

Product Brief

Synchronous rectification controller for SMPS

IR1161L and IR11688S

Infineon's new synchronous rectification (SR) controller family for switching mode power supply (SMPS) meets the new 2016 standards set forth by the U.S. DoE and EU CoC demanding higher efficiency from external power supplies. Up to 3 percent efficiency improvement is required to meet the new standards. Together with Infineon's best-in-class OptiMOS™ and StrongIRFET™, IR1161L and IR11688S are here to provide a simple way to drive the MOSFETs and therefore improve efficiency by 1 to 3 percent depending on output loads. IR1161L is targeting flyback SMPS especially charger and adapter applications while IR11688S is focusing on LLC SMPS applications.

Key features

- > DCM, CrCM/QR mode capable
- > 200 V direct sensing
- > SOT-23 package
- > Cycle-by-cycle MOT protection
- > Low quiescent current
- > Programmable MOT

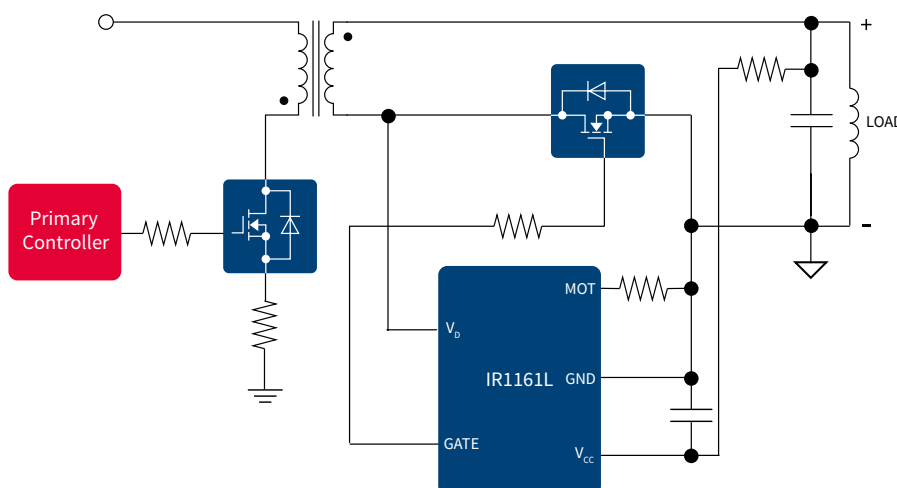
Applications

- > Flyback SMPS for chargers and adapters

IR1161L

The IR1161L provides direct sensing eliminating the need for external voltage dividers. It is available in a compact SOT-23 package, which is 70 percent smaller than the popular SOIC-8 package. The programmable minimum on time (MOT) protection ensures reliable operation from no load to full load.

Typical application block diagram for IR1161L



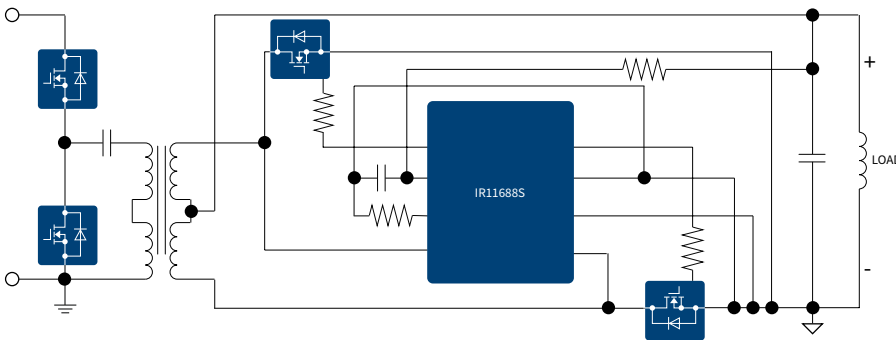
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IR11688S

The IR11688S offers low quiescent current which meets the new 2016 efficiency standard requirements. The IR11688S provides programmable MOT protection to ensure reliable operation from no load to full load.

Typical application block diagram for IR11688S



Key features

- > 200 V direct sensing
- > Cycle-by-cycle MOT protection
- > Low quiescent current
- > Programmable MOT

Applications

- > LLC SMPS for televisions, desktops, silver boxes, microservers



Product portfolio

Part number	Topology	Package	V_{HV} [V]	I_{o+} / I_{o-} [A]
IR1161L	Flyback SR	SOT-23	200	1 / -2.5
IR11688S	LLC SR	SOIC-8	200	1 / -4.0

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