



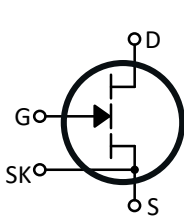
# CoolGaN™ Drive 600 V/700 V G5



# The CoolGaN™ Drive family of Infineon's CoolGaN™ portfolio

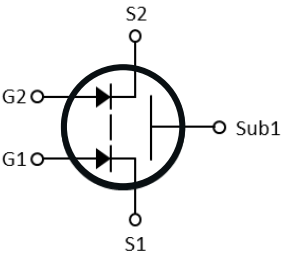
## CoolGaN™ Transistor

Infineon's CoolGaN™ Transistors are normally-off devices, ranging from 60 V up to 700 V. This technology is derived from years of Infineon innovation, resulting in the industry's largest intellectual property portfolio.



## CoolGaN™ BDS

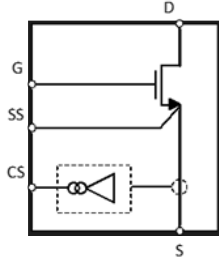
This family of monolithic bidirectional switches (BDS) is based on Infineon CoolGaN™ Transistor technology. The BDS device blocks voltages in both directions. Options will include 40 V, 650 V, and 850 V.



Coming soon

## CoolGaN™ Smart

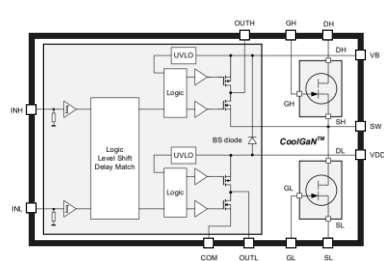
Family of CoolGaN™ Transistors with industry-leading integrated utilities, including lossless current sense, range of protection functionalities, and more.



Coming soon

## CoolGaN™ Drive

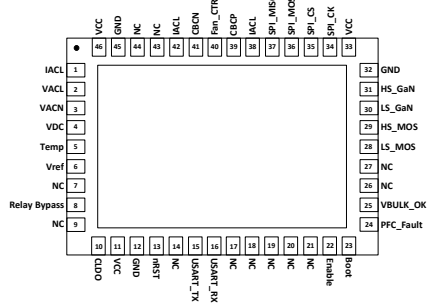
Infineon's CoolGaN™ Drive family of single-switch and half-bridge solutions consists of integrated high-performance CoolGaN™ Transistors with intelligent gate drivers in a variety of package options, resulting in a robust, high-performing portfolio.



Coming soon

## CoolGaN™ Control

The CoolGaN™ Control family of power IC solutions features industry-leading CoolGaN™ Transistors combined with Infineon's EZ-PD™ controllers, resulting in maximum efficiency and power density while reducing manufacturing complexity and total system cost.



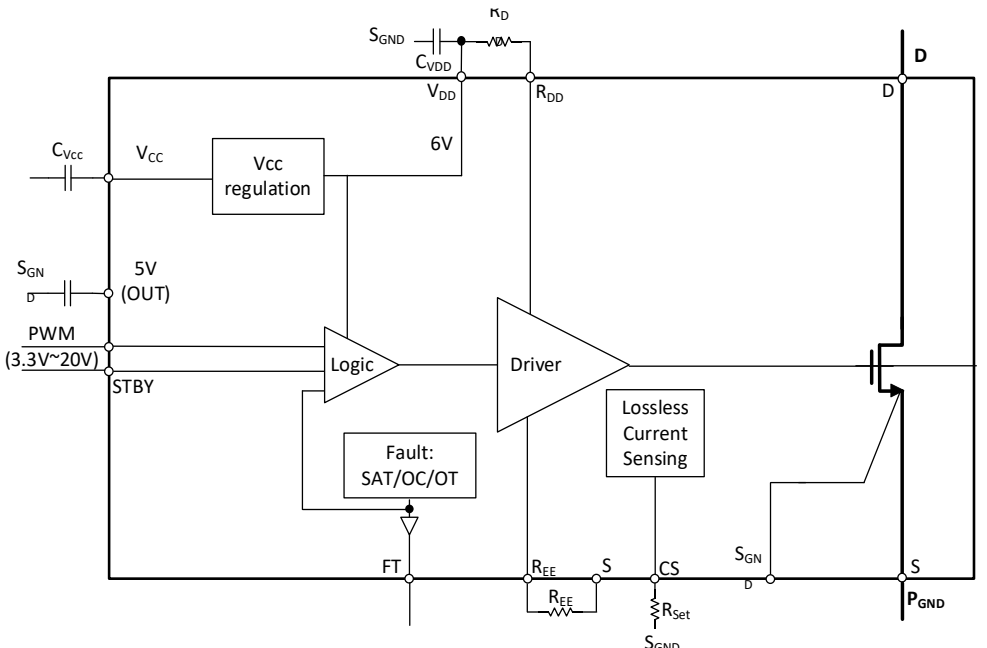
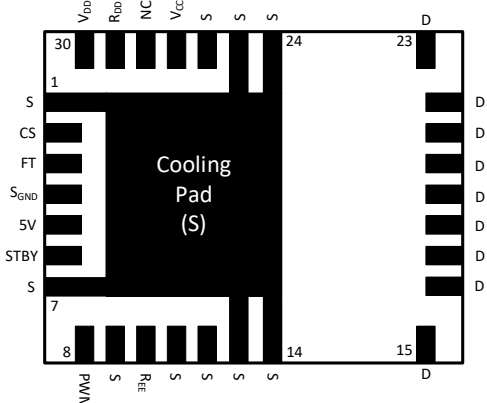
# CoolGaN™ Drive 700 V G5 – single-switch solutions

## Product description

- Integrated **gate driver and loss-less current sense**
- Adjustable turn-on and turn-off dv/dt
- OCP/OTP/SCP
- Auto standby low Iq mode with fast wake up
- Wide V<sub>CC</sub> range
- 55 mΩ – 500 mΩ in QFN 5x6 and 6x8

## System benefits

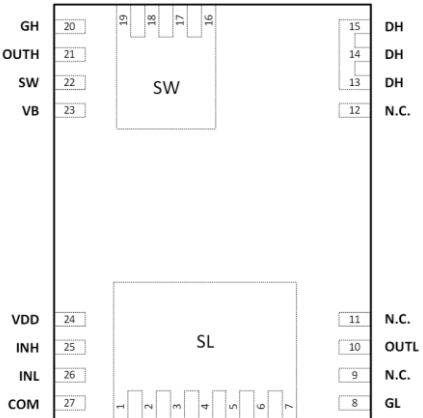
- **Improved efficiency** by removing the sense resistor
- **System cost saving** with simplified biasing need
- **Meet stringent system standby spec** with the ultra-low standby power



# CoolGaN™ Drive HB 600 V G5 – half-bridge solutions

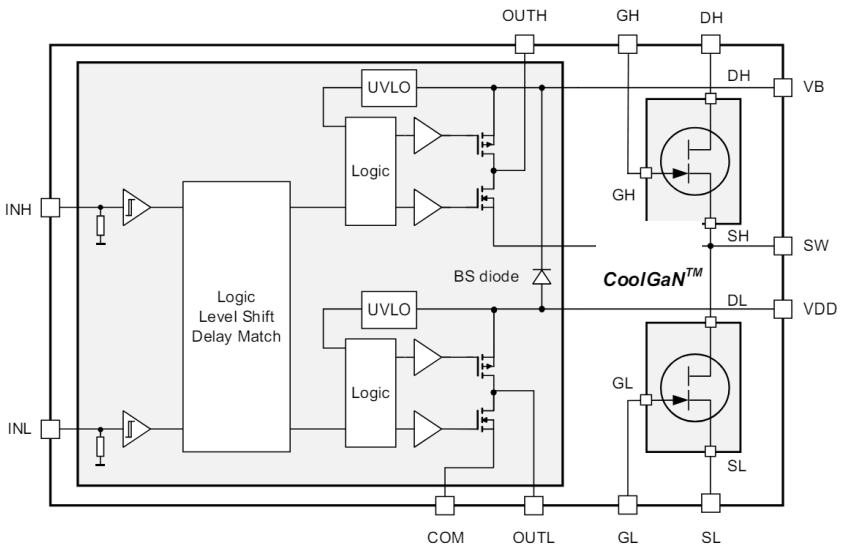
## Product description

- Two CoolGaN™ Transistors 650 V G5 with integrated high- and low-side gate drivers
- Integrated ultrafast low-resistance bootstrap diode
- Fast input-to-output propagation (typ. 98 ns) with extremely small channel-to channel mismatch
- 140 mΩ – 500 mΩ in low-cost 6x8 mm LGA package






## System benefits

- **Optimized** for motor drive and SMPS applications
- **Maximize performance** with application-configurable turn-on and turn-off speed
- **Cost and size savings** via integrated driver and bootstrap diode



# CoolGaN™ Drive G5 portfolio overview

$R_{DS(on,typ)}$ [mΩ]	Single		Half-bridge
Package			
	<b>PQFN 5x6</b> (PG-VIQFN-24-1)	<b>PQFN 6x8</b> (PG-VIQFN-30-1)	<b>LGA 6x8</b> (PG-TFLGA-27-2)
<b>500</b>	IGI70N500A2PS	IGI70N500A2MS	IGI60L5050B1M
<b>270</b>	IGI70N270A2PS	IGI70N270A2MS	IGI60L2727B1M
<b>200</b>	IGI70N200A2PS	IGI70N200A2MS	
<b>140</b>	IGI70N140A2PS	IGI70N140A2MS	IGI60L1414B1M
<b>100</b>		IGI70N100A2MS	
<b>70</b>		IGI70N070A2MS	
<b>55</b>		IGI70N055A2MS	


 For more information and to request samples, contact us [here](#).

