

Epson Toyocom X3500W – QMEMS Gyro

Reverse Costing Analysis

by System Plus Consulting

Physical Analysis of the Device

Step by Step Reconstruction of the Process Flow

Cost of Manufacturing and Estimation of Selling Price

System Plus Consulting is proud to publish the reverse costing report of the yaw rate sensor X3500W supplied by Epson Toyocom.

This Z-axis gyroscope use an hermetically sealed multi-chip Ceramic LCC package with two dies: : a Quartz crystal sensor die processed with MEMS technology (QMEMS) and an ASIC die for signal conditioning.

The X3500W is integrated in the Nintendo Wii Motion Plus accessory. It is a variation of the standard XV-3500CB from Epson Toyocom which is mainly used for image stabilization of DVC and DSC or for the detection of moving with human machine interface.

This report provides a complete teardown of the QMEMS Gyroscope with:

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



TABLE OF CONTENTS

Glossary			
Overview / Introduction	P4	Cost Analysis	P49
Epson Toyocom Company Profile	P8	•Synthesis of the Cost Analysis	
Physical Analysis	P14	•Main Steps of Economic Analysis	
•Synthesis of the Physical Analysis		•Supply Chain Analysis	
•Physical Analysis Methodology		•Manufacturers financial ratios	
•Package Characteristics & Markings		•Yields Explanation	
•Package Opening		•ASIC Front-End Cost	
•Device Structure		•ASIC Back-End 0 : Probe Test and Dicing	
•ASIC Markings		•Die per wafer & Probe Test	
•ASIC Dimensions		•ASIC Total Wafer Cost (Front-End + Back-End 0)	
•ASIC Poly & Metal Layers		•ASIC Die Cost	
•ASIC Main Blocks		•QMEMS Front-End Cost	
•ASIC Process Characteristics		•QMEMS Front-End Cost per Process Steps	
•QMEMS Dimensions		•QMEMS Front-End : Equipment Cost per Family	
•QMEMS Structure		•QMEMS Front-End : Material Cost per Family	
•Gyro Principle : Double-T Structure		•QMEMS Back-End 0 : Test/Trimming	
•QMEMS Details		•QMEMS Back-End 0 : Bumping & Dicing	
•Component Cross-Section		•QMEMS Total Wafer Cost (Front-End + Back-End 0)	
•MEMS process characteristics		•QMEMS Die Cost	
Manufacturing Process Flow	P44	•X3500W Packaging Process Flow	
•Overview		•X3500W Packaging Cost	
•ASIC Process Flow		•X3500W Final Test Cost	
•MEMS Process Flow		•X3500W Component Manufacturing Cost	
		•Yield Synthesis	
		Estimated Manufacturer Price Analysis	P78
		Conclusion	

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The present document is valid till 1st November 2010.

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