



*Teardowns, deep analysis of competing products and technologies for new product development, patents' enforcement and defense*

*New market research report released by LTEC Corporation:*

## ***“PSiP and PwrSoC - The Power Density Challenge Continues 2015-2021”***

*Louis Burgyan, Technical Advisor, LTEC Corporation*



**October 2018.** LTEC Corporation released its first detailed market report, “Power Supply in a Package (PSiP) and Power Supply on Chip (PwrSoC) - The Power Density Challenge Continues.” The report is now available for purchase. *See our brochure and its table of contents:* <https://www.ltecusa.com/psip>.

Market dynamics impact the adoption of technology and intellectual property so LTEC Corporation partnered with Anagenesis Inc., a US market research company, can augment our IP services with market analysis reports. This new report includes both market forecasts and technical analysis, and it will give our customers more context for the development of their products, technology, and intellectual property. Product and business roadmap planners and new product development teams now have the ability to track technology, construction advancement/barriers, and the impact on market opportunities. Our collaboratively developed market reports offer a deeper understanding of new technologies and competing products in the field of vehicle electrification, power electronics, and power semiconductor devices.

### ***Announcement: New Market report***

#### ***LTEC and Anagenesis Augment PSiP & PwrSoC Market Report***

***"Power-Supply in a Package (PSiP) and Power-Supply-on-a-Chip (PwrSoC) Market Report:  
The Density Challenge Continues 2015 – 2021"***

***Now with technical benchmarking insights included.***

***These miniature power conversion products are 1"x1"x1" or smaller  
with a current density of 0.004A/mm<sup>3</sup> or more.***

*Do you want to know the latest regarding PSiP and PwrSoC products and markets?*

*Do you want to know what the prospects are for these emerging devices?*

*Do you want to know if they are worth investing your time, effort, and funds in them?*

***Latest events:***

- The PSiP market revenue has had double-digit growth with the need for rapid time-to-market and enhanced functionality being the main market drivers.
  - Ultra-high-density applications are starting to appear but not yet ready to ignite exponential growth.
  - The 48:1 POL is emerging — pushed heavily by Google and Facebook. What impact will this new architecture have on PSiPs?
  - Mergers have had dramatic impact on PwrSoC market trends. Who and what will rekindle this market?
  - Is granular PwrSoC a trend or a single event?
  - Where are investments most needed?
- And more...

***Some highlighted features in this report are:***

- Covers technical and business aspects of Granular PwrSoC with its unique product path and includes integrated magnetics
- "Technical Benchmark & Figure-of-Merit" sections with trend analysis based on device introduction year
- *New!* Enabling technology gap analysis for embedded power passives
- *Expanded!* Detailed pricing trends analysis
- Expanded packaging & wideband gap sections
- Added a PSiP landscape that shows the different PSiP types by company
- Key alliances that could have impact on PSiPs or PwrSoCs
- Key parametric trends tracked and forecasted based on analysis of historic data from the past decade

Our newest market report will provide past and projected market dynamics and an overview of the market drivers—drills down to the historic and projected benchmarking performance/trend details, particularly focusing on the point-of-load (POL) converter.

***What makes this report unique?***

- It is compiled for business **and** product planners who value concise, time-saving approach to market reports augmented by technical analysis (Anagenesis pioneered the reporting on these devices starting in 2007.).
- It now showcases key technical benchmarks as requested by customers.
- It includes insights obtained during discussions and interviews with key research, design, and business leaders during private meetings and industry events such as the PwrSoC Workshops.

[See our content brochure](#)

[Purchase your copy today \(click here\)!](#)

***Read our presentation last June at the***

***Second Power Electronics Integration and Manufacturing 3D-PEIM Symposium.***

***Title: The Integration Progress and Trends in Miniature Integrated Power Supplies***

***See our technology report brochure:***

[Current Developments in 3D Packaging with Focus on Embedded Substrate Technologies](#)

***See us at APEC 2019 in Anaheim, CA, March 17 - 21.***

<http://www.ltecusa.com>

## *New technical analysis reports from LTEC*

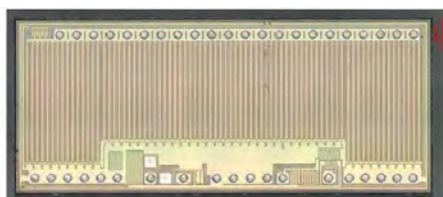
*Click on the titles below*

### **NAVITAS NV611x SERIES GAN POWER IC STRUCTURE ANALYSIS**



LTEC Corporation released a detailed 93-page structure analysis report of the NV611X, a GaN Power IC having a 650V switch. NAVITAS is the first GaN manufacturer to introduce a GaN FET and GaN drive circuit on the same die. The NV6115 and NV6117 are the subjects of our structure analysis [18G-0004-1].

### **NAVITAS NG6117 GaN POWER IC CIRCUIT ANALYSIS REPORT**



LTEC Corporation released a detailed circuit analysis report of this new 650V GAN Power IC. NAVITAS is the first GaN manufacturer to introduce a GaN FET and GaN drive circuit on the same die. NV6117 is the second product released by NAVITAS.

This  $V_{dss}=650V$ ,  $R_{ds} = 110m\Omega$  device features integrated GaN transistors, passives, and a carefully constructed layout to ensure optimal switching waveform. The 34-page report includes package image, X-ray, metal image of each layer, element symbols, and an extracted hierarchical schematic [18G-0004-2].

[Click here to see many additional analysis report brochures](#)

**About LTEC Corporation:** LTEC Corporation, Japan's dominant intellectual property analysis company, provides in-depth competitive, benchmarking, deep analysis, and patents-related services for the research and development engineering and industrial legal communities in the form of an innovative and collaborative approach. The company is engaged in the fields of vehicle electrification, ADAS, mobile communication, all types of semiconductors including SiC and GaN devices, and automotive and power electronics. With regional offices in the USA, Japan, Korea, and Taiwan, LTEC helps its customers overcome intellectual property (patent) research, analysis, and protection challenges across all sectors of electronics. With over 100 highly trained engineers and Ph.D.s and thirty-three years of an impeccable track record, LTEC stands ready to help retain or gain a competitive edge for its clients worldwide. [www.ltecusa.com](http://www.ltecusa.com)



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