Wolfson WM7121 & WM7132 - Top & Bottom Port MEMS Microphones Reverse Costing Analysis

Description: Set of 2 Reports Highlighting MEMS And Packaging Technologies Of Wolfson Microphones

Before its acquisition by Cirrus Logic for $467M in April 2014, Wolfson Microelectronics released a series of analog and digital MEMS microphones with revenues growing 70% from 2012 to 2013.

A teardown of Motorola Moto X smartphone revealed that from the three microphones integrated two were coming from Wolfson Microelectronics, the remaining one using an Infineon technology. Wolfson's WM7121 and WM7132 are respectively top and bottom port analog MEMS microphones.

Assembled in specific LGA cavity packages, both microphones use a capacitive sensing principle based on Wolfson proprietary MEMS technology.

One of the main interest of Wolfson's MEMS technology is the use of silicon nitride (SiN) instead of polysilicon for the transducer element. According to Wolfson, silicon nitride delivers lower stress and strain coefficients, leading to higher reliability.

COMPLETE TEARDOWN WITH:

- Detailed Photos
- Precise Measurements
- Material Analysis
- Manufacturing Process Flow
- Supply Chain Evaluation
- Manufacturing Cost Analysis
- Selling Price Estimation

Please note:
- Price and number of pages are given for the set (two reports)

Contents: 1. Glossary

2. Overview/Introduction, Wolfson Company Profile

2. Moto X teardown

4. Physical Analysis

- Package

- Package Views & Dimensions
- Package Opening
- Package Cross-Section

- ASIC Die

- View, Dimensions & Marking
- Delayering, Process Identification
- Cross-Section
- Process Characteristics

- MEMS Die
5. Manufacturing Process Flow

- Global Overview
- ASIC Front-End Process
- ASIC Wafer Fabrication Unit
- MEMS Process Flow
- MEMS Wafer Fabrication Unit
- Packaging Process Flow
- Package Assembly Unit

6. 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
- Microphone Component & Price Cost

Ordering:

Order Online - [http://www.researchandmarkets.com/reports/2904218/](http://www.researchandmarkets.com/reports/2904218/)

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: Wolfson WM7121 & WM7132 - Top & Bottom Port MEMS Microphones Reverse Costing Analysis
Web Address: http://www.researchandmarkets.com/reports/2904218/
Office Code: SC

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

Quantity
Electronic (PDF) - Enterprisewide: USD 3644

* 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: Bank details will be provided on the invoice which you will receive after you place your order with us.

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