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Murata SCC2000 Series

X or Z-Axis Gyro & 3-Axis Accelerometer

Murata's Second Generation Combo Sensors for Automotive & Harsh Environments



Murata SCC2000 series sensors are combined accelerometer and gyroscope devices aimed at use in tough environments such as those encountered in automotive and industrial applications. The SCC2000 series has best in class temperature dependency, shock sensitivity and bias stability characteristics and consists of a low-g 3-axis accelerometer with two angular rate sensor options of either X or Z-axis detection.

The SCC2000 series features independent acceleration and angular rate sensing elements manufactured with Murata proprietary High Aspect Ratio (HAR) 3D-MEMS process and using SOI and cavity-SOI (c-SOI) substrates. A single ASIC produced with an advanced BCD process is used.

The acceleration sensing element consists of four acceleration sensitive masses and the angular rate sensing element consists of moving masses that are purposely exited to in-plane drive motion.

The SCC2000 devices are packaged in a SOIC 24-pin premolded plastic housing measuring 15.0x8.5x4.1mm. The combo sensor is compliant to the ISO26262 automotive safety standard and the AEC-Q100 stress test qualification requirements for electronic components used in automotive applications.

SCC2000 series is targeted for applications demanding high stability with tough environmental requirements. Typical applications include: IMUs for highly demanding environments, platform stabilization and control, machine control systems, Electronic Stability Control (ESC), Hill Start Assist (HSA), roll over detection and Navigation systems.

The report includes the analysis of all combo sensors in the SCC2000 series: the SCC2230-E02, SCC2230-D08 and SCC2130-D08. Also a comparison with previous generation SCC1300 series is included.

Title: Automotive MEMS Combo

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PRICE:

Full report: EUR 3,290

COMPLETE TEARDOWN WITH:

- Detailed Photos
- Precise Measurements
- Material Analysis
- Manufacturing Process Flow
- Supply Chain Evaluation
- Manufacturing Cost Analysis
- Selling Price Estimation
- Analysis of the complete SCC2000 Series: SCC2230-E0, SCC2230-D08 & SCC2130-D08
- Comparison of SCC2000 series vs. SCC1300 series

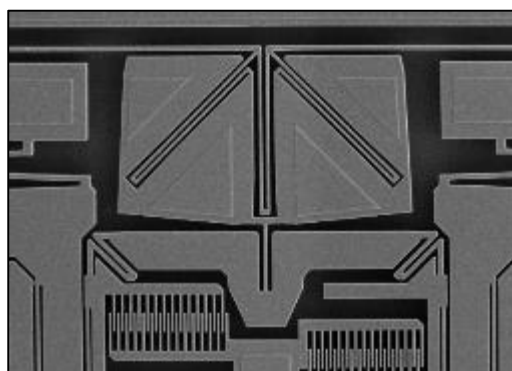
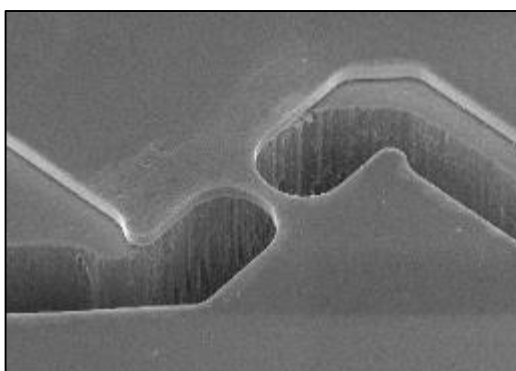


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Fraux

Romain is in charge of costing analyses for MEMS, IC and Advanced Packaging. He has published more than 50 Reverse Costing reports on various MEMS devices including Inertial, Pressure, Microphones or RF Sensors.



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Yvon is the laboratory manager. He has deep knowledge in chemical & physical technical analyses. He previously worked for 25 years in Atmel Nantes Laboratory and performs MEMS analyses for over 8 years.

ANALYSIS PERFORMED WITH OUR COSTING TOOLS MEMS COSIM+ AND IC PRICE+

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MEMS Cosim+

Cost simulation tool to evaluate the cost of any MEMS process or device:

From single chip to complex structures.

MEMS CoSim+ is a process-based costing tool used to evaluate the manufacturing cost per wafer using your own inputs or using the pre-defined parameters included in the tool.

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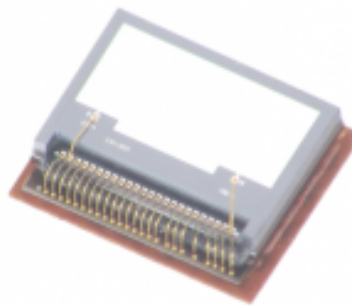
Fairchild's first consumer IMU manufactured using a completely new bulk micro machining process and interconnection structure.



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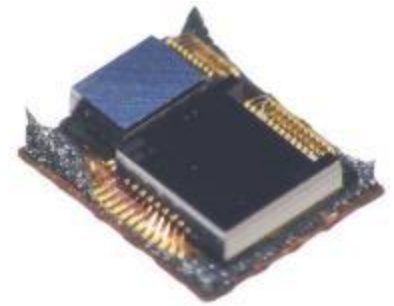
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Date: September 2015

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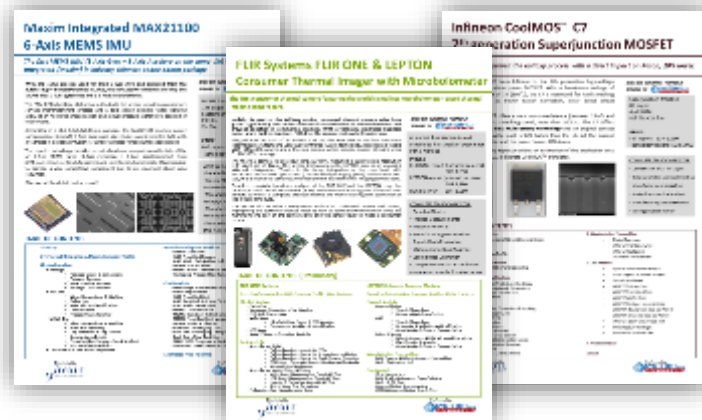
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2.1 Products are sent by email to the Buyer:

- within [1] month from the order for Products already released; or

- within a reasonable time for Products ordered prior to their effective release. In this case, the Seller shall use its best endeavours to inform the Buyer of an indicative release date and the evolution of the work in progress.

2.2 Some weeks prior to the release date the Seller can propose a pre-release discount to the Buyer

The Seller shall by no means be responsible for any delay in respect of article 2.2 above, and including incases where a new event or access to new contradictory information would require for the analyst extra time to compute or compare the data in order to enable the Seller to deliver a high quality Products.

2.3 The mailing of the Product will occur only upon payment by the Buyer, in accordance with the conditions contained in article 3.

2.4 The mailing is operated through electronic means either by email via the sales department or automatically online via an email/password. If the Product's electronic delivery format is defective, the Seller undertakes to replace it at no charge to the Buyer provided that it is informed of the defective formatting within 90 days from the date of the original download or receipt of the Product.

2.5 The person receiving the Products on behalf of the Buyer shall immediately verify the quality of the Products and their conformity to the order. Any claim for apparent defects or for non-conformity shall be sent in writing to the Seller within 8 days of receipt of the Products. For this purpose, the Buyer agrees to produce sufficient evidence of such defects.

2.6 No return of Products shall be accepted without prior information to the Seller, even in case of delayed delivery. Any Product returned to the Seller without providing prior information to the Seller as required under article 2.5 shall remain at the Buyer's risk.

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3.5 In the event of termination of the contract, or of misconduct, during the contract, the Seller will have the right to invoice at the stage in progress, and to take legal action for damages.

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4.2 The Seller shall only be liable for (i) direct and (ii) foreseeable pecuniary loss, caused by the Products or arising from a material breach of this agreement

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a) damages of any kind, including without limitation, incidental or consequential damages (including, but not limited to, damages for loss of profits, business interruption and loss of programs or information) arising out of the use of or inability to use the Seller's website or the Products, or any information provided on the website, or in the Products;

b) any claim attributable to errors, omissions or other inaccuracies in the Product or interpretations thereof.

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8. Miscellaneous

All the provisions of these Terms and Conditions are for the benefit of the Seller itself, but also for its licensors, employees and agents. Each of them is entitled to assert and enforce those provisions against the Buyer. Any notices under these Terms and Conditions shall be given in writing. They shall be effective upon receipt by the other Party.

The Seller may, from time to time, update these Terms and Conditions and the Buyer, is deemed to have accepted the latest version of these terms and conditions, provided they have been communicated to him in due time.

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