

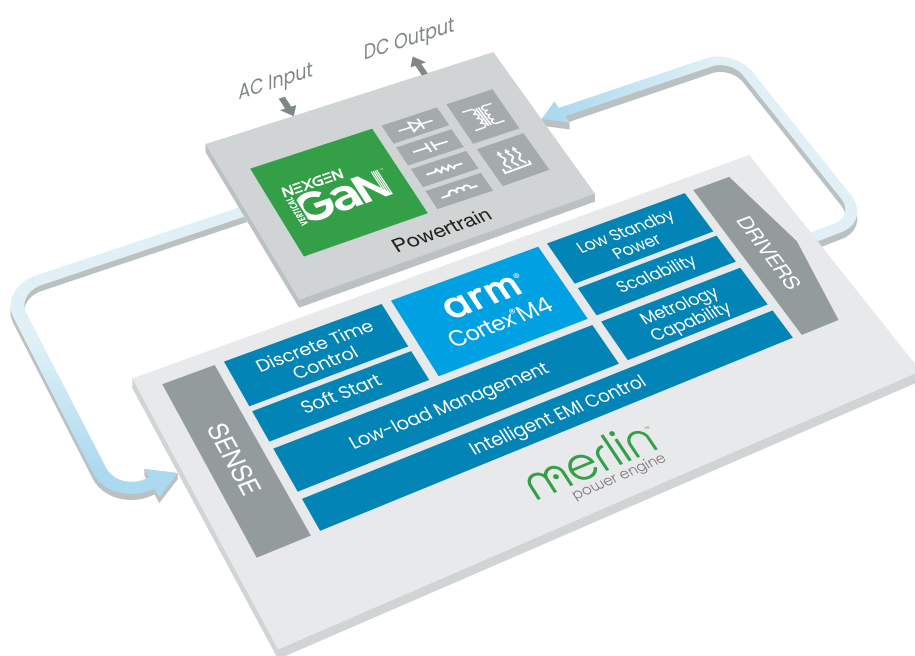
NexGen Power Platform

Scalable, software-configurable architecture
enabling power systems from 20W – 5kW

NEXGEN
POWER SYSTEMS

Scalability and time-to-market are major challenges power engineers face today.

The NexGen Power Platform incorporates the major building blocks for power systems enabling unmatched performance in unrivaled form factors.



NexGen Vertical GaN™ Powertrain

Powertrain built with NexGen Vertical GaN™: Breakthrough high-voltage 1+ MHz switching frequency technology as well as revolutionary mechanical, magnetics and thermal engineering

Merlin Power Engine™

The world's first 1 MHz+ digital powertrain controller enabling scalability and high efficiency



www.nexgenpowersystems.com/solutions/gan-power-platform

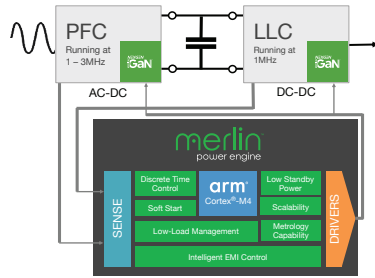
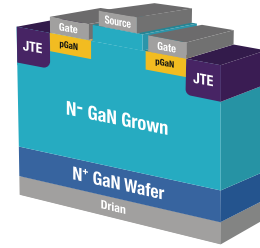
NEXGEN
POWER SYSTEMS

NexGen Power Platform

NexGen Vertical GaN™ technology at the core:

Enabling the NexGen Platform with a new benchmark in power

- Built with GaN grown on a GaN substrate to reduce size and cost
- Switching frequency at a cutting-edge 1+ MHz, 100x the speed of Silicon
- Inherently reliable with a 4kV breakdown voltage, Avalanche and Short-Circuit capability
- Manufactured in NexGen's state-of-the-art Fab in Syracuse, NY



Merlin Power Engine™:

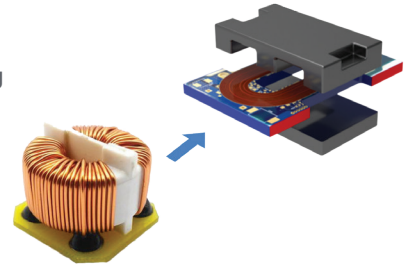
Delivering the World's First 1+ MHz Switching Digital Powertrain Controller

- Enables scalability to higher power through interleaving multiple phases
- Implements Novel Power Control through configurable Software Algorithms
- Flexible architecture to adapt to different power topologies
- Provides advanced features such as Metrology and Intelligent EMI control

Innovation Beyond Power:

Revolutionary magnetics and thermal engineering through Systems Engineering

- Planar Magnetics provides 10x lower leakage than current magnetic solutions
- Implements low profile, flat windings, and reduced noise sources
- Efficient thermal design with advanced thermal impedance management
- Provides excellent repeatability in manufacturing



Revolutionary impact across a broad array of industries



Computing



Data Center



LED Lighting



Electric Mobility



Renewable Energy



Storage & Charging



Motor Drive



And More



Contact us to learn more at info@nexgenpowersystems.com

About NexGen Power Systems

NexGen Power Systems, the premier vertically integrated power electronics company, designs, develops, and manufactures innovative power conversion systems with its revolutionary NexGen Vertical GaN™ semiconductor technology.

www.nexgenpowersystems.com

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Founded in 2017, NexGen Power Systems is revolutionizing power electronics with technology solutions utilizing GaN-on-GaN (NexGen Vertical GaN™) discrete semiconductor devices, controllers, modules, and systems that increase efficiency and reliability of power conversion systems while dramatically reducing their cost, size, and weight. Our vision is to create the smallest, lightest, most cost-effective power conversion systems in the world.