

GLOBAL
SWITCHING POWER SUPPLY INDUSTRY

(Embedded Power Supplies)

(Detail-Version)

Strategies for A Changing Market

(07/11)

Micro-Tech Consultants

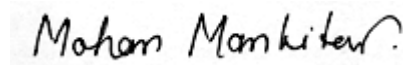
**Global Switching Power Supply Industry 2011
Embedded Power Supplies (Detail-Version)
Strategies for A Changing Market**

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FOREWORD

The power supply industry suffered a significant decline during 2010. Though certain level of uncertainty still 2010 was a turnaround year. It is expected that the recovery will slow and incremental and not in a "V" shape form.

Over the last four years, the power supply industry consolidated significantly: with the top 10 companies' share of the market increasing from 43% in 2005 to 61% in 2010. However, it is not expected that the power supply industry will be dominated by a few large companies.

Financial institutions continue to make their mark on the power supply industry. With the economic recovery power supply industry's gross margin has improved significantly, which will further attract attention of the financial institutions.

In the market segment, the Consumer/Retail market segment has emerged as the most significant and not surprisingly, it is dominated by Far-Eastern manufacturers. On the other hand, most North American/European power supply manufacturers have concentrated their power supply business efforts on the computer, networking and the industrial sector. The end-equipment manufacturing and to some extent the markets themselves have moved to Asia/ Pacific regions mainly due to the rise of China. Military/aerospace market has remained local and lucrative and away from top 10 power supply companies.

In the product segment, there are significant changes occurring due to a variety of emerging power architectures. Energy efficiency has emerged as the important industry-wide issue and most new products are designed with higher efficiencies. Its dual impact of profit-making and planet-saving has made this parameter highly attractive and highly sought after by the end-user community. All these emerging trends have created a significant impact on the power supply industry and its various business models.

This global power supply industry 2010 report provides a comprehensive analysis of the current situation and these emerging trends. It provides a quantitative measure and qualitative analysis in the following manner:

- Broad Market Analysis: (LED, CON; COE; NTE; IND, MED, TRN & MIL)
- Applications Analysis: (Important segments within a given market)
- Product Analysis: AC-DC switchers (EPS, FES & CPS) and DC-DC converters (Isolated, BUS, POLs & VRMs)
- Emerging Trends in: Power Architectures and related products, Product Models, Business Models, Global Changes that will affect the Power Supply Industry

The analysis is provided only at the "Global Level" because regional-level business transactions are difficult to identify. Moreover the power supply business has become global in nature especially for multinational power supply manufacturers (PSMs) and their OEM customers. PSMs tend to design power supplies in one location (NA), manufacture them in another (China) and then market/sales them in a third region (EU). Globalization has blurred the line between different regions in terms of markets. However, it is also true that there are many smaller companies that manufacture and sell their products in the "native regions." The report is designed to provide information for both sets of companies.

Power supplies are a unique commodity with multiple user/marketing/sales parameters. So power supply data can be organized in many different combinations of different parameters creating a massive database. Here are examples of power supplies in various possible data organizations:

- Products: AC-DC & DC-DC
- Regions: North America, Europe, Asia & Rest of World
- Markets: CON, COE, NTE, IND & MIL
- Applications: CON: Cell Phones....; COE: Servers...; NTE: Routers... etc.
- Output Power: 0-50W... or 0-150W... depending upon the product
- Output Voltages: 1.2VDC; 2.5VDC; 3.3VDC; 5.0VDC; 12VDC; 24VDC; 28VDC; 48VDC...
- Input Voltages: AC-DC: Universal input; DC-DC: 48VDC; 28VDC; 24VDC; 12VDC; 5VDC...
- Output Current: DC-DC: 5A; 10A; 20A; 30A; 40A; 50A...
- Product Design/Packaging: DC-DC: Isolated; non-isolated; VRMs...
- Packaging: AC-DC: 3x5; 5x7; 1U; 2U...
- Packaging: DC-DC: HB; QB; 1/8th B; SIP...

With all these combinations, it is impossible to provide market size and trends for all possible applications and all possible product categories. Micro-Tech Consultants (MTC) has provided data and analysis for the most commonly used and most significant categories.

- In-depth information about the Global Switching Power Supply Industry along with market statistics in major geographic regions:
 - North America (NA)
 - Europe (EU)
 - Asia
 - Rest of World (ROW)
- An analysis of various markets: Information Technology (IT); Industrial/Instrumentation and Military/Aerospace equipment in different geographic regions
- An analysis of emerging trends related to new architectures: DPA—Distributed Power Architecture: using isolated DC-DC converters and IBA—Intermediate Bus Architecture—using non-isolated converters
- Competitive analysis

This report is the culmination of the past 25 years of market research in the power supply industry. The data were gathered from primary sources, and original analysis has been presented.

Chapter 1.0: Executive Summary - summarizes the entire report in a concise manner. It provides an overview with specific important industry highlights, trends and strategies.

Chapter 2.0: Global Power Supply Industry Analysis - provides an analysis of the Global Power Supply Industry, which includes OEM Power Supplies, Telecom Power Systems (Energy Systems) and Uninterruptible Power Supplies (UPSs).

Chapter 3.0: Global OEM Power Supply Market Analysis - presents detailed information about global markets and power products, what the important and emerging markets are, and what products will be suitable for these markets—their trends and characteristics. It also includes specific product applications.

Chapter 4.0: North America: OEM Power Supply Market Analysis - provides an analysis of the North American Switching Power Supply Industry, which includes AC-DC Switchers and DC-DC Converters.

Chapter 5.0: Europe: OEM Power Supply Market Analysis - provides an analysis of the European Switching Power Supply Industry, which includes AC-DC Switchers and DC-DC Converters.

Chapter 6.0: Asia: OEM Power Supply Market Analysis - provides an analysis of the Asian Switching Power Supply Industry, which includes AC-DC Switchers and DC-DC Converters.

Chapter 7.0: Rest of World (ROW): OEM Power Supply Market Analysis - provides an analysis of the Rest of World (ROW) Switching Power Supply Industry, which includes AC-DC Switchers and DC-DC Converters.

Chapter 8.0: Product Analysis - provides an in-depth analysis of marketable product parameters and evolving standards in the industry. This chapter also includes a subchapter on emerging trends in DPA and its impact on isolated and non-isolated converters.

Chapter 9.0: Competitive Analysis - analyzes major power supply companies.

Chapter 10.0: Appendix: Definitions and Explanations - gives details about terms and conditions used to prepare this report. This chapter also includes an explanation of geographic regions.
Organization and Methodology - gives details about how this report is organized and the methodology used to create the data.

Chapter 11.0: Micro-Tech Consultants (MTC) - provides background information on Micro-Tech Consultants.