THE WORLDWIDE ELECTRONICS MANUFACTURING SERVICES MARKET

2023 Edition

The Most Comprehensive Study Available on the Worldwide EMS Market

Report Highlights

- Worldwide Electronics Market Analysis, 2022–2027
 - 46 Product Segments by Region and Supplier
 - Total Assembly Value (OEM, EMS and ODM)
- Worldwide EMS Market Analysis, 2022–2027
 - OEM vs. Outsourced (EMS and ODM Subcontractors)
 - ► EMS, ODM, and OEM Production Market Share by Region, Market Segment, and Product (46 products and 1000+ manufacturing facilities): covid-19 Impact
 - Regional Manufacturing Distribution by 57 Countries
 - Product Analysis by EMS, ODM, OEM, and Country
- Financial Benchmarks
 - Market Segment Metrics Revenue/Margin/Earnings
 - Revenue per Sq. Ft./ per SMT Line/ per Employee
 - **♦ WW Labor Rates, ROA/ROE Highest Performers**
- In-Depth Company Profiles (Best Performing EMS and ODM Companies from \$100+ Million Total 103)

New Venture Research Corp.

A Technology Market Research Company

337 Clay St., Suite 101 Nevada City, CA 95959 Tel: (530) 265-2004 info@newventureresearch.com www.newventureresearch.com

Fax: (530) 265-1998

The Worldwide EMS Market - 2023 Edition

Synopsis

The worldwide electronics manufacturing services (EMS) market is a determining force in production of electronics products and now accounts for 49 percent of all assembly. Outsourcing grew exceptionally in 2021 but fell flat in 2022 due to computer and smartphone markets being saturated. The COVID-19 crisis continues to disrupt the supply chain and labor force. The EMS industry grew by 7.7 percent CAGR but only 1.7 percent in 2022—the lowest rate of the period.

New Venture Research (NVR) has followed this industry for over 30 years and is pleased to offer our latest update on this continually expanding market. Our report, *The Worldwide Electronics Manufacturing Services Market* – *2023 Edition* is the most comprehensive market research report on the EMS industry. This analysis focuses on the leading players, growing market segments, total available market (TAM), and emerging manufacturing opportunities and technologies by numerous products and countries.

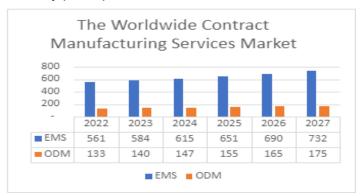
The report begins with an analysis of the worldwide electronics OEM assembly market, giving a baseline for the manufacturing value of electronics product assemblies. A forecast is checked against 46 individual product segments which make up the majority of electronics assembly (automotive, consumer, industrial, medical, aviation and aerospace and defense industries). NVR estimates that total electronics assembly value (OEM+EMS+ODM) was \$1.416 trillion in 2022 and will grow to approximately \$1.747 trillion in 2027 at a CAGR of 4.3 percent, ostensibly fueled by the demand for EMS services. The contract manufacturing industry by itself will grow from \$694 billion in 2022 to \$907 billion in 2027 at a 5.5 percent CAGR.

To support this conclusion, the report analyzes the EMS industry in a variety of ways. First, it reviews the worldwide market for EMS and OEM electronics assembly by individual product. Second, the report analyzes the EMS industry, including a breakdown of the market leaders and relative share by industry and region. Third, the market

opportunity for emerging growth is presented by product and country across 46 product segments and 1000+ manufacturing sites. No other report gives such detail by country, wage rate, and regional product assembly. The data can also be purchased as an Excel file to allow for easy analysis of the hundreds of variables collected in the report.

The report also includes an EMS financial performance analysis for the best-performing companies and examines a variety of critical financial metrics. Another chapter reviews EMS mergers and acquisitions for the past few years and the impact on the growth of the industry and its competitiveness.

The report concludes with profiles of the largest EMS and ODM firms (103 companies—86 EMS and 15 ODM) from all over the world. These reviews summarize the market focus of each company, its leading customers, and each company's financial production performance statistics. The intent of these profiles is to serve as a global directory and competitive analysis tool for industry participants.



The Worldwide Electronics Manufacturing Services Market, 2023 Edition is the product of hundreds of hours of research. The report sells for \$3995, with extra single-user licenses at \$500 and a corporate license at \$1500. This report is available in PDF format and is delivered by email (print copy at extra cost). An Excel spreadsheet of all data and tables may also be obtained for an additional \$1000.

About the Author

Randall Sherman is the president and principal analyst of New Venture Research Corp., a technology market research and business consulting firm focused on the EMS and OEM electronics manufacturing industries. Mr. Sherman has more than 30 years' experience in technology and business research. He began his career as a telecom systems engineer and went on to hold several market research analyst and management positions with companies such as Creative Strategies, Frost and Sullivan, and BIS Strategic Decisions. He earned his undergraduate degree in Astrophysics and holds an MSEE from the University of Colorado and an MBA from the Edinburgh School of Business.

The Worldwide EMS Market - 2023 Edition

Table of Contents

GigaByte

GPV Group

Global Brands Mfg Providence

Chapter 1: Introduction

Objectives Organization Methodology

Chapter 2: Executive Summary

Worldwide Market Forecast Regional Market Share Application Market Share EMS Market Share EMS Performance

Chapter 3: Worldwide Electronics Industry Forecast, 2022 - 2027

Overview World Economic Outlook **Summary Forecast Industry Forecasts**

> **Communications (9 product segments)** Computers (10 product segments) **Consumer (9 product segments)** Industrial (4 product segments) Medical (3 product segments) **Automotive (4 product segments)** Aviation, Defense, Other Transportation (7 product segments)

Chapter 4: EMS Industry Structure, 2022

The Worldwide OEM Market for Electronic Products **Manufacturing Sources for Electronics Products OEM Market by Seven Market Segments EMS Market by Manufacturing Source (OEM, EMS) EMS Statistics by Company Size (large/med/small) Regional Production Market Share (57 Countries)** Americas (9 countries) **EMEA (33 countries)** APAC (15 countries) **Industry Production by Market Share (46 products) Communications (9 product segments)** Computer (10 product segments) **Consumer (9 product segments)** Industrial (4 product segments) Medical (3 product segments)

Commercial Aviation (2 product segments) Military/Defense, Other Transportation (5

product segments)

Worldwide EMS Supplier Market Share

Chapter 5: Industry Forecast, 2022-2027

Automotive (4 product segments)

Worldwide OEM Market for all Electronic Products Manufacturing Source for Electronics Assembly OEM Market by Product and Market Segment EMS Market by Production Source (OEM, EMS) Regional Production Share by Country/Segment **Product Application Forecast (EMS, ODM) Total WW Available Market by Product/Country**

Chapter 6: Financial Benchmarks

Financial Performance Benchmarks 5-Year Sales Growth Rankings **Net Income Averages by Market Segment Gross Margins by Market Segment** Return on Assets (Average plus Leaders) Return on Equity (Averages plus Leaders) Revenue per Employee (Average plus Leaders) Revenue per Square Foot of Manufacturing Space Other Performance Metrics - Earnings per Share **Growth (Average plus Leaders)** Average Base Wage Rate by 53 Countries **Summary Performance Rankings by Leading Supplier**

Chapter 7: Mergers and Acquisitions

Past Activity, 2017 - 2022 - Largest and Best Deals by Year **Acquisition Classes and Valuations - Methods Best OEM Divestment Opportunities by Region** M/A activity by OEM, EMS, ODM, OSAT and IDM

Chapter 8: Company Profiles of Leading Suppliers

| | • | • |
|---------------------------|---------------------------|------------------------|
| 3CEMS | Hana Micro | Qisda |
| Accton Technology | HANZA | Quanta Computer |
| AEC | Hi-Mix Electronics | RAFI Group |
| ALL CIRCUITS | IMI | Sanmina |
| AmTran | Inventec | Scanfil |
| ATA IMS Berhad | Jabil | Season Group |
| Benchmark | Kaga Electronics | SERCOMM |
| Bitron | KATEK AB | Shenzhen Kaifa |
| BMK | Katolec | Shenzhen Zowee |
| BYD Electronics | KeytronicEMS | SigmaTron |
| Celestica | Kimball | SIIX |
| Cicor | Kitron | SKP Resources |
| Compal Electronics | LACROIX | SMTC |
| Computime | Lite-On | Sumitronics |
| Connect | Luxshare | Suzhou Etron |
| Creation | Mack Technologies | SVI |
| Cyient Ltd. | Melecs | Syrma SGS |
| DBG Holdings | Micro-Star | TPV |
| Delta Electronics | MiTAC Holdings | TQ-Systems |
| Di-Nikko | NEO Technology | TT Electronics |
| Dixon Technologies | New Kinpo Group | UMC |
| Ducommun | Neways | USI |
| Elemaster | Nippon Mfg. | Valuetronics |
| EliteGroup | Norautron | Variosystems |
| eolane | Nortech Systems | Venture |
| ESCATEC | NOTE | Vexos |
| Etron | Orbit One | VIDEOTON |
| Fabrinet | OSE | VIRTEX |
| Fideltronik | Pan-International | V.S. Industry |
| Flex | PC Partner | Vtech EMS |
| Foxconn (Hon Hai) | Pegatron | Wistron |
| Gemtek | Plexus | WKK Technology |
| O: D 1 | - | — |

Prodrive Tech

Wong's Electronics

Zollner

The Worldwide EMS Market - 2023 Edition

Table of Contents (continued)

Partial List of Figures and Tables

Product Industry and Market Segments Nominal GDP of Major Countries and Regions Real GDP Growth Rates for Selected Countries Electronics Assembly Market, 2022–2027 Computer Products, 2022-2027

Communications Products, 2022–2027

Consumer Products, 2022-2027

Industrial Products, 2022-2027

Medical Products, 2022-2027 Automotive Products, 2022–2027

Commercial Aviation, Defense, Other Transportation Products, 2022-2027

Worldwide EMS Market, 2022-2027

Worldwide OEM Market by Mfg. Source, 2022-2027

Worldwide OEM Market by Industry Segment, 2022–2027

Worldwide EMS Market by EMS Size, 2022–2027

Key EMS Statistics by Company Size, 2022

Worldwide EMS Market by Region, 2022

Large EMS Manufacturing Facilities by Country, 2022

Worldwide EMS Market by Country, 2022

— 57 Countries/Regions

Worldwide EMS Market by Industry Segment, 2022

- 7 Market Segments, 46 Products
- EMS and ODM Rankings

EMS Market Share, 2022

ODM Market Share, 2022

Top Ten CM Market Share, 2022

Worldwide OEM Market by Industry Segment, 2022–2027

Worldwide EMS Market by Company Size, 2022-2027

Worldwide EMS Market by Country and CAGR - 2022

Worldwide Total Market by Country and CAGR - 2022 and 2027

Worldwide EMS Market by Region and Industry Segment, 2022-2027

Worldwide Total Market by Region and Industry Segment, 2022-2027

Worldwide EMS and Total Market by Product

- 46 Product Segments
- Forecasts from 2022 to 2027

Summary Financial Performance Metrics for Large Public EMS Companies, 2022

Key Financial Performance Metrics for Large Public EMS Companies, 2022

Worldwide EMS Margins by Industry Segment, 2022

EMS Companies by Revenue Growth Rate, 2022–2027

EMS Companies by Net Income, 2022

EMS Companies by Gross Margin, 2022

EMS Companies by Return on Assets, 2022

EMS Companies by Return on Equity, 2022

EMS Companies by Revenue per Employee, 2022

EMS Companies by Revenue per Square Foot, 2022

EMS Companies by Average Days Collection, 2022

EMS Companies by Inventory Turns, 2022

EMS Companies by Available Cash, 2022

EMS Companies by Debt to Equity, 2022

EMS Companies by 5-Year EPS Growth, 2022

Worldwide Performance Ranking for Leading EMS Companies, 2022

Worldwide EMS Wage Rates by Country, 2022

Merger and Acquisition Activity, 2022–2027

Leading Merger and Acquisition Activity by Company, 2022-2027

Average Merger and Acquisition Valuations by Company, 2022-2027

Publish Date July 2023 ~600 Pages

| Order Form | | | |
|---|--|--|--|
| Payment Method Check in the amount of \$is enclosed. Invoice per P.O. # Please charge: Visa MasterCard American Express Card #Exp Name On Card SignatureDate | Name Title Company Address City/State/Zip Telephone Fax E-mail | | |
| The Worldwide EMS Market, 2023 Edition (Single User License - PDF file shipped electronically) Add Extra Single User License (\$500 each) or Corporate License (\$1,500) | | | |
| Returns: No return privileges. International Orders: Must be prepaid, please contact us for payment arrangements. New Venture Research Corp. 337 Clay St., Suite 101 Nevada City, CA 95959 Tel: (530) 265-2004 Fax: (530) 265-1998 www.newventureresearch.com; info@newventureresearch.com | Subtotal Add Excel Spreadsheet of all tables (\$1000) TOTAL | | |