

## 产品简介

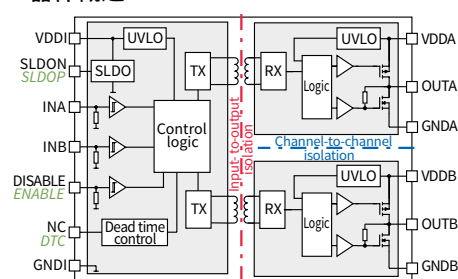
# 双通道隔离式EiceDRIVER™系列

时长精确, 稳定, 快速, 稳健, 双通道, 功能隔离和加强隔离的MOSFET栅极驱动器IC

### 概述

双通道隔离式EiceDRIVER™产品系列专为高性能电源转换应用而设计。非常强大的4 A/8 A拉/灌电流双通道栅极驱动器提高了CoolMOS™和OptiMOS™ MOSFET半桥的效率。37 ns的低传输延迟, 加上在不同温度和生产条件下的高度精确和稳定的时长, 使得在电隔离功率级或多相/多级拓扑结构实现进一步的效率提升。提供的功能隔离和加强隔离驱动器在不同封装中可使其非常适合初级侧和(安全)次级侧控制。栅极驱动器输出具有较高的5A反向电流能力和150 V/ns的CMTI稳健性, 适用于高 dv/dt 电源回路。对于较慢的开关或驱动较小的MOSFET, 也可提供1 A/2 A峰值电流产品型号。

### 器件概述



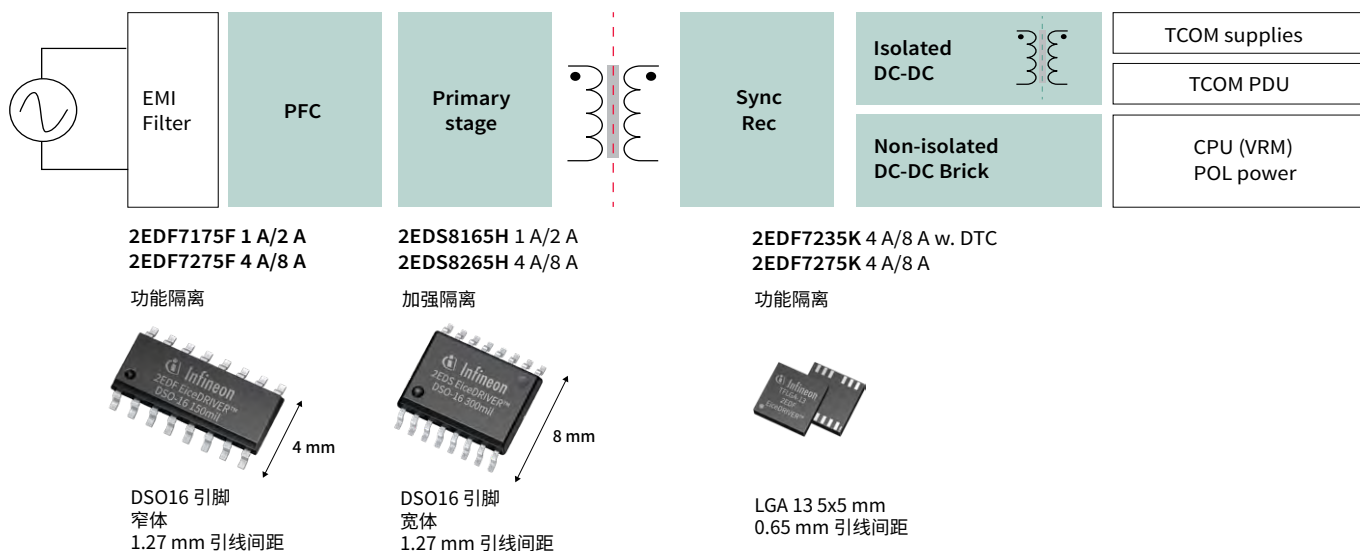
### 产品系列概述

产品关键性能	产品优点	系统优势
<b>快速电源开关, 时序精确</b> <ul style="list-style-type: none"> <li>提供4 A/8 A 和1 A/2 A拉/灌电流</li> <li>37 ns标准传输延迟, 3 ns的通道到通道偏移</li> <li>最大传输延迟偏差~14 ns</li> </ul>	<b>效率增加, 损失减少</b> <ul style="list-style-type: none"> <li>快速准确的开关, 降低了半桥的开关损耗</li> <li>适用于新型数字, 快速高分辨率PWM控制, 包括轻负荷优化</li> </ul>	<b>实现更高的系统效率和更高的功率密度设计</b>
<b>针对区域和系统BOM进行了优化</b> <ul style="list-style-type: none"> <li>隔离和驱动器集成封装</li> <li>低功耗, 低通电阻</li> <li>输出级具有5 A反向电流能力</li> </ul>	<b>更小的外形封装和改善的热性能</b> <ul style="list-style-type: none"> <li>LGA为1mm, DSO为2.3 mm的封装高度而脉冲变压器 &gt; 1cm</li> <li>消除栅极驱动器输出侧的两个保护二极管</li> </ul>	<b>改善长期成本竞争地位, 整合和大规模制造能力</b>
<b>抗开关噪声的稳健性</b> <ul style="list-style-type: none"> <li>浮动驱动器能够处理大的感应电压过冲和下冲</li> <li>很好的共模瞬态抗扰度CMTI &gt; 150 V/ns</li> <li>用于开关保护的欠压保护功能</li> </ul>	<b>保护和安全管理</b> <ul style="list-style-type: none"> <li>非常适合用于具有快速开关瞬态的高功率设计</li> <li>可靠的CT无芯变压器PWM信号链, 用于接通高压侧MOSFET</li> </ul>	<b>通过改善正常和非正常磁场(电网)条件下电源开关的安全操作, 延长终端产品的使用寿命</b>
<b>输出到输出通道隔离</b> <ul style="list-style-type: none"> <li>功能级电隔离</li> </ul>	<b>灵活的配置</b> <ul style="list-style-type: none"> <li>HS+LS, HS+HS, LS+LS 或1xHS上的2x I<sub>max</sub></li> </ul>	<b>通过接地隔离, 驱动器接近MOSFET或使用4引脚Kelvin源MOSFET降低EMI</b>
<b>输入到输出通道隔离</b> <ul style="list-style-type: none"> <li>功能和加强电隔离</li> </ul>	<b>监管安全</b> <ul style="list-style-type: none"> <li>初级侧控制的功能隔离</li> <li>次级侧控制的加强隔离</li> </ul>	<b>通过组件(VDE884-10, UL1577)和系统(IEC60950, IEC62386)证书简化安全认证</b>

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## 系统应用图



## 产品组合

零件编号	可订购部件号 (OPN)	封装	PWM 输入类型	驱动器拉/ 灌电流	栅极 驱动器 UVLO	输入到输出隔离				死区时 间控制
						隔离类型	等级	浪涌测试	安全认证*	
2EDF7175F	2EDF7175FXUMA1	NB-DSO16 10 x 6 mm	双模式 (IN_A, IN_B)	1 A/2 A	4 V	功能隔离	V <sub>IO</sub> = 1.5 kV <sub>DC</sub>	不适用	不适用	否
2EDF7275F	2EDF7275FXUMA1			4 A/8 A						
2EDS8165H	2EDS8165HXUMA1	WB-DSO16 10.3 x 10.3 mm		1 A/2 A	8 V	加强隔离*	V <sub>IOTM</sub> = 8 kV <sub>peak</sub> (VDE0884-10) V <sub>ISO</sub> = 5.7 kV <sub>rms</sub> (UL1577)	V <sub>IOSM</sub> = 10 kV <sub>peak</sub> (IEC60065)	VDE0884-10 UL1577 IEC60950 IEC62368 CQC	
2EDS8265H	2EDS8265HXUMA1			4 A/8 A						
2EDF7235K**	2EDF7235KXUMA1	LGA13 5.0 x 5.0 mm		4 A/8 A	4 V	功能隔离	V <sub>IO</sub> = 1.5 kV <sub>DC</sub>	不适用	不适用	是
2EDF7275K	2EDF7275KXUMA1									否

\*认证即将发布

\*\*从2018年第四季度开始提供

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