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Optoelectronic Components 2023 Report

Part of the Semiconductor Components Service Area Package

A detailed quantitative analysis of the global market for optoelectronic components, including visible LEDs, optical and non-optical isolators, infrared, optical switches, LED displays, and ultraviolet LEDs.

LED Intelligence Service
MSCD-101262

“Although market recovery momentum was sustained in the first half of 2022, significant pandemic and geopolitical events emerged, introducing new macroeconomic and supply chain complications. Omdia expects these to dampen optoelectronics demand and derail the growth trajectory of different application sectors.”

Chee-Seng Tan

Senior Research Analyst

OMDIA

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What does the market for optoelectronic components look like in the next five years?

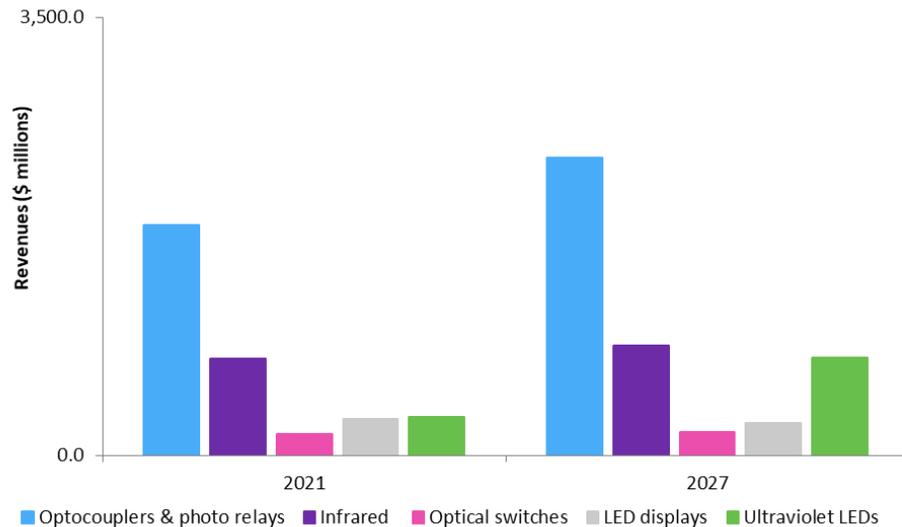
This report provides a detailed quantitative analysis of the global market for optoelectronic components, including LEDs, optocouplers, wireless infrared components, optical switches (also known as photo interrupters) and LED displays. For each type of optoelectronic component, the market is analyzed in terms of application, region and feature historical and current market shares. This report allows users to gain a better market understanding to make more informed decisions, identify growth opportunities, identify investment opportunities and compare company performance in a number of key end markets.

This year's report provides the reliable and accurate coverage that customers are used to, with data by region, application, and product type, as well as market shares. The report includes the usual quantitative data provided in the past. In addition, the report research covers upcoming changes and trends in the report, adding to the report content as needed to cover these trends.

The report is based on very detailed data provided by most leading suppliers in the form of excel surveys of customer sales and telephone interviews. Each year, the report's coverage is enhanced by adding to the core data as the market changes and customers' needs adapt. Clients of this report will receive:

- **Optoelectronic Components Report:** Comprehensive discussion on each of the optoelectronic components covered and accompanied by analyst recommendations and key predictions.
- **Optoelectronic Components Excel Tables:** Offers detailed revenue market share analysis of each optoelectronic components by region, application, product type, and supplier.

Optoelectronic components by product type
Relative market sizes – 2021 versus 2027



Source: Omdia

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Semiconductor Components: Our expert analysts



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Optoelectronic Components 2023 Report: Market Data

Part of the Semiconductor Components Service Area Package

Key Issues Addressed

- What are the key drivers for the optoelectronic components market in the next five years?
- What is the current size of the optoelectronic components market and how will this change for each product type over the next five years?
- Who are the leading suppliers of each component type? Which suppliers lost and gained share?
- Will new applications bring additional opportunities to the market?
- How is the market for high-performance optocouplers evolving with growing competition from non-optical isolators?

Coverage

Frequency: Annual

Time Period

- Base year/ actuals (2022)
- 5-year annual forecast (2023 - 2028)

Measures

- Revenues
- Unit Shipments
- Average Selling Price
- Market Shares

Regions

- Western Europe
- Eastern Europe
- Middle East & Africa
- North America
- Latin America
- Greater China (includes Taiwan)
- Japan
- Rest of Asia & Oceania

Applications

- Lighting
- TVs
- Monitors
- Notebook
- Tablets
- Mobile
- Automotive Interior
- Automotive Exterior
- Signage

Products Covered LEDs

- InGaN/GaN
- AlInGaP
- Standard

Optocouplers & Photo Relays

- Phototriacs/SCRs
- Phototransistors
- Photodiode
- Photodarlington
- High Performance
- Photo Relays
- Non-Optical Isolators

Wireless Infrared

- Infrared LEDs
- Photodiodes & Phototransistors
- IrDA Transceivers
- IR Receivers

Optical Switches LED Display UV LEDs

Applicable to

Marketing

- Directors
- Managers
- Strategic Marketing

Corporate

- Executives
- Investor Relations

Research & Development Engineers

Financial

- Business Development
- Sales Executives
- Investors

Report Coverage

Note: Components considered are packaged products, not bare die.

LEDs

The LED section of the report contains the most detailed market shares by application, product type and region, as well as the most data overall. It is the largest of the markets covered (as revenue).

This year's report contains all the same tables shown in the past on core markets such as backlighting, lighting and automotive. In addition, the market size for new areas such as micro LED (and mini LED) in signage, as well as horticulture, has been added.

Optocouplers

In this market, areas such as factory automation, motor drives and power suppliers are more important, and are therefore quantified. Key global trends and market share information for leading suppliers are provided.

The section for optocouplers is broken down into "standard" photo SCRs, phototriacs, phototransistors, photodiode, photodarlington, "high speed," IGBT gate drivers, and solid-state relays (also known as photo relays). It also shows the revenue and unit shipments for non-optical isolation components.

Infrared Components

The market for infrared components has been strong in both industrial/security applications (such as light curtains and CCTV cameras) and consumer applications (such as set-top boxes and TVs) for many years. However, with the introduction of new applications such as iris identification and 3D Face, new opportunities have arrived.

This report analyses the sub-market of each application for each infrared component type. Sub-markets are automotive, telecommunications, computer and office, consumer, military and aerospace, industrial, medical and security.

Infrared components covered are infrared LEDs, photodiode/phototransistors, IrDA transceivers and infrared receivers. (IrDA transceivers have been at a very low level for some years and are not a major focus of the report.)

Optical Switches (also known as photo interrupters)

The market for optical switches is also covered in this report. The shorter section on optical switches includes market forecasts for each sector and geographical region as described in the other components above.

LED Display

This report includes a concise market analysis for visible LED displays. It covers two types of LED displays: dumb and intelligent displays. The unit shipment and revenue numbers of each LED display type is segmented by application and geographic region.

UV LEDs

Ultraviolet LEDs is included in the report, but as a very small section. This is a small section showing the total market size and a supplier ranking but not information by application or other detailed quantitative segmentation.

Related Content: Semiconductor Service Area Coverage

SERVICE AREA PACKAGE			
Memory & Storage	Semiconductor Components	Semiconductor Manufacturing	Semiconductor Market
<ul style="list-style-type: none"> • DRAM Memory Intelligence Service • Mobile & Embedded Memory Intelligence Service • NAND Memory Intelligence Service • SSD & HDD Storage Memory Intelligence Service 	<ul style="list-style-type: none"> • Key Mobile Component Price Intelligence Service • LED Intelligence Service • Magnetic Sensors Report • MEMS & Sensors for Consumer & Mobile Intelligence Service • MEMS & Sensors Intelligence Service • Microcontroller Market Tracker • Optoelectronic Components Report • Power Semiconductor Intelligence Service • Processors for Graphics & Artificial Intelligence Market Tracker • Processors for Network Infrastructure Market Tracker • Processors Spotlight Service • System-on-Chip (SoC) Market Tracker 	<ul style="list-style-type: none"> • Global Semiconductor Manufacturing Market Tracker • Pure Play Foundry Market Tracker • Semiconductor Silicon Demand Forecast Tool 	<ul style="list-style-type: none"> • China Semiconductor Intelligence Service • Design Activity Tool • Industrial Semiconductor Intelligence Service • OEM Semiconductor Spend Tracker • OEM Semiconductor Spending & Design Activity Intelligence Service • Semiconductor Application Forecast AMFT Spotlight Service • Semiconductor Competitive Landscape CLT Spotlight Service • Semiconductor Forecast Scenario Tool

Example Tables

There are approximately 120 tables in this report, including market share tables. Two examples are shown below. Companies considering purchasing this report may request sample tables that show all of tables in the report (without data).

Table 2.1 - The world market for optoelectronic components

By product type (millions of \$, millions of units and average selling price)

Product		2021	2022	2023	2024	2025	2026	2027	CAGR 2021–27
LEDs	Revenues (\$M)								
	Units (Billions)								
	ASP (\$)								
Optocouplers & Photo Relays	Revenues (\$M)								
	Units (Billions)								
	ASP (\$)								
Infrared	Revenues (\$M)								
	Units (Billions)								
	ASP (\$)								
Optical Switches	Revenues (\$M)								
	Units (Billions)								
	ASP (\$)								
LED Displays	Revenues (\$M)								
	Units (Billions)								
	ASP (\$)								
Ultraviolet LEDs	Revenues (\$M)								
	Units (Billions)								
	ASP (\$)								
Total	Revenues (\$M)								
	Units (Billions)								
	ASP (\$)								

Source: Omdia

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Example Tables

Table 2.2 - The world market for optoelectronic components

Revenue by product type (\$ millions)

Product	2021	2022	2023	2024	2025	2026	2027	CAGR 2021–27
Visible LEDs								
InGaN/GaN								
AlInGaP								
Other								
Optocouplers & Photo Relays								
PhotoSCRs/Phototriacs								
Phototransistor								
Photodiode								
Photodarlington								
High Speed								
Gate Driver								
Photo Relays								
Infrared Components								
Infrared LEDs								
Photodiodes/ Phototransistors								
IrDA Transceivers								
IR Receivers								
Optical Switches								
LED Displays								
Ultraviolet LEDs								

Total
Growth Rate

Source: Omdia

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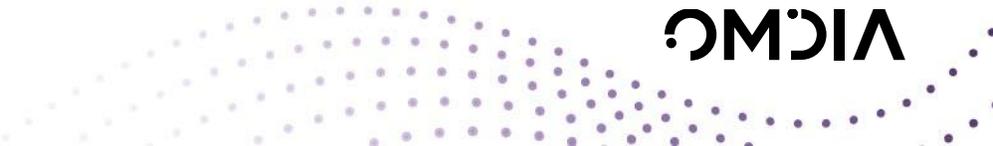
Research Methodology



Mar – Jun

Report Process & Timescales

Report process	Timescales
Collect Questionnaires from Suppliers	Mar - Apr 2023
Conduct Interviews & Perform Secondary Research	Mar – May 2023
Develop Report	May 2023
Preliminary Data	Jun 2023
Publish Report	End Jun 2023



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Thank you

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