Bosch Sensortec BMI160 - Reverse Costing Analysis

Description: Bosch is now the top MEMS supplier with a production of more than 4 millions MEMS per day. This strong growth is due to both consumer applications and automotive applications.

With a size of only 7.5mm² (3×2.5mm), the BMI160 is the smallest 6-Axis IMU MEMS on the market and features 60% volume reduction compared to previous BMI055. This size reduction has been made possible by the use of a new design and process for the MEMS Gyro and by the integration in one ASIC die for the control of both MEMS. The BMI160 is a 16-bit digital resolution accelerometer and gyroscope well suited for applications requiring extremely small form factors.

Bosch has worked on the power consumption with a low power mode for the significant motion and step detector functions, using a "7-axis" accelerometer. Moreover, the unique ASIC die can perform the fusion of the data from the accelerometer and gyroscope with those from an external sensor.

The report is including a detailed technical and cost comparison with the previous generation BMI055 and the state of the art 6-Axis MEMS IMU from Invensense.

Contents:

1. Glossary
2. Introduction, Bosch Sensortec Company Profile
3. Physical Analysis
   4. Package
      - Package Views & Dimensions
      - Package Openin
      - Package Cross-Section
      - ASIC Die
      - View, Dimensions & Marking
      - Delayering
      - Main Blocks Identification
      - Process Identificatio
      - Cross-Section
      - MEMS Die
      - View, Dimensions & Marking
      - Bond Pad Opening
      - Cap Removed & Cap Details
      - Sensing Area Details
      - Cross-Section (Sensor, Cap & Sealing
      - Process Characteristics
      - Consumer 6-Axis MEMS IMU Comparison (Bosch Sensortec BMI055 & BMI160, Invensense)
4. Manufacturing Process Flow
5. Global Overview
   - ASIC Front-End Process & Wafer Fab Unit
   - MEMS Process Flow & Wafer Fab Unit
   - Package Process Flow & Assembly Unit
6. Cost Analysis
   - Yields Hypotheses
   - ASIC Front-End Cost
   - ASIC Back-End 0 : Probe Test & Dicing
   - ASIC Wafer & Die Cost
- MEMS Gyro & Accelero Front-End Cost
- MEMS Gyro & Accelero Front-End Cost per process steps
- MEMS Gyro & Accelero Back-End 0: Probe Test & Dicing
- MEMS Gyro & Accelero Wafer & Die Cost
- Back-End: Packaging Cost
- Back-End: Final Test & Calibration Cost
- BMI160 Component Cost
- Consumer 6-Axis IMU Comparison

8. Estimated Price Analysis

9. Consumer 6-Axis MEMS IMU Cost Comparison (Bosch Sensortec BMI055 & BMI160, Invensense)

Order by Fax - using the form below
Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit
http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct.

Product Name: Bosch Sensortec BMI160 - Reverse Costing Analysis
Web Address: http://www.researchandmarkets.com/reports/3260058/
Office Code: SCH3N6H6

Product Format
Please select the product format and quantity you require:

Quantity
Electronic (PDF) - Enterprisewide: USD 3488

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: Mr □ Mrs □ Dr □ Miss □ Ms □ Prof □
First Name: ___________________________ Last Name: ___________________________
Email Address: * ___________________________
Job Title: ___________________________
Organisation: ___________________________
Address: ___________________________
City: ___________________________
Postal / Zip Code: ___________________________
Country: ___________________________
Phone Number: ___________________________
Fax Number: ___________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account number</td>
<td>833 130 83</td>
</tr>
<tr>
<td>Sort code</td>
<td>98-53-30</td>
</tr>
<tr>
<td>Swift code</td>
<td>ULSBIE2D</td>
</tr>
<tr>
<td>IBAN number</td>
<td>IE78ULSB9853308331083</td>
</tr>
<tr>
<td>Bank Address</td>
<td>Ulster Bank, 27-35 Main Street,</td>
</tr>
<tr>
<td></td>
<td>Blackrock, Co. Dublin, Ireland.</td>
</tr>
</tbody>
</table>

If you have a Marketing Code please enter it below:

Marketing Code: ______________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World