



DATE: 13th February, 2020

PCN #: 2438

PCN Title: Data Sheet Change and Additional Qualified Package BOM

Dear Customer:

This is an announcement of change(s) to products that are currently being offered by Diodes Incorporated.

We request that you acknowledge receipt of this notification within 30 days of the date of this PCN. If you require samples for evaluation purposes, please make a request within 30 days as well. Otherwise, samples may not be built prior to this change. Please refer to the implementation date of this change as it is stated in the attached PCN form. Please contact your local Diodes sales representative to acknowledge receipt of this PCN and for any sample requests.

The changes announced in this PCN will not be implemented earlier than 90 days from the notification date stated in the attached PCN form.

Previously agreed upon customer specific change process requirements or device specific requirements will be addressed separately.

For questions or clarification regarding this PCN, please contact your local Diodes sales representative.

Sincerely,

Diodes Incorporated PCN Team



PRODUCT CHANGE NOTICE

PCN-2438 REV 1

Notification Date:	Implementation Date:	Product Family:	Change Type:	PCN #:
13 th February, 2020	13 th May, 2020	Analog Semiconductors	Data Sheet Change and Additional Qualified Package BOM	2438
TITLE				
Data Sheet Change and Additional Qualified Package BOM				
DESCRIPTION OF CHANGE				
This PCN is being issued to notify customers that in order to assure continuity of supply, Diodes is planning to implement the following changes on products as indicated in the 'Products Affected' section below. <ol style="list-style-type: none">1. Data Sheet change to reflect more accurate start up performance.2. Additional package Bill of Material (BOM) has been qualified. Full electrical characterization and high reliability testing has been completed to ensure there is no change to device functionality or electrical specifications in the datasheet for the package BOM change. Refer to the attached qualification / reliability report (embedded in this file).				
IMPACT				
Continuity of Supply.				
PRODUCTS AFFECTED				
<ol style="list-style-type: none">1. NX7125003Z: Data Sheet Change (Startup time change from 3ms max to 10ms max)2. KM3270004: Qualification of additional package BOM				
WEB LINKS				
Manufacturer's Notice:	https://www.diodes.com/quality/product-change-notices/diodes-product-change-notices/			
For More Information Contact:	http://www.diodes.com/contacts			
Data Sheet:	http://www.diodes.com/products			
DISCLAIMER				
Unless a Diodes Incorporated Sales representative is contacted in writing within 30 days of the posting of this notice, all changes described in this announcement are considered approved.				

Change #1 – Diodes Part Number NX7125003Z

Existing Datasheet –

Start Up Time – 3ms max

Output Enable / Disable Function

Parameter	Min.	Typ.	Max.	Units	Notes
Input Voltage (Pin1), Output Enable	0.7V _{DD}			V	Or Open
Input Voltage (Pin1), Output Disable (low power standby)			0.3V _{DD}	V	Output is Hi-Z
Output Disable Delay			100	ns	
Output Enable Delay			100	ns	
Start Up Time			3	ms	

New Datasheet

Start Up Time – 10ms max

Output Enable / Disable Function

Parameter	Min.	Typ.	Max.	Units	Notes
Input Voltage (Pin1), Output Enable	0.7V _{DD}			V	Or Open
Input Voltage (Pin1), Output Disable (low power standby)			0.3V _{DD}	V	Output is Hi-Z
Output Disable Delay			100	ns	
Output Enable Delay			100	ns	
Start Up Time			10	ms	

Change #2 – Diodes Part Number KM3270004

Products category			Seam Sealed Oscillator			
Parts Number			KM3270004 (Original PKG)		KM3270004 (New PKG)	
Products Photo						
Mechanical Drawing						
Land Pattern						
Type	Units	Limit	Spec	Actual	Spec	Actual
Outline Size-L	mm		2.0±0.2	2.0	2.0±0.2	2.0
-W	mm		1.6±0.2	1.6	1.6±0.2	1.6
-H	mm		0.75±0.15	0.75	0.75±0.15	0.75
Output Frequency	KHz		32.768	32.768	32.768	32.768
Supply Voltage	V		+3.3±10%	+3.3	+3.3±10%	+3.3
Temperature Range °C	°C		-40 to +85	-40 to +85	-40 to +85	-40 to +85
Frequency Stability	ppm	Max.	±25	±25	±25	±25
Logic Type			LVCMOS	LVCMOS	LVCMOS	LVCMOS
Supply Current, Output Enabled	Ua		60 typ. / 80 max.	59.5	60 typ. / 80 max.	60.2
Supply Current, Output Disabled			10 max.	1.5	10 max.	1.5
Duty Cycle (Symmetry) %	%	Max.	45 / 55	49.990	45 / 55	49.980
Rise / Fall Time(10%/90%)	ns	Max.	15.0	3.67/3.20	15.0	3.66/3.25
Output Voltage "T" Level	V	Min.	90% VDD	3.05	90% VDD	3.06
Output Voltage "0" Level	V	Max.	10% VDD	-0.1	10% VDD	-0.1
Output Load	pF		15	15	15	15
Start Up Time	ms	Max.	2	0.31	2	0.33
Storage Temperature Range °C	°C		-55 to +125	-55 to +125	-55 to +125	-55 to +125