



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

Notification# 20200604003
Datasheet for LMK04821, LMK04826, LMK04828
Information Only

Date: July 21, 2020
To: TOKYO ELECTRON DEVICE (DSTR) 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.

For questions regarding this notice, contact your local Field Sales Representative or the Change Management team (PCN_ww_admin_team@list.ti.com).

Sincerely,

Change Management 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	CUSTOMER PART NUMBER
LMK04826BISQ/NOPB	null
LMK04821NKDT	null
LMK04826BISQE/NOPB	null
LMK04828BISQE/NOPB	null
LMK04828BISQ/NOPB	null

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

Notification Number:	20200604003	Notification Date:	July 21, 2020
Title:	Datasheet for LMK04821, LMK04826, LMK04828		
Customer Contact:	Notification Manager	Dept:	Quality Services

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

- Added [RESET Pin to Recommended Programming Sequence](#)..... 56
- Changed [CLKoutX_Y_ODL, CLKoutX_Y_IDL, DCLKoutX_DIV](#) descriptions to add more detail..... 63
- Changed [DCLKoutX_ADLY](#) description in [DCLKoutX_ADLY, DCLKoutX_ADLY_MUX, DCLKout_MUX](#)..... 64
- Changed [SDCLKoutY_ADLY](#) description in [SDCLKoutY_ADLY_EN, SDCLKoutY_ADLY](#)..... 65
- Added OSCout LVPECL format instructions in [VCO_MUX, OSCout_MUX, OSCout_FMT](#)..... 68
- Changed [SYSREF_CLR](#) description in [SYSREF_CLR, SYNC_1SHOT_EN, SYNC_POL, SYNC_EN, SYNC_PLL2_DLD, SYNC_PLL1_DLD, SYNC_MODE](#) to add more detail..... 74
- Added time alongside frequency for [LOS_TIMEOUT](#) in [Table 45](#) 80
- Changed [LOS_EN](#) description to clarify requirements in [Table 45](#)..... 80
- Changed [Table 53, Table 55, Table 56](#) register text from "N counter" to "R divider" 84
- Changed [Table 57](#) maximum field value to match register size..... 85
- Changed [Table 75](#) headers from **Resistance** to **Capacitance**..... 96
- Changed [Application Information](#) to reference current TI tools..... 102
- Changed all images in [Driving CLKin and OSCin Inputs](#) to include OSCin. 103
- Changed [CLKinX_BUF_TYPE](#) to [CLKinX_TYPE](#) in [Driving CLKin and OSCin Pins With a Single-Ended Source](#)..... 104
- Added [Output Termination and Biasing](#) section..... 105
- Changed [Typical Applications](#) to reference up-to-date tools..... 107
- Added [System Examples](#) 110
- Added OSCout, LVDS/HSDS, and RESET pin recommendations to [Do's and Don'ts](#)..... 113
- Added [Pin Connection Recommendations](#) 114
- Deleted empty column in [Table 87](#) and redirected to TICS Pro current calculator..... 116
- Changed tools listed in [Device Support](#) 119

The datasheet number will be changing.

Device Family	Change From:	Change To:
LMK04821, LMK04826, LMK04828	SNAS605AR	SNAS605AS

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/LMK04821>

Reason for Change:

To accurately reflect device characteristics.

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

No anticipated impact. This is a specification change announcement only. There are no changes to the actual device.

Changes to product identification resulting from this notification:

None.

Product Affected:

LMK04821NKDR	LMK04821NKDT	LMK04826BISQ/NOPB	LMK04826BISQE/NOPB
LMK04826BISQX/NOPB	LMK04828BISQ/NOPB	LMK04828BISQE/NOPB	LMK04828BISQX/NOPB

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
WW Change Management Team	PCN_ww_admin_team@list.ti.com

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