PCN Number:	20230210000.1A	PCN Date:	May 22, 2023
Title:	Qualification of TI CDAT as Additional Assembly Site for Select QFN Package Device		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	June 08, 2023	Sample requests accepted until:	June 23, 2023*

*Sample requests received after (June 23, 2023) will not be supported.

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

PCN Details

Description of Change:

Revision A is to announce the addition of new devices that were not included on the original PCN notification. These new devices are highlighted and **bolded** in the device list below under **Group 2**. The expected first shipment date for these new devices will be 90 days from this notice (Aug 23, 2023) for these newly added devices only. The proposed 1st ship date of June 08, 2023 still applies for the original set of devices.

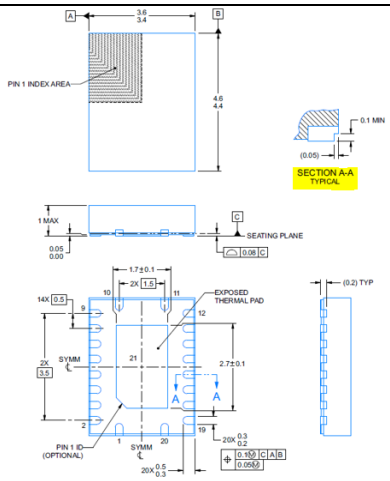
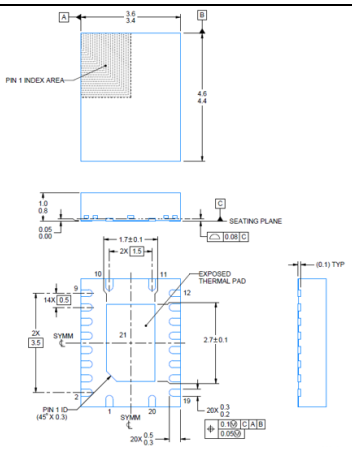
Texas Instruments Incorporated is announcing the qualification TI CDAT as Additional Assembly Site for select device listed in the "Product Affected" Section. Current assembly sites and Material differences are as follows.

Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City
UTAC	NSE	THA	Bangkok
TI CDAT	CDA	CHN	Chengdu

Group 1 Devices:
Material Differences:

	UTAC	TI CDAT
Mount Compound	PZ0035	4207123
Wire Type	1mil Cu	0.8mil Cu
Lead finish	Matte Sn	NiPdAu

Package Outline Differences:

UTAC	TI CDAT
	
Wettable Flank	Non-Wettable Flank

Group 2 Devices:

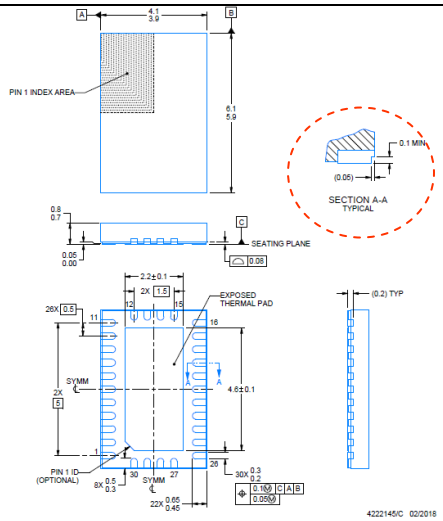
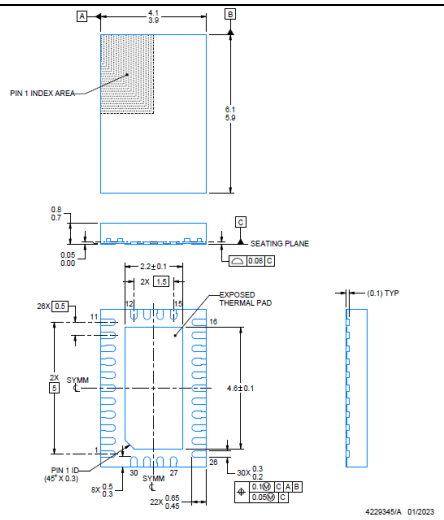
Material Differences:

	UTAC	TI CDAT
Mount Compound	PZ0035	4207123
Lead finish	Matte Sn	NiPdAu

Marking Differences:

	UTAC	TI Chengdu
RNP Package	LM73605R NP TI YMJ PLLLL G3 O TI = TI LETTERS YM = YEAR MONTH DATE CODE J = PRIMARY SITE CODE P = SECONDARY SITE CODE LLLL = ASSEMBLY LOT CODE O = PIN 1 INDICATOR	LM73605R NP TI YMS LLLL G4 O TI = TI LETTERS YM = YEAR MONTH DATE CODE S = ASSEMBLY SITE CODE LLLL = ASSEMBLY LOT CODE O = PIN 1 INDICATOR
ECAT	G3	**G4**

Package Outline Differences:

UTAC	TI CDAT
	
Wettable Flank	Non-Wettable Flank

Tape & Reel change:

What	UTAC	TI CDAT
Reel Width	16.4mm	12.4mm
Carrier Tape Width	16 mm	12mm

Reason for Change:

Continuity of supply.

1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties
2) Maximize flexibility within our Assembly/Test production sites.
3) Cu is easier to obtain and stock

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:

Assembly Site		
UTAC	Assembly Site Origin (22L)	ASO: NSE
TI-CDAT	Assembly Site Origin (22L)	ASO: CDA

Sample product shipping label (not actual product label)

Group 1 Product Affected:

LM25145RGYR	LM25145RGYT	LM5146RGYR

Group 2 Product Affected:

LM73605RNPR	**LM76002RNPR**	**LM76005RNPR**	**LV24640RNPT**
LM73605RNPT	**LM76002RNPT**	**LV24540RNPR**	
LM73606RNPR	**LM76003RNPR**	**LV24540RNPT**	
LM73606RNPT	**LM76003RNPT**	**LV24640RNPR**	

Group 1 Qualification Report

Approve Date 04-Mar-2022

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LM5146RGYR and LM5145RGYR	QBS Reference: UCC27282QDRCRQ1	QBS Reference: LM74810QDRRRQ1	QBS Reference: TS3A5017QRGYRQ1
HAST	A2	Biased HAST	130C	96 Hours	QBS	3/231/0	3/231/0	3/231/0
UHAST	A3	Autodave	121C/15psig	96 Hours	QBS	-	3/231/0	3/231/0
UHAST	A3	Unbiased HAST	130C	96 Hours	QBS	3/231/0	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	QBS	3/231/0	3/231/0	3/231/0

HTSL	A6	High Temperature Storage Life	150C	1000 Hours	QBS	3/135/0	3/135/0	3/135/0

QBS: Qual By Similarity
Qual Device LM5146RGYR and LM5145RGYR are qualified at MSL2 260C
Quality and Environmental data is available at TI's external Web site: http://www.ti.com/ Green/Pb-free
Status: Qualified Pb-Free(SMT) and Green

Group 2 Qualification Report

Approve Date 09-June-2022

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LM7360xRNPR	QBS Reference: TPS61378QWRTERQ1	QBS Reference: PCM6260QRTVRQ1	QBS Reference: DRV8703QRHBRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	QBS	3/231/0	3/231/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	3/231/0	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	QBS	3/231/0	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	-	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	QBS	-	-	3/135/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	QBS	3/135/0	-	-

QBS: Qual By Similarity
Qual Device LM7360xRNPR family is qualified at MSL2 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/
Green/Pb-free Status: Qualified Pb-Free (SMT) and Green

Qualification Report

Approve Date 09-June-2022

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LM7600xRNPR	Qual Device: LM7360xRNPR	QBS Reference: TPS61378QWRTERQ1	QBS Reference: PCM6260QRTVRQ1	QBS Reference: DRV8703QRHBRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	QBS		3/231/0	3/231/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	QBS	3/231/0	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	QBS		3/231/0	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	QBS	3/231/0	-	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	QBS		-	-	3/135/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	QBS		3/135/0	-	-

QBS: Qual By Similarity
Qual Device LM7600xRNPR family is qualified at MSL2 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/
Green/Pb-free Status: Qualified Pb-Free(SMT) and Green

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Location	E-Mail
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