

SiTime SiT8002 – MEMS Oscillator

Reverse Costing Analysis

by System Plus Consulting

January 2010

Analyze the cost of projects at the R&D level
Enhance the negotiation power of purchasing managers
Benchmark competitor's products

System Plus Consulting is proud to publish the reverse costing report of the MEMS Oscillator SiT8002 supplied by SiTime Corporation.

The SiTime SiT8002 is a one-time programmable 1MHz to 125MHz oscillator. Completely quartz-free, It uses a standard 2.5x2.0mm 4-land MLF-type package containing 2 stacked dies: a MEMS resonator and an ASIC for signal conditioning. The MEMS resonator is manufactured on SOI wafers using MEMS First™ process licensed by Robert Bosch GmbH. The SiT8002 programmable oscillator is suitable for use in clock generation for consumer, portable, industrial, automotive, and computation applications.

This report provides complete teardown of the MEMS Oscillator with:

- Detailed photos
- Material analysis
- Schematic assembly description
- Manufacturing Process Flow
- In-depth economical analysis
- Manufacturing cost breakdown
- Selling price estimation

| | Low Yield | | Middle Yield | | High Yield | |
|----------------------------|-----------|-----------|--------------|-----------|------------|-----------|
| | Cost | Breakdown | Cost | Breakdown | Cost | Breakdown |
| Clean Room | | | | | | |
| Equipment | | | | | | |
| Consumable | | | | | | |
| Raw wafer (\$) | | | | | | |
| Salary | | | | | | |
| Yield losses | | | | | | |
| UNPROBED WAFER COST | | | | | | |

ASIC Unprobed Wafer Cost Breakdown (Middle Yield)

- Very low wafer cost decrease because the technology is mature.
- The main part of the wafer cost is due to the salary with this. The salary part is this. This is an average value for production in Taiwan.
- The manufacturing yield ranges from to . The mature technology explains these values.

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ORDER FORM

PLEASE ENTER MY ORDER FOR "SiTime SiT8002" IN:

SP10024

Corporate license price:

EUR 1,990*

For price in dollars please use the day's exchange rate

*For French customer, add 20 % for VAT

SHIP TO

Name (Mr/Ms/Dr/Pr):

Job Title:

Company:

Address:

City:

State:

Postcode/Zip:

Country*:

*VAT ID Number for EU members:

Tel:

Email:

Date:

Signature :

PAYMENT

DELIVERY on receipt of payment:

By credit card:

Number: _____ Expiration date: __/__/____

Card Verification Value: _____

By bank transfer:

HSBC – CAE- Le Terminal -2 rue du Charron- 44800 St Herblain France
BIC code : CCFRFRPP

In EUR

Bank code : 30056 - Branch code : 00955 - Account : 09550003234
IBAN : FR76 3005 6009 5509 5500 0323 439

In USD

Bank code : 30056 - Branch code : 00955 - Account : 09550003247
IBAN : FR76 3005 6009 5509 5500 0324 797

Return order by:

FAX: +33 (0)253 55 10 59

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ABOUT SYSTEM PLUS CONSULTING

System Plus Consulting is specialized in the **cost analysis** of electronics from **semiconductor devices** to **electronic systems**.
Around this main line System Plus Consulting developed a complete range of services and costing tools to provide **in-depth production cost studies** and estimation of the **objective selling price** of the product.

COSTING SERVICES

- ✓ **On demand Reverse Costing studies** are performed on ICs, ASICs, MEMs, Power Devices, ECUs, electronic boards and full electronic systems
- ✓ **The catalog of available reports** includes cost analyzes on MEMS, Electronic components and Electronic systems (Telecom terminals, Power systems, Consumer products)

All these studies are performed using in-house developed costing tools and their technological databases.

COSTING TOOLS

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- ✓ IC Purchaser to calculate to cost of any integrated circuit
- ✓ SYS.Cost which is a powerful costing tool for electronic boards and systems

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- ✓ **Available now:** Board Assembly – System in Package – System on Chip – Memory Chip – Smart Card – Plastic Part
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- ✓ Powerful flow builders including exhaustive databases to simulate a device processing cost
- ✓ **Available now:** MEMS CoSim+ • IGBT CoSim+ • SiC CoSim+ • LED CoSim+ • TSV CoSim+ • PV CoSim+ (photovoltaic)