Market Report: PSiP & PwrSoC – Power Density Goes Mainstream 2017 – 2025



An Anagenesis Market Analysis With Product and Technology Benchmarking by LTEC



A 2020 market report covering miniature (max. 1" or 25.4 mm) power supplies – their opportunity and progress

Power Supply in a Package (PSiP)

- Growing number of players despite M&A
- Highest level development community support ever
- Outgrown traditional POL market; new ones are surprising
- Improved technology pushes lout and current density
 envelopes
- Reasonable and stable pricing and margins
- Double-digit growth outpaces most other power management offerings
- GaN adoption is waiting in the wings Needs key catalysts & accelerators
- Progress exhibited by more diversified integration
- New products are less scattered and more applications driven

Modular PwrSoC – Learn about Progress

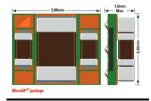
Commercial Granular PwrSoC



Intel Granular Xeon Processor with Fully Integrated Voltage Regulator (FIVR)



Encapsulated PSiP Murata 12 A MonoBlock POL 10.5 x 9.0 x 5.6 mm



Miniature open-constructed PSiP Texas Instruments 6 MHz 600 mA POL MicroSiP™ 2.3 mm X 2.9 mm X 1 mm

Power Supply on a Chip (PwrSoC)

- PwrSoC investment and start-ups outpace PSiPs
- More PSiP players are adding resources for better PwrSoC development positioning
- Granular efficiency improvements compel modular versions to seek the same applications
- New global heterogeneous integration community to accelerate PwrSoC
- Intense drive to create cost-competitive integrated power passives
- Key advancement merchant integrated magnetics now commercially available
- New integration opportunities causing fabs to reinvent themselves
- Most significant barrier is business model despite technical challenges

•

Content

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

Future Enabling Technologies

Control Method, Power Switches, Power Magnetics, Power Capacitors, & Packaging

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

Chapter VII – PSiP Competitive Market Analysis Market Revenue Share by Company Product Introduction Activity (2009 – 2018) Product Landscape Technology Readiness Assessment Company Profiles: Strengths and Weaknesses Suppliers, Users, and Component Providers Key Alliances Market Barriers and Customer Issues Chapter VIII – Forecasts: 2017 to 2025 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 Anagenesis/LTEC Difference

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

business and referrals validate high customer satisfaction.

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 products and technologies for product development, patents' enforcement, and defense with headquarters in Osaka, Japan, and local offices in the USA and the Asia-Pacific region.



You can order this market report today.

Report Price \$6,995.00 USD Pre-Publication Price: \$5,880.00 USD (a 16% savings)

Anagenesis Inc., Suite 2000, 222 N. Sepulveda Blvd., El Segundo, CA 90245 <u>info@anagenesis-inc.com</u> Arnold Alderman Phone: 310 662 4764 Mobile: 310 704 7079 Ada Cheng Phone: 310 406 5691