

PRESS RELEASE

Infineon X-GOLD™213–eWLB Package, A Reverse Costing Analysis from System Plus Consulting

The 1st reverse analysis report of a fan-out Wafer Level Package!

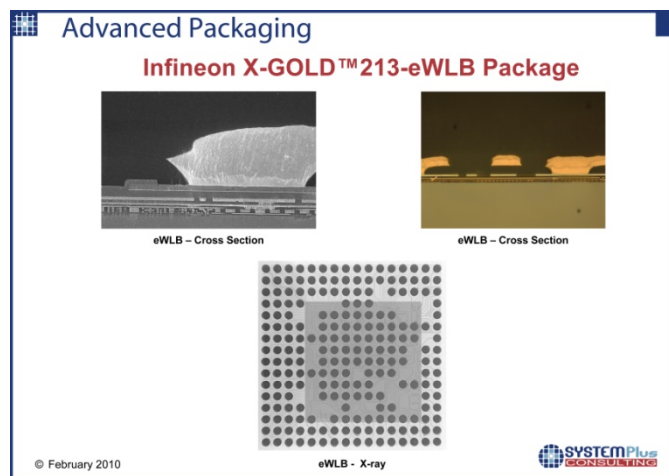
Feb. 16th, 2010 – System Plus Consulting released its new reverse costing analysis of the enhanced Wafer Level BGA (eWLB) packaging used in the X-GOLD™213 circuit from Infineon. This report is commercialized by both companies System Plus Consulting and Yole Développement.

In 2008, Yole Développement and System Plus Consulting signed a business agreement whose purpose was to broaden the marketing and technological offer of both companies.

System Plus Consulting is proud to publish the reverse costing report of the **enhanced Wafer Level BGA (eWLB)** package used in the X GOLD™213 circuit from Infineon. eWLB is a Ball Grid Array package based on the emerging Fan-Out Wafer Level Package(FO-WLP) concept. All the packaging operations are done at the wafer level, and a fan-out area is provided, which extends the package size beyond the IC surface area to allow for higher ball counts. The ball pitch is 0.5mm and only one redistribution layer is used for this 217 balls 8x8 mm package.

The eWLB is manufactured on 200 mm wafers by Infineon who licensed the technology to ASE and STATS ChipPAC.

System Plus Consulting's reverse costing analysis provides for a complete teardown of the X-GOLD™213™eWLB package including: detailed photo, material analysis, manufacturing process flow, in-depth economical analysis, manufacturing cost breakdown, selling price estimation ...



About the report

- **Content of the report**

Fan-out package Principle - Physical Analysis - Manufacturing Process Flow - Cost Analysis - Estimated Manufacturer Price



- **Author**

Sylvain Hallereau joined System Plus Consulting in 2000 and is in charge of Semiconductors and IC Packaging within the company. He cumulates 10 years of experience in reverse costing of semiconductor devices and creation of cost models for integrated circuits. He was granted a Master of Science from the University of Nantes, France. Contact: shallereau@systemplus.fr

- **Infineon X-GOLD™213–eWLB Package, Reverse Costing Analysis**

Catalogue price: Euros 3,490

Publication date: February 2010

For special offers and price in dollars, please contact David Jourdan (jourdan@yole.fr or +33 472 83 01 90).

Other reverse costing analysis from System Plus Consulting

SEOUL Semiconductor – Z-Power P9 LED Reverse Costing Analysis – 2010 Edition

The reverse costing report of the Z-Power P9 LED supplied by SEOUL Semiconductor.

InvenSense IDG-600/650 2-Axis Gyroscope Reverse Costing Analysis – 2010 Edition

The reverse costing & engineering process analysis of the famous Dual-Axis MEMS Gyroscope IDG-600/650 supplied by InvenSense

SiTime SiT8002, MEMS Oscillator Reverse Costing Analysis – 2010 Edition

The reverse costing & engineering process analysis of the famous MEMS Oscillator SiT8002 supplied by SiTime.

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 catalogue 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

- Software
 - IC Purchaser to calculate to cost of any integrated circuit
 - SYS.Cost which is a powerful costing tool for electronic boards and systems
- Costing Models
 - Easy to use, Excel-based models: Board Assembly –System in Package –System on Chip –Memory Chip –Smart Card –Plastic Part

Cost Simulation Tools

- Powerful flow builders including exhaustive databases to simulate a device processing cost
- Available now: MEMS CoSim+ - IGBT CoSim+ - SiCCoSim+ - LED CoSim+ - TSV CoSim+ - PV CoSim+ (photovoltaic)

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About Yole Développement – www.yole.fr

Created in 1998, Yole Développement is a market research and strategy consulting firm analyzing emerging applications using silicon and micro manufacturing. With 20 full time analysts tracking MEMS, Microfluidics, Compound Semiconductor, Power Electronics, Photovoltaic, Advanced Packaging and Nanomaterials, Yole Développement supports companies and investors worldwide to help them understand markets and follow technology trends.

**Services**

- Market research and market data
- Technology analysis
- Market workshop
- Strategy consulting
- M&A support, fund raising and due diligence through Yole Finance

Media

- Critical news, Bi-weekly: Micronews, the magazine
- In-depth analysis & Quarterly Technology Magazines: MEMS Trends Magazine – 3D Packaging Magazine – PV Manufacturing Magazine
- Online disruptive technologies website: www.i-micronews.com
- Exclusive Webcasts
- Live event with Market Briefings

Publications

- Collection of market & technology reports
- Players & technology databases and market data
- Manufacturing cost simulation tools
- Component reverse costing analysis