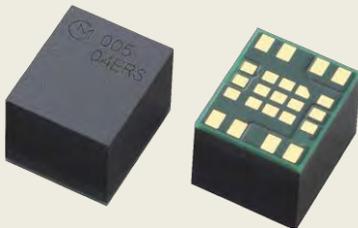


Market Research Report: PSiP and PwrSoC - Power Density Goes Mainstream 2016-2023

March 2019. LTEC Corporation, in collaboration with Anagenesis, Inc., is planning to release a market research report covering miniature power supplies having physical dimensions of 25.4 mm x 25.4 mm footprint or less, and volumetric power density of at least 4mA/mm³. This class of power supplies are integrated



PSiP Example: Murata's MonoBlock



PwrSoC Example: Intel's granular PwrSoC

either at package-level and termed as Power Systems in a Package (PSiP), or at chip-level and termed as Power System on Chip (PwrSoC). Accelerated growth of the PSiP sub-class and accelerated activity in the PwrSoC sub-class has been observed lately, thus underscoring the need to take a fresh look at the evolving market drivers and the underlying technology-base. ***Some of the key themes addressed in this report are:***

- Growing number of players despite M&As
- Emerging new technologies pushing up current density
- Merchant - integrated passives are now commercially available - this is a key advancement
- Outgrown traditional POL market; new ones are surprising
- GaN adoption as potential accelerator
- The pull of emerging markets and heterogeneous integration trends
- Intense drive to create low-cost, low profile integrated power passives
- New integration opportunities push fabs to reinvent themselves
- Important learnings from purpose-based RE , patent landscape analysis
- Double-digit PSiP growth outpaces most power management offerings

18G-0037-1

Why read this report?

The report

- Offers a comprehensive overview of the growing number of entries despite vigorous M&A activity.
- Provides access hard to obtain facts and trend charts to facilitate careful planning of your company's portfolio.
- Identifies key market drivers and technology drivers
- Offers assessment of the current status of GaN adoption and its potential accelerating effects for PSiP development
- Contains targeted RE, product teardown and deep analysis-based assessments of technology trends
- Includes an overview of the patent landscape is provided
- Saves time with this unique technical-marketing tool

Learn

- What's accelerating the PSiP market? What's fueling the double-digit growth our analysts are seeing?
- Why is it the PwrSoC market evolves at slower pace than the PSiP market? Is it technology, lack of market driver, or something inherent in the nature of the "beast"?
- What technologies enable the next generation PwrSoC and PSiP?
- Who are the key PSiP players and who will be forthcoming?
- What are the future growth drivers and key applications?
- What makes the PwrSoC opportunity different from PSiP?
- How is PwrSoC more than an engineering dream in search of a market?
- Why has it been so difficult for the PwrSoC to become a reality?
- How fast will the PwrSoC market grow and will it continue to drive additional investments?
- Where do your best emerging opportunities exist?
- *System integration - define your innovation and development strategy.*



Table of Contents

Page

Chapter I – Introduction

Chapter II – Executive summary

Chapter III – Purpose, Scope, and Methodology

Chapter IV – Recent Key Developments and Milestones (PSiP & PwrSoC)

Chapter V – PSiP Market Analysis and Trends

- Applications & Drivers
- Product Comparisons and Trends (over 11 years)
- By Product Types & Package Types including impact on open-construction power supplies
- Figures of Merit – Density, Efficiency, Pricing
- Technical Benchmarks – Switching Frequency by Voltage Classes
- Technical Benchmarks by Current Classes
- Control Method, Power Switches, Magnetics, Power Capacitors, & Packaging
- Purpose-based patents landscape analysis

Chapter VI – PwrSoC Market Analysis & Trends

- Evolution Toward the PwrSoC
- Parametric Progress
- Emerging PwrSoC Applications
- Future Enabling Technologies
- Control Method, Semiconductor Switches, Integrated Magnetics, Integrated Capacitors, and Packaging
- Modular & Granular PwrSoCs, L and C based
- Company Profiles
- Purpose-based patents landscape analysis

Chapter VII – PSiP Competitive Market Analysis

- Market Revenue Share by Company
- Product Introduction Activity (2009 – 2016)
- Product Landscape
- Technology Readiness Assessment
- Company Profiles: Strengths and Weaknesses
- Suppliers, Users, and Component Providers
- Key Alliances
- Market Barriers and Customer Issues



Table of Contents (Cont.)

Page

Chapter VIII – Forecasts: 2015 to 2021

- Forecast Assumptions and Methodology
The Miniature Power Supply Product Forecast (PSiP + PwrSoC)
- PSiP Market Forecast (Revenue, Quantity, and Price)
 - By Product Type
 - By Package Type
 - By Voltage Class
 - By Current Class
 - By Market Subsector
 - Upside Estimate Possibilities
- PwrSoC Forecasts (Modular & Granular)

Chapter IX – Business Success Recommendations

- To the Component Suppliers, Manufacturers, Users

Appendices

- Appendix A - References
- Appendix B - Definitions

The LTEC – Anagenesis Difference

LTEC Corporation is Japan's leading, well-respected supplier of products and technologies teardown and deep analysis (benchmarking) for IP protection and new product R&D for over three decades. LTEC offers teardowns, deep analysis of competing technologies for product development, patents' enforcement and defense with headquarters in Osaka, Japan, and local offices in the USA and the Asia-Pacific region



Anagenesis is the leading analysis team for PSiP and PwrSoC markets since 2007 with in-depth research offering a unique perspective. Moreover, they have the engineering expertise and business relationships to capture the PSiP and PwrSoC customers' viewpoint. Customers say their reports are "deeply impressive" and

"have details unavailable anywhere else." Their repeat business and referrals reflect high customer satisfaction.

Order this market report today.

Report Price \$6,995 Pre-publication Price: \$5,880 USD (16% savings)



LTEC Corporation US Representative Office
No.203 2880 Zanker Road San Jose, CA 95034

Phone: (408) 489-1994
www.ltecusa.com Contact: info@ltecusa.com