256-FB236-C20	XLF210-256-FB236-C20A
XLF210-256-FB236-I20	XLF210-256-FB236-I20A
XLF210-512-TQ128-C20	XLF210-512-TQ128-C20A
XLF210-512-TQ128-I20	XLF210-512-TQ128-I20A
XLF210-512-FB236-C20	XLF210-512-FB236-C20A
XLF210-512-FB236-I20	XLF210-512-FB236-I20A
XLF212-256-TQ128-C20	XLF212-256-TQ128-C20A
XLF212-256-TQ128-I20	XLF212-256-TQ128-I20A
XLF212-256-FB236-C20	XLF212-256-FB236-C20A
XLF212-256-FB236-I20	XLF212-256-FB236-I20A

XLF212-512-TQ128-C20	XLF212-512-TQ128-C20A
XLF212-512-TQ128-I20	XLF212-512-TQ128-I20A
XLF212-512-FB236-C20	XLF212-512-FB236-C20A
XLF212-512-FB236-I20	XLF212-512-FB236-I20A
XLF216-256-TQ128-C20	XLF216-256-TQ128-C20A
XLF216-256-TQ128-I20	XLF216-256-TQ128-I20A
XLF216-256-FB236-C20	XLF216-256-FB236-C20A
XLF216-256-FB236-I20	XLF216-256-FB236-I20A
XLF216-512-TQ128-C20	XLF216-512-TQ128-C20A
XLF216-512-TQ128-I20	XLF216-512-TQ128-I20A
XLF216-512-FB236-C20	XLF216-512-FB236-C20A
XLF216-512-FB236-I20	XLF216-512-FB236-I20A
XLF224-512-FB374-C40	XLF224-512-FB374-C40A
XLF224-512-FB374-I40	XLF224-512-FB374-I40A
XLF224-1024-FB374-C40	XLF224-1024-FB374-C40A
XLF224-1024-FB374-I40	XLF224-1024-FB374-I40A
XLF232-512-FB374-C40	XLF232-512-FB374-C40A
XLF232-512-FB374-I40	XLF232-512-FB374-I40A
XLF232-1024-FB374-C40	XLF232-1024-FB374-C40A
XLF232-1024-FB374-I40	XLF232-1024-FB374-I40A
XUF208-128-QF48-C10	XUF208-128-QF48-C10A
XUF208-128-QF48-I10	XUF208-128-QF48-I10A
XUF208-128-TQ64-C10	XUF208-128-TQ64-C10A
XUF208-128-TQ64-I10	XUF208-128-TQ64-I10A
XUF208-128-TQ128-C10	XUF208-128-TQ128-C10A
XUF208-128-TQ128-I10	XUF208-128-TQ128-I10A
XUF208-256-QF48-C10	XUF208-256-QF48-C10A
XUF208-256-QF48-I10	XUF208-256-QF48-I10A
XUF208-256-TQ64-C10	XUF208-256-TQ64-C10A
XUF208-256-TQ64-I10	XUF208-256-TQ64-I10A
XUF208-256-TQ128-C10	XUF208-256-TQ128-C10A
XUF208-256-TQ128-I10	XUF208-256-TQ128-I10A
XUF210-256-TQ128-C20	XUF210-256-TQ128-C20A
XUF210-256-TQ128-I20	XUF210-256-TQ128-I20A
XUF210-256-FB236-C20	XUF210-256-FB236-C20A
XUF210-256-FB236-I20	XUF210-256-FB236-I20A
XUF210-512-TQ128-C20	XUF210-512-TQ128-C20A

XUF210-512-TQ128-I20	XUF210-512-TQ128-I20A
XUF210-512-FB236-C20	XUF210-512-FB236-C20A
XUF210-512-FB236-I20	XUF210-512-FB236-I20A
XUF212-256-TQ128-C20	XUF212-256-TQ128-C20A
XUF212-256-TQ128-I20	XUF212-256-TQ128-I20A
XUF212-256-FB236-C20	XUF212-256-FB236-C20A
XUF212-256-FB236-I20	XUF212-256-FB236-I20A
XUF212-512-TQ128-C20	XUF212-512-TQ128-C20A
XUF212-512-TQ128-I20	XUF212-512-TQ128-I20A
XUF212-512-FB236-C20	XUF212-512-FB236-C20A
XUF212-512-FB236-I20	XUF212-512-FB236-I20A
XUF216-256-TQ128-C20	XUF216-256-TQ128-C20A
XUF216-256-TQ128-I20	XUF216-256-TQ128-I20A
XUF216-256-FB236-C20	XUF216-256-FB236-C20A
XUF216-256-FB236-I20	XUF216-256-FB236-I20A
XUF216-512-TQ128-C20	XUF216-512-TQ128-C20A
XUF216-512-TQ128-I20	XUF216-512-TQ128-I20A
XUF216-512-FB236-C20	XUF216-512-FB236-C20A
XUF216-512-FB236-I20	XUF216-512-FB236-I20A
XUF224-512-FB374-C40	XUF224-512-FB374-C40A
XUF224-512-FB374-I40	XUF224-512-FB374-I40A
XUF224-1024-FB374-C40	XUF224-1024-FB374-C40A
XUF224-1024-FB374-I40	XUF224-1024-FB374-I40A
XUF232-512-FB374-C40	XUF232-512-FB374-C40A
XUF232-512-FB374-I40	XUF232-512-FB374-I40A
XUF232-1024-FB374-C40	XUF232-1024-FB374-C40A
XUF232-1024-FB374-I40	XUF232-1024-FB374-I40A
XEF216-512-TQ128-C20	XEF216-512-TQ128-C20A
XEF216-512-TQ128-I20	XEF216-512-TQ128-I20A
XEF216-512-FB236-C20	XEF216-512-FB236-C20A
XEF216-512-FB236-I20	XEF216-512-FB236-I20A
XEF232-1024-FB374-C40	XEF232-1024-FB374-C40A
XEF232-1024-FB374-I40	XEF232-1024-FB374-I40A