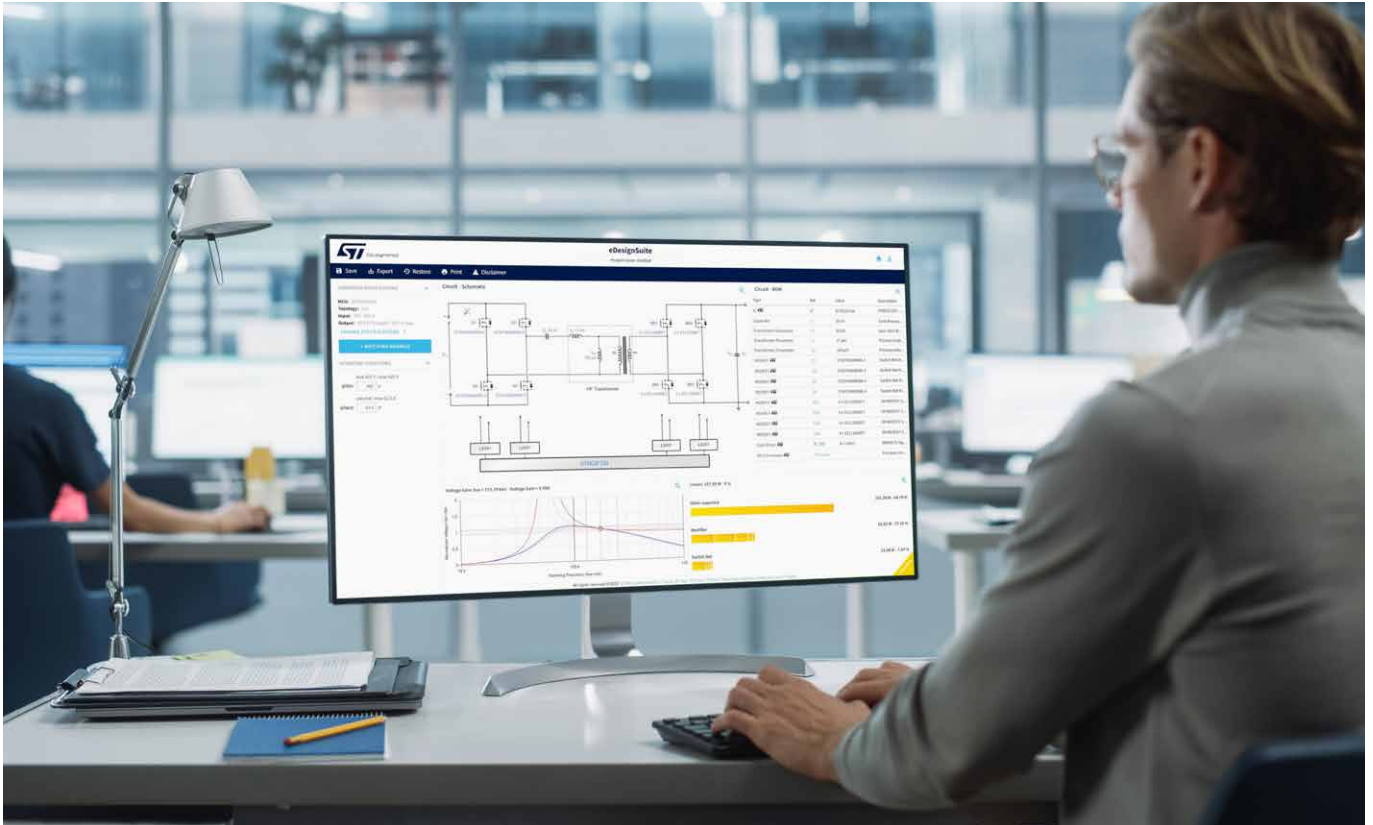




VI Power M0-9  
smart high-side drivers  
add an extra mile  
to your driving experience





For over three decades, our relentless innovation in **Vertical Intelligent Power (VIPower)** technology has been at the forefront of creating essential products that drive the future of sustainable transportation.

Our latest generation, the VIPower M0-9 family, includes intelligent multi-channel high-side drivers, divided into two distinct product series:

- **Parallel M0-9 series:** Features parallel inputs and is housed in a PowerSSO-16 package.
- **SPI-driven M0-9 series:** Utilizes a Serial Peripheral Interface (SPI) and is housed in a QFN (6 x 6 mm) package.



## FOSTERING CAR ELECTRIFICATION

The VIPower M0-9 high-side drivers embrace the future of automotive technology, playing a pivotal role in managing power distribution, ensuring safety, and enhancing the overall performance of vehicles.

With accurate sensing features, sophisticated protections, and advanced diagnostics, they elevate the benchmark for automotive smart drivers.

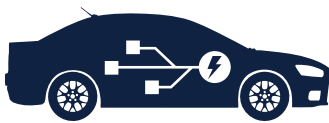
VIPower M0-9 smart switches are automotive-grade AEC-Q100 certified, ensuring high reliability and quality levels.



## HANDLING POWER WITH INTELLIGENCE

Smart switches based on VIPower technology are designed to control a wide range of loads for automotive applications and support the evolving zonal architectures of smart vehicles, ensuring seamless integration into next-generation automotive designs.

### General applications for both VIPower M0-9 series



Energy management, power distribution, and protected supply for ADAS systems.

## PROTECTION AND DIAGNOSTICS

The VIPower M0-9 high-side drivers provide unmatched flexibility with both parallel and SPI-driven inputs. Featuring advanced protection and diagnostics, they ensure exceptional versatility and numerous benefits, making them an ideal choice for modern automotive applications.



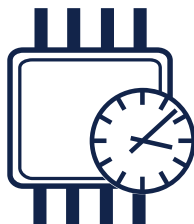
Ruggedness



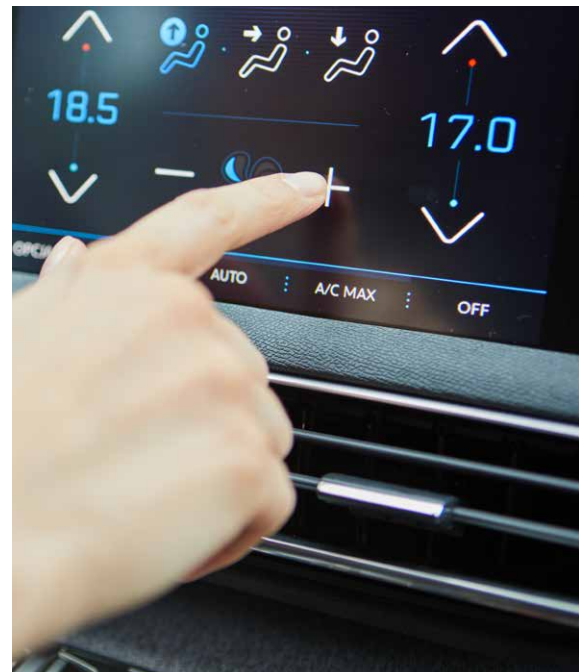
Accuracy



Flexibility




Monitoring




## COMPREHENSIVE PORTFOLIO

### Parallel VIPower M0-9 series

Product	Package	Channels	On-resistance per channel (mΩ)	Current limitation (A)	Ready-to-use easyboards
<a href="#">VN9004AJ</a>	PowerSS0-16 	1	4.2	108.0	<a href="#">EV-VN9004AJ</a>
<a href="#">VN9006AJ</a>		1	6.0	82.0	<a href="#">EV-VN9006AJ</a>
<a href="#">VN9008AJ</a>		1	8.0	81.6	<a href="#">EV-VN9008AJ</a>
<a href="#">VN9012AJ</a>		1	12.0	63.0	<a href="#">EV-VN9012AJ</a>
<a href="#">VN9016AJ</a>		1	16.0	50.6	<a href="#">EV-VN9016AJ</a>
<a href="#">VND9008AJ</a>		2	9.4	67.0	<a href="#">EV-VND9008AJ</a>
<a href="#">VND9012AJ</a>		2	12.0	63.0	<a href="#">EV-VND9012AJ</a>
<a href="#">VND9016AJ</a>		2	16.0	50.6	<a href="#">EV-VND9016AJ</a>
<a href="#">VND9025AJ</a>		2	25.0	35.0	<a href="#">EV-VND9025AJ</a>
<a href="#">VNQ9025AJ</a>		4	25.0	30.0	<a href="#">EV-VNQ9025AJ</a>
<a href="#">VNQ9080AJ</a>		4	86.0	13.6	<a href="#">EV-VNQ9080AJ</a>

### SPI-based VIPower M0-9 series

Product	Package	Channels	On-state resistance	Reverse ON	Ready-to-use easyboards
<a href="#">VN9D5D20FN</a>	QFN 6x6 	4	2x6.7 mΩ + 2x20 mΩ	N	<a href="#">EV-VN9D5D20FN</a>
<a href="#">VN9D5D20F</a>		4	2x6.7 mΩ + 2x20 mΩ	Y	<a href="#">EV-VN9D5D20F</a>
<a href="#">VN9D7D20F</a>		4	2x8.4 mΩ + 2x21.6 mΩ	Y	<a href="#">EV-VN9D7D20F</a>
<a href="#">VN9D30Q100F</a>		6	2x33 mΩ + 4x90 mΩ	N	<a href="#">EV-VN9D30Q100F</a>
<a href="#">VN9Q25D70F</a>		6	4x27 mΩ + 2x70 mΩ	Y	<a href="#">EV-VN9Q25D70F</a>
<a href="#">VN9E30F</a>		6	6x30 mΩ	Y	<a href="#">EV-VN9E30F</a>

## DEVELOPMENT TOOLS

ST provides an extensive array of support tools designed to help engineers quickly and efficiently develop optimal solutions for their applications.

### Evaluation boards

To assist developers in assessing products without incurring the costs, time, and resources usually required to design a custom circuit board, ST introduces the Easyboard concept. Easyboards are straightforward, economical evaluation tools that connect a VIPower product directly to a load. Additionally, ST provides a variety of evaluation boards tailored for driving different loads.

For more information and to explore the available options, visit our [Automotive IC evaluation board](#)



### TwisterSIM

TwisterSIM is a distinctive electro-thermal simulator that aids in reducing the design solution cycle by facilitating complex engineering evaluations. It includes an interactive selector that assists in quickly identifying the appropriate high-side drivers; it evaluates load compatibility, analyzes the impact of fault conditions, examines diagnostic behavior, assesses dynamic thermal performance, and more.

For a comprehensive experience and to delve into the capabilities of devices in VIPower technology, visit our [TwisterSIM - Dynamic Electro-Thermal simulator](#)



For more information on ST products and solutions, visit [www.st.com](http://www.st.com)

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