

Osram Oslon Blue LEDs: 2mm sq. Square vs. 1mm sq. SSL Compared Reverse Engineering & Costing Report

System Plus Consulting – February 2013

OSRAM promotes 2mm sq. LED for projection or MR16 lamp replacement
The efficiency is higher compared to similar Oslon 1mm sq. LED
Find out how more than twice the light is obtained with the 2mm sq. chip

Osram Opto Semiconductor has recently released the Oslon Square family with the first 2mm² LED family from Osram, which generates 2 times more light than the Oslon SSL 1mm² chip. The new design of cathode and anode increases the light extraction of the LED. Moreover, the efficacy of the chip is enhanced by the new package design improving reflection. The blue Oslon Square produces 270lm for 700mA, i.e. 123lm/W.

Manufactured in the new Osram UX:3 technology, the 2 components integrate a thin GaN LED bonded on a germanium substrate and a silicon protective diode in a tiny ceramic package (3mm x 3mm).

System Plus Consulting is publishing a reverse costing report comparing Oslon Square 2mm² with Oslon SSL 1mm², 2 blue LEDs from OSRAM.

This report provides a complete teardown of the 2 LEDs with:

- Detailed photos
- Material analysis
- Structure of packaging and dies
- Manufacturing Process Flow
- In-depth economical analysis
- Manufacturing cost breakdown
- Selling price estimation

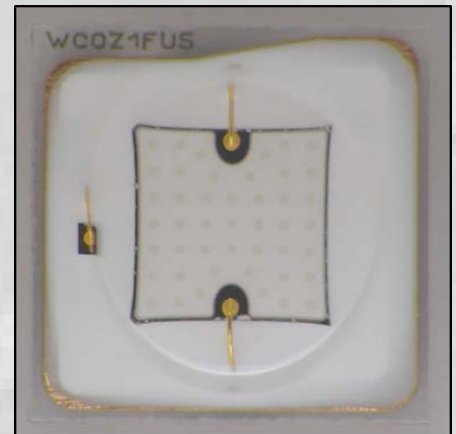
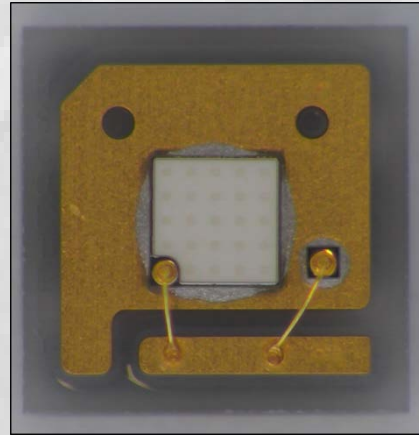


TABLE OF CONTENTS

Glossary	3	4. Cost Analysis.....	57
1. Overview / Introduction.....	4	– Synthesis of the Cost Analysis	59
– Executive Summary		1mm ² LED Cost.....	59
– Comparison of the Analyzed LEDs		– Yield Hypotheses	
– Reverse Costing Methodology		– LED Front-End Cost	
– OSRAM Company Profil		– Front-End : Epitaxy Cost	
– 1mm ² - Oslon LED characteristics		– Front-End : Other Front-End Cost	
2. Physical Analysis.....	10	– Front-End : Other Front-End Cost per Steps	
– Physical Analysis Methodology		– Dies per Wafer & Probe Test	
– 1mm ² - Package Characteristics		– Back-End 0 : Probe Cost	
– 1mm ² - Package Opening		– LED Wafer & Die Cost (FE + BE 0)	
– 1mm ² - Package Cross-Section		– Back-End 1 : Packaging Hypothesis	
– 2mm ² - Package Characteristics		– Back-End 1 : Packaging Process Flow	
– Package Parameters		– Component Manufacturing Cost (FE+BE0+BE1)	
– 1mm ² - LED Die		– Cost Analysis Evolution	
– 2mm ² - LED Die		2mm ² LED Cost.....	80
– GaN Layer and electrodes		5. Estimated Manufacturer Price Analysis	101
3. Manufacturing Process Flow.....	40	– Price definitions	
– LED Die Process Flow 1mm ² and 2mm ²		– Manufacturers financial ratios	
– Description of the Wafer Fabrication Units		– Binning Impact on Manufacturing Price	
		– 1mm ² - Ideal manufacturer Price	
		– 2mm ² - Ideal manufacturer Price	
		Contacts	111

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SP13122

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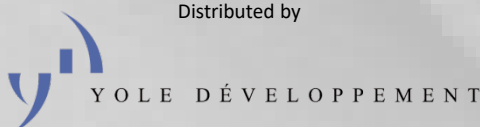
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