Autoliv 77GHz Multi Mode Radar: Technology Analysis

Description: Autoliv, one of the leading automotive radar system supplier, has developed a new radar configuration. No more need to install two radar systems, one for Long Range and another for Middle Range, the 77GHz Multi Mode Radar combines both. By expanding the detection area of the radar, Autoliv provides a significant cost reduction in safety equipment.

The system integrates two electronic boards including Texas instrument Microcontroller and Automotive Vision Processor. The RF board is manufactured with an asymmetric structure using Hybrid PTFE/FR4 substrate and is equipped with planar antennas.

Infineon 77GHZ SiGe Monolithic Microwave Integrated Circuits (MMIC) are used as High-Frequency transmitter and receiver. The RF dies are packaged in the last version of the eWLB, the Fan-Out Wafer Level Package developed and manufactured by Infineon. The Transmitter and Receiver are associated to a Dual Power Amplifier and to a Wave Form Generator from Infineon.

Based on a complete teardown analysis of the Autoliv Multi Mode Radar, the report provides the bill-of-material (BOM) and the manufacturing cost of the Radar Sensor.

Contents:
- Overview/Introduction
  - Executive Summary
  - Company Profile & Main Features
  - Reverse Costing Methodology

Physical Analysis
- Global View of the Radar
- Views and Dimensions of the Radar
- Radar Teardown
- Electronic Boards
- MCU Board
- Global View
- High Definition Photo
- Components Markings & Identification
- RF Board
- Global View
- High Definition Photo
- Components Markings & Identification
- RF Chipset Analysis
- Comparison with Bosch MMR1 and Delphi RACam

Cost Analysis
- RF Board Cross Section and EDX Analysis
- Estimation of the cost of the PCBs
- BOM Cost – MCU Board
- BOM Cost - RF Board
- BOM Cost - Housing
- Material Cost Breakdown
- Accessing the Added Value (AV) cost
- MCU Board Manufacturing Flow
- RF Board Manufacturing Flow
- Details of the Housing Assembly & Functional Test Costs
- Added Value Cost Breakdown
- Manufacturing Cost Breakdown
Estimated Price Analysis

Estimation of the Manufacturing Price

Ordering:

Order Online - [http://www.researchandmarkets.com/reports/4039379/](http://www.researchandmarkets.com/reports/4039379/)

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: Autoliv 77GHz Multi Mode Radar: Technology Analysis
Web Address: http://www.researchandmarkets.com/reports/4039379/
Office Code: SC2GXLCP

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

Quantity

<table>
<thead>
<tr>
<th>Product Format</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF and Excel - Enterprisewide</td>
<td>USD 3332</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 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