

Reliability Report

Product: **ADIS16260 / ADIS16265**
11mm X 11mm
LGA Package Assembly
Transfer to IMI

PCN#: **PCN 10_0181**

Date: **11-February-11**



Greensboro Manufacturing
7910 Triad Center Drive
Greensboro, NC 27409
Tel: (336) 668-9511
Fax: (336) 605-4347

RELIABILITY REPORT FOR ADIS16260 / ADIS16265 11mm X 11mm packages

Analog Devices
Greensboro Manufacturing
Greensboro, NC

Introduction

This qualification was completed as a requirement for the ADIS16260 / ADIS16265 11mm X 11mm LGA Package assembly site transfer from Universal Scientific Inc. (USI) in Taiwan to Integrated Microelectronics Inc. (IMI) in the Philippines.

Product Description

The ADIS16260 / ADIS16265 is a complete, angular rate measurement system available in a single compact package. By enhancing Analog Devices **MEMS**® sensor technology with an embedded signal processing solution, the ADIS16260 / ADIS16265 provides factory calibrated and tunable digital sensor data in a format that can be accessed using a serial peripheral interface (SPI). The ADIS16260 and ADIS16265 are the same physical device. While the ADIS16260 is calibrated at +25°C the ADIS16265 is calibrated over the temperature range of - 40°C to +85°C.

Device Characteristics

Greensboro Part Number	ADIS16260 / ADIS16265
Process.....	Epoxy chip attach on BT laminate substrate
Package Type.....	11 mm x 11 mm 20 leads Stacked Frame CSP LGA
Encapsulation Material	Hysol FP4470
Die Attach.....	Ablestik 84-3J Non-Conductive epoxy
Soldered Component Attach...	SN95/Sb5 Solder Paste
Wire Bonding.....	1.0 mil Gold wirebond
Assembly Location.....	IMI-Philippines
Test Location	ADI Greensboro, NC

Description/Results of Tests Performed

Qualification tests and results appear in Table 1. All qualification samples were electrically tested for all defined parameters at +25°C at each endpoint. The qualification samples consisted of devices from the first engineering build from IMI Philippines.

Table 1: ADI Qualification Results

TEST NAME	TEST METHOD / CONDITIONS	SAMPLE SIZE	RESULTS
Temperature Cycle*	JESD22, Method A104 Condition G -40°C to +125°C 1000 cycles	32	Pass
Temperature/Humidity /Bias*	JESD22, Method A101 130°C / 85%RH 2atm Biased 96 hours	32	Pass
Cross Section Analysis*	GSD00086	10	Pass
Sample wire bond pull data	MIL-STD-883 Test Method 2011	3 devices	Pass
Sample final package physical dimensions	Applicable Product Dimension Specification	3	Pass

*Preconditioned Per JEDEC/IPC J-STD-020D.1

Conclusion

The ADIS16260 and ADIS16265 manufactured by IMI in the Philippines are accepted for production release.

	Quality Engineer	Quality Engineer Mgr.
By	David Hensley	Elaine Trotter
Signed	Signature on file	Signature on file
Date	22-February-11	22-February-11