



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20240723006.1

**Qualification of RFAB using qualified Process Technology, Die Revision, Datasheet update and additional Assembly BOM options for select devices
Change Notification / Sample Request**

Date: July 23, 2024

To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments (TI). The details of this change are on the following pages, and are in alignment with our standard product change notification (PCN) [process](#).

TI requires acknowledgement of receipt of this notification within 30 days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within 30 days of this notification, given that samples are not built ahead of the change.

The Proposed First Ship date in this PCN letter is the earliest possible date that customers could receive the changed material. It is our commitment that the changed device will not ship before that date. If samples are requested within the 30 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

This particular PCN is related to TI's multiyear transition plan for our two remaining factories with 150-millimeter production (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). DFAB will remain open, but will focus on 200-mm production, with a smaller set of technologies. SFAB will close no earlier than 2024 and no later than 2025. As referenced in the "reason for change" below, these changes are part of our multiyear plan to transition these products to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the Change Management team. For sample requests or sample related questions, contact your local Field Sales Representative. As always, we thank you for your continued business.

Change Management Team
SC Business Services

20240723006.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
CD74HC4066M96	NULL
CD74HC4066M96E4	NULL
CD74HC4066PWR	NULL
CD74HC4316PWR	NULL
CD74HCT4066M96	NULL

Technical details of this Product Change follow on the next page(s).

PCN Number:	20240723006.1	PCN Date:	July 23, 2024
Title:	Qualification of RFAB using qualified Process Technology, Die Revision, Datasheet update and additional Assembly BOM options for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	October 21, 2024	Sample requests accepted until:	August 22, 2024*

***Sample requests received after August 22, 2024 will not be supported.**

Change Type:					
☐	Assembly Site	☒	Design	☐	Wafer Bump Material
☒	Assembly Process	☒	Data Sheet	☐	Wafer Bump Process
☒	Assembly Materials	☐	Part number change	☒	Wafer Fab Site
☐	Mechanical Specification	☐	Test Site	☒	Wafer Fab Material
☒	Packing/Shipping/Labeling	☐	Test Process	☒	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its RFAB fabrication facility as an additional Wafer Fab option in addition to Assembly BOM options for the devices listed below.

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
SFAB	74HC	150 mm	RFAB	LBC9	300 mm

The die was also changed as a result of the process change.

Construction differences are as follows:

	Current	Proposed
Wire diam/type	0.96mil Cu	0.8mil Cu

The datasheets will be changing as a result of the above mentioned changes. The datasheet change details can be reviewed in the datasheet revision history. The links to the revised datasheets are available in the table below.



CD54HC4066, CD74HC4066, CD74HCT4066
SCHS208E – FEBRUARY 1998 – REVISED JULY 2024

Changes from Revision D (August 2003) to Revision E (July 2024)	Page
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Updated thermal information.....	4
• Updated electrical specifications.....	6
• Updated switching specifications.....	8
• Updated analog channel specifications.....	9
• Updated ordering information.....	12



CD54HC4316, CD74HC4316, CD74HCT4316
SCHS212E – FEBRUARY 1998 – REVISED JULY 2024

Changes from Revision D (October 2003) to Revision E (July 2024)	Page
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Updated thermal information.....	5
• Updated electrical specifications.....	6
• Updated switching specifications.....	10
• Updated analog channel specifications.....	15
• Updated orderable information.....	19

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
CD54HC4066, CD74HC4066, CD74HCT4066	SCHS208D	SCHS208E	http://www.ti.com/product/CD54HC4066
CDx4HCx4316	SCHS212D	SCHS212E	http://www.ti.com/product/CD54HC4316

Qual details are provided in the Qual Data Section.

Reason for Change:

These changes are part of our multiyear plan to transition products from our 150-millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

Impact on Environmental Ratings:

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

RoHS	REACH	Green Status	IEC 62474
☒ No Change	☒ No Change	☒ No Change	☒ No Change

Changes to product identification resulting from this PCN:

Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
SH-BIP-1	SHE	USA	Sherman
RFAB	RFB	USA	Richardson

Die Rev:

Current	New
Die Rev [2P]	Die Rev [2P]
-	-

Sample product shipping label (not actual product label):



Product Affected:

CD74HC4066M96	CD74HC4066PWR	CD74HC4316PWR	CD74HCT4066M96
CD74HC4066M96E4			

For alternate parts with similar or improved performance, please visit the product page on [TI.com](http://www.ti.com)

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Name	Condition	Duration	Qual Device: CD74HCT4066M96	Qual Device: CD74HC4316PWR	Qual Device: CD74HC4066PWR
ESD	E2	ESD CDM	-	200 Volts	1/3/0	1/3/0	-
ESD	E2	ESD HBM	-	500 Volts	1/3/0	1/3/0	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	1/3/0	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	-

- QBS: Qual By Similarity
- Qual Device CD74HCT4066M96 is qualified at MSL1 260C
- Qual Device CD74HC4316PWR is qualified at MSL1 260C
- Qual Device CD74HC4066PWR is qualified at MSL1 260C
- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

TI Qualification ID: R-CHG-2311-080

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Name	Condition	Duration	Qual Device: CD74HC4066M96	QBS Reference (Package): SN74HCS174DR	QBS Reference (Process, Product): SN74HCS74QPWRQ1
HAST	A2	Biased HAST	130C	96 Hours	-	3/231/0	-
UHAST	A3	Unbiased HAST	130C	96 Hours	-	3/231/0	-
TC	A4	Temperature Cycle	-65/150C	500 Cycles	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/231/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	3/2400/0
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB Solder;	-	-	3/66/0	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	-	3/66/0	-
ESD	E2	ESD CDM	-	200 Volts	1/3/0	-	-
ESD	E2	ESD HBM	-	500 Volts	1/3/0	-	-
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-
CHAR	E5	Electrical Characterization	Min, Typ, Max Temp	-	1/30/0	-	-

Type	#	Test Name	Condition	Duration	Qual Device: CD74HC4066M96	QBS Reference (Package): SN74HCS174DR	QBS Reference (Process, Product): SN74HCS74QPWRQ1
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-

- QBS: Qual By Similarity
- Qual Device CD74HC4066M96 is qualified at MSL1 260C
- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

TI Qualification ID: R-CHG-2311-078

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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