

<b>PCN Number:</b>	20170203000		<b>PCN Date:</b>	Feb 6, 2017	
<b>Title:</b>	UCD3138128PFC/UCD3138A64PFC Product Family Die Revision Change				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>		<b>Dept:</b>	Quality Services	
<b>Proposed 1<sup>st</sup> Ship Date:</b>	May 6, 2017	<b>Estimated Sample Availability:</b>	Date provided at sample request.		
<b>Change Type:</b>					
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials
<input checked="" type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process
<input type="checkbox"/>		<input type="checkbox"/>	Part number change		
<b>PCN Details</b>					
<b>Description of Change:</b>					
<p>This notification is to inform of a die revision change to the UCD3138128PFC/UCD3138A64PFC family of devices. A design change was performed to tighten program current distribution by 20% for better yield control. There will be no accompanying changes to the device specifications. The design changes do not affect the device's guaranteed datasheet specifications or electrical performance.</p> <p>Affected devices are listed in the product affected section of this document.</p>					
<b>Reason for Change:</b>					
Improved yield control					
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>					
None					
<b>Changes to product identification resulting from this PCN:</b>					
Die Rev designator will change as shown in the table and sample label below:					
<b>Current</b>	<b>New</b>				
Die Rev [2P]	Die Rev [2P]				
A	C				
Sample product shipping label (not actual product label)					
<p> <b>TEXAS INSTRUMENTS</b>  MADE IN: Malaysia  2DC: 2Q:  MSL 2 / 260C/1 YEAR SEAL DT  MSL 1 / 235C/UNLIM 03/29/04  OPT:  ITEM: 39  <b>LBL: 5A (L)T0:1750</b> </p> <p> (1P) SN74LS07NSR  (Q) 2000 (D) 0336  (31T) LOT: 3959047MLA  (4W) TKY (1T) 7523483SI2  (P)  (2P) REV: (V) 0033317  (20L) CSO: SHE (21L) CCO:USA  (22L) ASO: MLA (23L) ACO: MYS </p>					
<b>Product Affected:</b>					
UCD3138128PFC	UCD3138128PFCR	UCD3138A64PFC	UCD3138A64PFCR		

**Qualification Report**  
**UCD3138128PFC /UCD3138A64PFC Design Change**  
**Approve Date 10-Oct-2016**

**Product Attributes**

Attributes	Qual Device: UCD3138128PFC	Qual Device: UCD3138A64PFC	QBS Product Reference: UCD3138A64QPFCRQ1
Assembly Site	TITL (TAI)	TITL (TAI)	TITL (TAI)
Package Family	QFP	QFP	QFP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	TSMC 11	TSMC 11	TSMC 11
Wafer Process	TSMC 0.18	TSMC 0.18	TSMC 0.18

- QBS: Qual By Similarity
- Qual Device UCD3138A64PFC is qualified at LEVEL3-260C
- Qual Device UCD3138128PFC is qualified at LEVEL3-260CG

**Qualification Results**

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

Type	Test Name / Condition	Duration	Qual Device: UCD3138128PFC	Qual Device: UCD3138A64PFC	QBS Product Reference: UCD3138A64QPFCRQ1
AC	Autoclave 121C	96 Hours	-	-	3/231/0
ED	Auto Electrical Distributions	Cpk>1.67 Room, hot, and cold test	-	-	Pass
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	3/2400/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
HBM	ESD - HBM	4000 V	1/3/0	-	1/3/0
CDM	ESD - CDM	1500 V	1/3/0	-	-
HTOL	Life Test, 140C	480 Hours	-	-	1/77/0
LU	Latch-up	(per JESD78)	1/6/0	-	1/6/0
PD	Physical Dimensions	--	-	-	Pass
SD	Solderability	Pb Free	-	-	3/45/0
SD	Solderability	Pb	-	-	3/45/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	3/231/0
WBP	Bond Pull	Wires	-	-	Pass
WBS	Bond Shear	Wires	-	-	Pass

- 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

For questions regarding this notice, e-mails can be sent to the regional contacts shown below, or you can contact your local Field Sales Representative.

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USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
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Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
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