

### 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

# Notification# 20200728004 Datasheet for LMK04821, LMK04826, LMK04828 Information Only

**Date:** August 28, 2020

To: PREMIER FARNELL PCN

#### Dear Customer:

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

The changes discussed within this notification are for your information only.

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.

Notification# 20200728004

For questions regarding this notice, contact your local Field Sales Representative or the PCN team (PCN www admin team@list.ti.com).

Sincerely,

PCN Team SC Business Services

## Information Only Attachments

#### **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** LMK04828BISQE/NOPB **CUSTOMER PART NUMBER** 

null

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

Notification Number: 20200728004 Notification Date: Aug. 28, 2020

Title: Datasheet for LMK04821, LMK04826, LMK04828

#### **Notification Details**

#### **Description of Change:**

Texas Instruments Incorporated is announcing an information only notification.

The product datasheet(s) is being updated as summarized below.

The following change history provides further details.



#### LMK04821, LMK04826, LMK04828

SNAS605AS - MARCH 2013-REVISED MAY 2020

Changes from Revision AR (December 2015) to Revision AS				
De	eleted references to "LMK0482xB" and replaced with device names	1		
Up	odated Pin Configuration and Functions table with expanded descriptions	8		
Ch	nanged mVpp to  mV  for 10-mA HSDS V <sub>OD</sub> in Electrical Characteristics.	22		
Ad	Ided requirements for OSCout LVPECL emitter resistors to Detailed Description	30		
Ch	nanged Overview to provide more detail	30		
Ch	nanged Three PLL1 Redundant Reference Inputs to provide more detail.	31		
Ch	nanged Frequency Holdover wording for added clarity.	31		
Mo	oved VCO1 Divider (LMK04821 only) to within Internal VCOs.	31		
Ch	nanged all instances of '0-delay' to 'zero-delay' and added reference to Multi-Clock Synchronization app note	33		
Ch	nanged Figure 10 and Figure 11 to show OSCout_MUX, SYNC/SYSREF detail, and color	35		
Ch	nanged Figure 13 to show distribution path reclocking, other FB_MUX targets.	38		
Ad	dded SYSREF_DDLY_PD and DCLKoutX_DDLY_PD conditions for added power savings in SYNC/SYSREF	39		
Ad	Ided reference to Recommended Programming Sequence	40		
Ch	nanged _CNTH/_CNTL register values to 0, representing delay value of 16, in Table 3.	43		
Ad	ded timing alignment figure, alignment equations to SYSREF to Device Clock Alignment	45		
Ad	ded LOS register requirements to Input Clock Switching - Automatic Mode	47		
Me	erged redundant paragraph into Digital Lock Detect.	47		
Ad	ded note clarifying PLL1 phase detector frequency effect on PLL1_WND_SIZE in Digital Lock Detect	47		
Ad	ded holdover entry conditions and clarifications in Holdover	48		
Ac	dded Single-Loop Mode, Single-Loop Mode With External VCO, Distribution Mode to Device Functional Modes	50		

•	Added RESET Pin to Recommended Programming Sequence						
•	Changed CLKoutX_Y_ODL, CLKoutX_Y_IDL, DCLKoutX_DIV descriptions to add more detail						
•	Changed DCLKoutX_ADLY description in DCLKoutX_ADLY, DCLKoutX_ADLY_MUX, DCLKout_MUX						
•	Changed SDCLKoutY_ADLY description in SDCLKoutY_ADLY_EN, SDCLKoutY_ADLY						
•	Added OSCout LVPECL format instructions in VCO_MUX, OSCout_MUX, OSCout_FMT						
•	Changed SYSREF_CLR description in SYSREF_CLR						
	SYNC_PLL2_DLD, SYNC_PLL1_DLD, SYNC_MODE to add more detail						
•	Added time alongside frequency for LOS_TIMEOUT in Table 45						
•	Changed LOS_EN description to clarify requirements						
•	Changed Table 53, Table 55, Table 56 register text from "N counter" to "R divider"						
•	Changed Table 57 maximum field value to match register size						
•	Changed Table 75 headers from Resistance to Capacitance.						
•	Changed Application Information to reference current TI tools.						
•	Changed all images in Driving CLKin and OSCin Inputs to include OSCin.						
•	Changed CLKinX_BUF_TYPE to CLKinX_TYPE in Driving CLKin and OSCin Pins With a Single-Ended Source						
•	Added Output Termination and Biasing section.						
•	Changed Typical Applications to reference up-to-date tools.						
•	Added System Examples						
	Added Discout, EVDS/RSDS, and RESET pill recommendations to Do's and Don'ts.						
	Deleted empty column in Table 87 and redirected to TICS Pro current calculator.						
	Changed tools listed in Device Support						
- Changed tools listed in Device Support							
	datasheet number will be changing.	Character Francis	Chanas Tar				
Dev	vice Family	Change From:	Change To:				
LMI	K04821, LMK04826, LMK04828	SNAS605AR	SNAS605AS				
These changes may be reviewed at the datasheet links provided.							
http://www.ti.com/product/LMK04821							
Rea	son for Change:						
To accurately reflect device characteristics.							
10 a	ccurately reflect device characteristics.						
	ccurately reflect device characteristics.	on, Quality or Reliabili	ty (positive / nega	tive):			
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For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

LMK04821NKDT

LMK04828BISQ/NOPB

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN www admin_team@list.ti.com

LMK04826BISQ/NOPB

LMK04828BISQE/NOPB

#### **IMPORTANT NOTICE AND DISCLAIMER**

Product Affected:
LMK04821NKDR

LMK04826BISQX/NOPB

LMK04826BISQE/NOPB

LMK04828BISQX/NOPB

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