



PCN# : P633AAB
Issue Date : Mar. 14, 2016

Information Only Notification

This is to inform you that a change is being made to the following products.

This is a minor change that has no impact on product quality, reliability, electrical or mechanical performance. Affected products will remain fully compliant to all published specifications. Notification is being made for informational purposes only and there is no approval required. Products incorporating this change may be shipped interchangeably with existing unchanged products on or after the issue date of this notification.

Please contact your local Customer Quality Engineer if you have any questions regarding this notification.

Implementation of change:

Description of Change (From) :

Current device FIS1100 as per datasheet version 1.1.

- Vdda 3.0V max.
- Start-up-time from Reset or Power Up (1.0 s)

Description of Change (To) :

New device FIS1100 as per datasheet version 1.2

- Vdda 3.47V max
- Changes to device to add new Low Latency OIS mode (OIS LL)
- Improved gyroscope wideband noise performance
- Improved gyroscope bias performance over temperature
- Increased start-up-time from Reset or Power Up (1.7 s)
- Accelerometer output now available in OIS modes

The changes are enhancements with effect from datecode 1547 as compared to the existing FIS1100 products. Expected First Shipment Date for Change Product will be 3/18/2016.

IMU Performance Summary

"From"

"To"

Sensor Metric	Sensor Type	FIS1100	FIS1100V2	Changed for FIS1100V2?	Units	Notes
Full Scale Range	Gyro Max	± 2560	± 2560	No	<u>dps</u>	
	Accel Max	± 8	± 8	No	<u>g</u>	
Noise Density	Gyro	100Hz 0.01	0.01	No	<u>dps/√Hz</u>	
		1000Hz 0.03	0.01	Yes		Lower noise
	Accel	50	50	No	<u>μg/√Hz</u>	
Initial Bias (Board Mounted)	Gyro	10 (X,Y) 1 (Z)	10 (X,Y) 1 (Z)	No	<u>±dps</u>	
	Accel	150 (X,Y) 500 (Z)	150 (X,Y) 500 (Z)	No	<u>±mg</u>	
Bias <u>Tempco</u> (Board Mounted)	Gyro	0.25 (X,Y) 0.02 (Z)	0.1 (X,Y) 0.02 (Z)	Yes	<u>±dps/°C</u>	Lower drift
	Accel	1 (X,Y) 2.5 (Z)	1 (X,Y) 2.5 (Z)	No	<u>±mg/°C</u>	
Initial Scale Factor Error (Board Mounted)	Gyro	3 (X,Y) 1 (Z)	3 (X,Y) 1 (Z)	No	<u>±%</u>	
	Accel	1 (X,Y) 3 (Z)	1 (X,Y) 3 (Z)	No	<u>±%</u>	
Scale Factor <u>Tempco</u>	Gyro	0.07 (X,Y) 0.01 (Z)	0.07 (X,Y) 0.01 (Z)	No	<u>±%/°C</u>	
	Accel	0.01 (X,Y) 0.02 (Z)	0.01 (X,Y) 0.02 (Z)	No	<u>±%/°C</u>	
VDDA Operating Voltage	Whole Chip	2.4 to 3.0	2.4 to 3.47	Yes	V	High VDDA possible
VDDD Operating Voltage	Whole Chip	1.62 to 1.98	1.62 to 1.98	No	V	
Start-up Time from Reset or Power Up	Accel, Gyro	1.0	1.7	Yes	sec	Disable-to-Enable time 60ms
OIS Mode: Bandwidth / Integrated Noise (@8100 Hz ODR)	Gyro	4050 / 3	4050 / 3	No	Hz / <u>dps_{RMS}</u>	Programmable bandwidth options. New mode added.
		345 / 0.6	2000 / 0.6 345 / 0.3	Yes No		
Accel Available in OIS Mode	Accel	No	Yes	Yes	-	New mode available

Reason for Change:

Enhancements for better performance

Affected Product(s):

FEBFIS1100MEMS_IMU6D3X	FIS1100	
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