



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN# 20120904003
Datasheet update for UCD3138
Information Only**

Date: 9/13/2012
To: MOUSER PCN

Dear Customer:

This is an information-only announcement of a change to a device that is currently offered by Texas Instruments.

The changes discussed within this PCN are for your information only. Please see the attachment details for the planned implementation date.

This notification period is per TI's standard process. Any negotiated alternative change requirements will be provided via the customer's defined process. Customers with previously negotiated, special requirements will be handled separately. Any inquiries should be directed to your local Field Sales Representative.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager ([PCN admin team@list.ti.com](mailto:PCN_admin_team@list.ti.com)).

Sincerely,

PCN Team
SC Business Services
Phone: +1(214) 480-6037
Fax: +1(214) 480-6659

20120904003
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
UCD3138RGCT	null

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

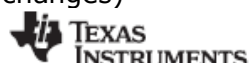
PCN Number:	20120904003			PCN Date:	09/10/2012
Title:	UCD3138 Data Sheet				
Customer Contact:	PCN Manager	Phone:	+1(214) 480-6037	Dept:	Quality Services
Change Type:					
<input type="checkbox"/> Assembly Site	<input type="checkbox"/> Assembly Process	<input type="checkbox"/> Assembly Materials			
<input type="checkbox"/> Design	<input checked="" 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			

PCN Details

Description of Change:

The product datasheet(s) is being updated to update specs and application sections.

The following change history provides further details. These changes may be reviewed at the datasheet links provided (see datasheet page 63 for table with hyperlinks to specific changes)



UCD3138

www.ti.com

SLUSAP2B – MARCH 2012 – REVISED JULY 2012

Changes from Revision A (March 2012) to Revision B

Page

• Added Feature bullets	6
• Changed "Dual Edge Modulation" to "Triangular Modulation" in Features section	6
• Changed "265 ksps" to "267 ksps" in Features section	6
• Clarified number of UARTs in Feature section	6
• Changed "FDPP" to "DDP" throughout.	7
• Changed Total GPIO pin count for the UCD3138 40-pin device from "17" to "18" in the Product Selection Matrix table.	8
• Changed "VREG" to "BP18" in conditions statement for Electrical Characteristics table.	16
• Changed EAP – EAN Error voltage digital resolution MIN values for AFE=3, AFE=2, AFE=1, AFE=0 from 0.95, 1.90, 3.72, and 7.3 respectively; to, 0.8, 1.7, 3.55, and 6.90 respectively.	16
• Changed "VREG" to "BP18" in conditions statement for Electrical Characteristics table.	17
• Changed conditions for V_{OL} and V_{OH} specs in the Electrical Characteristics table	17
• Added TWD spec to Electrical Characteristics table	17
• Changed "VREG" to "BP18" in conditions statement for Electrical Characteristics table.	18
• Changed "PWM" to "DPWM" in DPWM Module.	29
• Changed "PWMA" and "PWMB" to "DPWMA" and "DPWMB" in	34
• Changed waveforms graphic for "Phase Shifted Full Bridge Example" for clarification	41
• Added text to section LLC Example	42
• Changed typical conversion speed from "268 ksps" to "267 ksps" in the General Purpose ADC12 section.	52
• Added package ID information for the UCD3138RGC and UCD3138RHA devices.	54
• Added bullet "AD02 has a special ESD protection mechanism that prevents the pin from pulling down the current-share bus if power is missing from the UCD3138" to Current Sharing Control	57
• Added sub-bullet "The power pad of the driver IC should be tied to DGND" and changed capacitor value from "0.1 μ F" to "4.7 μ F" in IC Grounding and Layout Recommendations	59
• Added "Tools and Documentation" section	60
• Changed " Mechanical Data" section to "References" section	62

The datasheet number will be changing.

Device Family	Change From:	Change To:
UCD3138	SLUSAP2A	SLUSAP2B

The updated datasheet(s) can be accessed by the following link(s):

<http://www.ti.com/product/ucd3138>

Reason for Change:			
To more accurately reflect device characteristics - no actual changes to device performance have occurred			
Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):			
Electrical specification performance changes as indicated above.			
Changes to product identification resulting from this PCN:			
None			
Product Affected:			
UCD3138RGCR	UCD3138RGCT	UCD3138RHAR	UCD3138RHAT

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

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com