Maxim Integrated MAX21100 – 6-Axis MEMS IMU Reverse Costing Analysis

Description: With the same process used for their 3-Axis gyro and acquired from the purchasing of SensorDynamics in 2011, the MAX21100 combines on only one MEMS die a 3-Axis gyroscope and a 3-Axis accelerometer.

The PSM-X2 technology platform used to build the sensor includes a proprietary surface micromachining process and a gold silicon eutectic wafer bonding allowing an hermetic encapsulation and a dual pressure wafer-level capping of the sensors.

Assembled in a LGA 3.0×3.0×0.83mm package, the MAX21100 is a low power consumption (3.45mA) 3-Axis gyroscope plus 3-Axis accelerometer IMU with integrated 9-axis sensor fusion (6+3 DoF) targeted for consumer applications.

The report is including a detailed technical and cost comparison with state of the art 6-Axis MEMS IMUs (3-Axis gyroscope + 3-Axis accelerometer) from STMicroelectronics, Bosch Sensortec and InvenSense. Surprisingly, Maxim is able to provide a very competitive component due to an important silicon area reduction.

Discover all the details in the report!

Contents:
1. Glossary
2. Overview/Introduction, Maxim Company Profile
3. Physical Analysis
   - Package
   - Package Views & Dimensions
   - Package Opening
   - Wire Bonding Process
   - Package Cross-Section
   - ASIC Die
   - View, Dimensions & Marking
   - Delayering
   - Main Blocks Identification
   - Cross-Section
   - Process Characteristics
   - 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 IMU Comparison
4. Manufacturing Process Flow
   - Global Overview
   - ASIC Front-End Process
5. Cost Analysis

- Main steps of economic analysis
- Yields Hypotheses
- ASIC Front-End Cost
- ASIC Back-End 0: Probe Test & Dicing
- ASIC Wafer & Die Cost
- MEMS Front-End Cost
- MEMS Back-End 0: Probe Test & Dicing
- MEMS Front-End Cost per process steps
- MEMS Wafer & Die Cost
- Back-End: Packaging Cost
- Back-End: Packaging Cost per Process Steps
- Back-End: Final Test Cost
- MAX21100 Component Cost
- Consumer 6-Axis IMU Cost Comparison

6. Estimated Price Analysis

Ordering:


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: Maxim Integrated MAX21100 – 6-Axis MEMS IMU Reverse Costing Analysis
Web Address: http://www.researchandmarkets.com/reports/2971162/
Office Code: SC

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

<table>
<thead>
<tr>
<th>Quantity</th>
<th>USD 3404</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF)</td>
<td></td>
</tr>
<tr>
<td>Enterprisewide</td>
<td></td>
</tr>
</tbody>
</table>

* The price quoted above is only valid for 30 days. Please submit your order within that time frame to avail of this price as all prices are subject to change.

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:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB9853308331083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

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