



## Full Chip Circuitry Analysis of the *BMG250* *Low noise, low power triaxial gyroscope*

### **IMPORTANT NOTICE REGARDING THE USE OF THIS REPORT:**

This report is protected by copyright and may not be by way of trade or otherwise, be copied, reproduced, re-sold, lent, hired out in any form without express written permission from Shanghai Industrial  $\mu$ Technology Research Institute (hereinafter referred to as SITRI).

SITRI always endeavors to provide accurate and reliable information to its customers. However, it is not possible to guarantee absolute accuracy of all information contained herein and SITRI can assume no liability for inadvertent errors in this report.

This report was prepared for our Clients' private study, analysis or research and for no other purpose. The information contained in this report may describe technical innovations, which are the subject of patents held by third parties. The disclosure by SITRI of any such information is in no form whatsoever an inducement to infringe any patent. SITRI assumes no liability for patent infringement arising from the use of the information contained in this report.

Report #: 21607M0051

Jul 15, 2016

## Contents

<b>DEVICE INFORMATION</b> .....	<b>II</b>
<b>1.0 INTRODUCTION</b> .....	<b>1</b>
1.1 DEVICE PARAMETER DEFINITION.....	2
<b>2.0 ARCHITECTURAL OVERVIEW</b> .....	<b>4</b>
2.1 PACKAGE OVERVIEW.....	4
2.2 PHYSICAL DIE OVERVIEW.....	5
2.3 FUNCTIONAL DIE OVERVIEW.....	8
<b>3.0 SCHEMATIC OF THE BMG250 LOW NOISE, LOW POWER TRIAXIAL     GYROSCOPE</b> .....	<b>9</b>
<b>4.0 MAJOR FINDINGS</b> .....	<b>35</b>
<b>5.0 STANDARD CELLS</b> .....	<b>35</b>
<b>APPENDIX – SIGNAL DESCRIPTION</b> .....	<b>37</b>