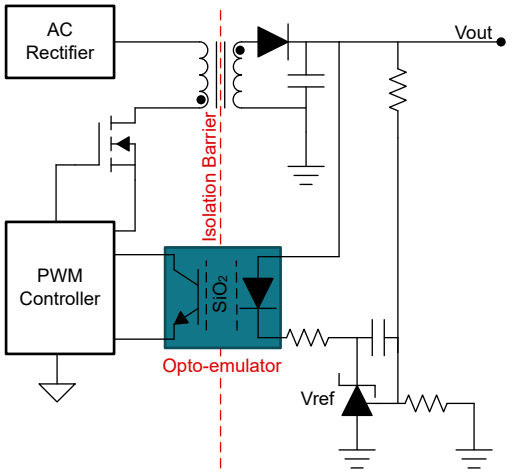
Product Overview

Isolating Feedback Signals in Power Supplies



Example Isolated Flyback Block Diagram Using an Opto-emulator

Design Considerations

- [FAQ] What is an Opto-emulator?
- [FAQ] Opto-Emulator FAQ's
- [FAQ] What are the benefits of Opto-emulators vs. Optocouplers?
- Allows isolated feedback for power-supply regulation
- Performance upgrade from traditional optocouplers
- Allows tight current transfer ratio (CTR) performance and no light-emitting diode (LED) aging. Uses TI's Silicon Dioxide isolation technology.
- Protects low-voltage parts in a system from high-voltage circuits
- Introduction to Opto-Emulators
- Opto-emulators explained: Why you should upgrade your optocoupler technology

Need additional assistance? Ask our engineers a question on the *TI E2E™ Isolation Support Forum*.

Recommended Parts

Analog Output Opto-Emulators

Catalog Part Number	Automotive Part Number	Input Type	Output Type	V_F (MAX)	CTR	Pin-to-Pin Optocouplers
ISOM8110	ISOM8110-Q1	DC Input	Open Collector	1.4V	100% to 155%	HCPL-181 ACPL-217 LTV356T LTV357T TLP185 TLP181 PS2701A PS2811-1 EL816 EL3H7 and more
ISOM8111	ISOM8111-Q1			1.4V	150% to 230%	
ISOM8112	ISOM8112-Q1			1.4V	255% to 380%	
ISOM8113	ISOM8113-Q1			1.4V	375% to 560%	
ISOM8115	ISOM8115-Q1	Bidirectional DC Input		1.5V	100% to 155%	
ISOM8116	ISOM8116-Q1			1.5V	150% to 230%	
ISOM8117	ISOM8117-Q1			1.5V	255% to 380%	
ISOM8118	ISOM8118-Q1			1.5V	375% to 560%	

To find a pin-to-pin alternative to the optocouplers in your design, search TI's *cross reference tool*.
For more opto-emulators, browse through the *online parametric tool*.

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265