InvenSense ICS-43432 Microphone - Reverse Costing Analysis

Description: Following the acquisition of MEMS Microphone Business Line of Analog Devices for 100M$ in October 2013, InvenSense releases its last high performances digital MEMS Microphone based on flexible membrane and capacitive common sensing principle.

The ICS-43432 is a digital microphone equipped with MEMS and amplification ASIC into a single chip. It is designed by CMOS process, it has I²S protocol interface and high SNR of 65dBA.

The MEMS transducer is a condenser microphone with a flexible poly-Si membrane and a rigid reference electrode manufactured on SOI substrate. Compared with state of the art MEMS Microphones, it presents a new design of the diaphragm with octagonal shape and centralfixation.

Assembled in a 6-pins LGA4.0x3.0x1.0mm package, the ICS-43432 is an high performance digital output microphone with bottom port targeted for consumers applications.

Contents:

1. Overview / Introduction
   - Executive Summary
   - Reverse Costing Methodology

2. Company Profile
   - InvenSense
   - Digital Microphones portfolio

3. Physical Analysis
   - Synthesis of the Physical Analysis
   - Device Design
   - Physical Analysis Methodology
   - Package
     - Package Views & Dimensions
     - Package Opening
     - Package Cross-Section
   - ASIC Die
     - View & Dimensions
     - Die Marking
     - Die Delayering
     - Die Process
     - Die Cross-Section
     - Process Characteristics
   - MEMS Die
     - View & Dimensions
     - Marking
     - Dicing
     - Bond Pads
     - Membrane & Backplate
     - Central Support
     - Anti-Stiction holes
     - Cavity- Cross-Section
     - MEMS Characteristics

4. Manufacturing Process Flow
   - Global Overview
   - ASIC Front
   - End Process
   - ASIC Wafer Fabrication Unit
   - MEMS Process Flow– MEMS Wafer Fabrication Unit
5. Cost Analysis
- Synthesis of the cost analysis
- Main steps of economic analysis
- Yields Explanation
- Yields Hypotheses
- ASIC Front-End Cost
- ASIC Back-End 0: Probe Test & Dicing - ASIC Wafer Cost
- ASIC Die Cost - MEMS Front-End Cost
- MEMS Front-End Cost per process steps
- MEMS Front-End: Equipment Cost per Family
- MEMS Front-End: Material Cost per Family
- MEMS Back-End 0: Probe Test & Dicing
- MEMS Wafer Cost - MEMS Die Cost
- Back-End: Packaging Cost
- Back-End: Packaging Cost per Process Steps
- Back-End: Final Test Cost - Microphone Component Cost

6. Estimated price Analysis
- Manufacturer financial ration
- Microphone Component Price

Ordering:
Order Online - http://www.researchandmarkets.com/reports/3095449/
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: InvenSense ICS-43432 Microphone - Reverse Costing Analysis
Web Address: http://www.researchandmarkets.com/reports/3095449/
Office Code: SCH3192U

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

Quantity
Electronic (PDF) - Single User: [ ] 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:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
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