



## FOR IMMEDIATE RELEASE:

# Power GaN: who is part of the playground?

Extracted from: Power GaN: Epitaxy, Devices, Applications, and Technology Trends report, Yole Développement

GaN Con - Power GaN: from promises to possible market explosion – Executive Networking Event on Feb. 21, Milpitas, USA. [Program & Registration](#)

**LYON, France – February 11, 2019:** Eight years have passed since the first commercialized power GaN device. People in the power electronics industry are becoming increasingly familiar with the names of start-ups that are actively promoting GaN technology.

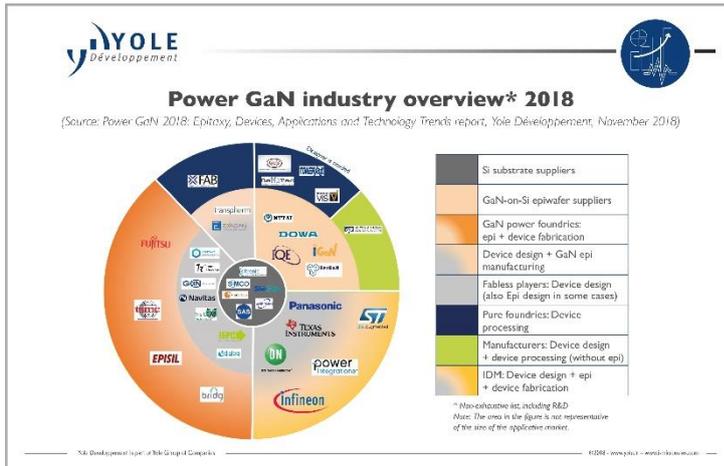


Efficient Power Conversion (EPC), GaN Systems, Transphorm or Navitas, in addition to the power electronics leaders, Infineon Technologies and ON Semiconductor are also highly involved in the development of GaN technology. Moreover, not surprisingly, the list of GaN start-up players is getting longer over the years:

Exagan, GaNPower International or Tagore Technology are also offering power GaN products.

Under this dynamic ecosystem, [Yole Développement \(Yole\)](#) and its partners EPC and SEMI are organizing a conference dedicated to the power GaN industry. Taking place on Feb. 21 in Milpitas, California, the [“GaN Con - Power GaN: from promises to possible market explosion”](#) [TechDay](#) is a smart combination of powerful presentations proposed by leading power GaN companies, debates, and networking. During half day, the Organizing Committee including Yole’s analysts strongly involved in the analysis of the Power GaN industry invites you to dive into this emerging industry, understand the technical challenges and identify business opportunities. Full program & registration are now available on [i-micronews.com](#).

Most of the power GaN start-up players choose the foundry model, mostly using TSMC, Episil, or X-Fab as their preferred partner. Meanwhile, other foundries might offer this service if the market takes off. The foundry model affords fabless or fab-lite start-ups the possibility of ramping up quickly if the market suddenly takes off, while existing IDM can benefit from previous acquired equipment and knowledge for GaN manufacturing.



“It is fascinating to see that along with these start-up players, companies with very different profiles are competing in the same playground: industrial giants like Infineon Technologies, ON Semiconductor, STMicroelectronics, Panasonic, and Texas Instruments,” comments **Ana Villamor, PhD., Technology & Market Analyst at Yole.**

The [Power GaN report](#) performed by the Power & Wireless team at Yole, identified several new items in 2018:

- Infineon Technologies announced it would start volume production for CoolGaN 400V and 600V E-mode HEMT products at the end of 2018. “The power electronics leader has so started mass production of GaN,” asserts **Ezgi Dogmus, Ph.D. Technology & Market Analyst at Yole.** “This announcement is a strong sign for the Power GaN industry. Therefore, because of its leadership, Infineon Technologies has already many customers for silicon products that could shift to GaN solutions in the near future, if their requirements are satisfied.” The GaN adoption by the biggest player gives confidence for future market growth.
- In parallel, STMicroelectronics and CEA Leti announced their cooperation in developing GaN-on-Si technologies for both diode and transistor on Leti's 200mm R&D line. Both partners expect to have validated engineering samples in 2019. Also, STMicroelectronics will create a fully qualified manufacturing line, including GaN-on-Si hetero-epitaxy, for initial production running in the company's front-end wafer fab in Tours, France, by 2020.

As a good promise, new commercial products arrived during the last year, and more will come in 2019. The main ones released were power supply products for high end or high volume consumer applications. At the moment, each of the segments is targeted by different company profile: integrated solutions for consumer applications and discrete solutions for high-power/high-end power supplies.

What an attractive ecosystem! The industry is becoming more and more engaging, and many questionings are pending. The [Power GaN report](#) from Yole proposes two scenarios to get a deep understanding of the status of this market. The market research and strategy consulting company take into account all technical challenges and market parameters and daily crossing this information with leading power GaN players. During the [power GaN TechDay](#) partnered with EPC and SEMI, Yole's analysts and famous power GaN companies will

reveal their vision of today's industry and debate about its evolution. Make sure to attend this conference and be part of the strategic debate!

For more information about the program, list of speakers and registration, please contact [Camille Veyrier](#), Director, Marketing & Communication at Yole.

## ABOUT THE REPORT



### [Power GaN 2018: Epitaxy, Devices, Applications and Technology Trends](#)

*GaN market growth is fed by Lidar, wireless charging, and fast charging solutions. – Produced by Yole Développement (Yole).*

#### **Companies cited in the report:**

Aixtron, Allos, Alpha&Omega, Amec, Amkor, Apple, ASE, AT&S, BMW, Coorstek, Delta electronics, Dialog Semiconductors, Dowa, Efficient Power Conversion, Egtronics, EpiGaN, Episil, Epistar, Evatran, Exagan, Fairchild, Finsix, Ford, Fuji Electric, GaN Systems, GaN Power, Imec, Infineon, IQE, LG electronics, Jedec, Kyma ...[Full list](#)

#### **Authors:**

- **Ana Villamor**, Ph.D. serves as a Technology & Market Analyst, Power Electronics & Compound Semiconductors. She is involved in many custom studies, and reports focused on emerging power electronics technologies at Yole Développement, including device technology and reliability analysis (MOSFET, IGBT, HEMT, etc).
- As a Technology & Market Analyst, Compound Semiconductors, **Ezgi Dogmus**, Ph.D. is daily contributing to the development of these activities with a dedicated collection of market & technology reports as well as custom consulting projects.
- **Hong Lin**, Ph.D. works as a Senior Technology and Market Analyst, Compound Semiconductors since 2013. She is specialized in compound semiconductors and provides technical and economic analysis.



#### **ABOUT YOLE DEVELOPPEMENT**

Founded in 1998, **Yole Développement (Yole)** has grown to become a group of companies providing marketing, technology and strategy consulting, media and corporate finance services, reverse engineering and reverse costing services and well as IP and patent analysis. With a strong focus on emerging applications using silicon and/or micro manufacturing, the Yole group of companies has expanded to include more than 80 collaborators worldwide covering MEMS & Sensors - Imaging - Medical Technologies - Compound Semiconductors - RF Electronics - Solid State Lighting - Displays - Photonics - Power Electronics - Batteries & Energy Management - Advanced Packaging - Semiconductor Manufacturing - Software & Computing - Memory and more...

The “More than Moore” market research, technology and strategy consulting company Yole Développement, along with its partners System Plus Consulting, PISEO, and KnowMade, support industrial companies, investors and R&D organizations worldwide to help them understand markets and follow technology trends to grow their business. For more information, visit [www.yole.fr](http://www.yole.fr) and follow Yole on [LinkedIn](#) and [Twitter](#).

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