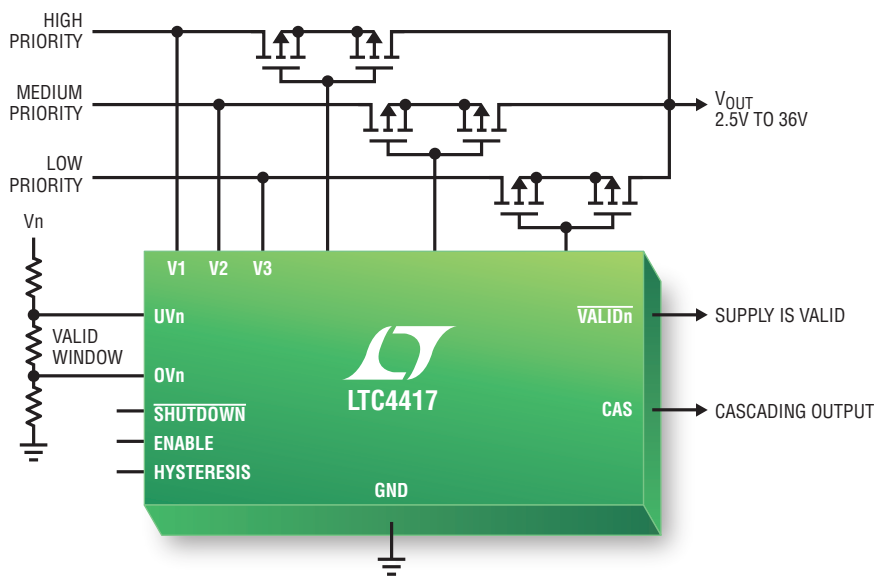


PowerPath Controllers, Ideal Diodes

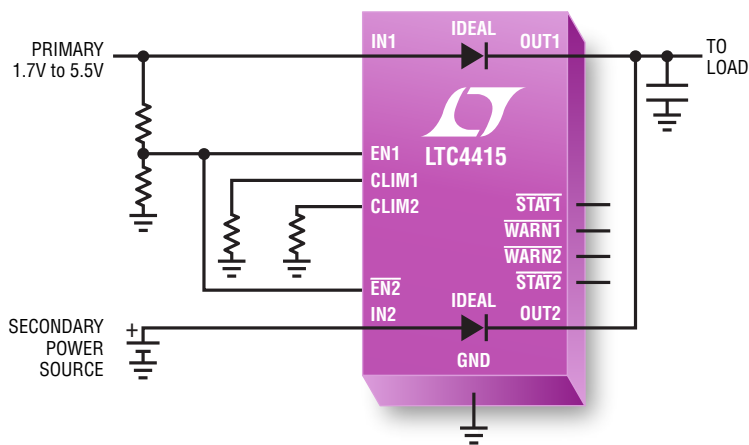
PowerPath™ controllers simplify power source selection in portable and high availability electronics employing multiple, disparate inputs such as wall adapters and batteries. Selection is either by highest voltage, as in a diode-OR, or by highest priority. Linear Technology's PowerPath controllers utilize P-channel MOSFETs as switches and ideal diodes. By dropping significantly less forward voltage than a regular diode, an ideal diode MOSFET conserves power and voltage headroom, critical for low voltage, battery-equipped systems. The lower drop leads to cooler operation, eliminating bulky heat sinks.

LTC®4417 Triple Supply Prioritized PowerPath Controller

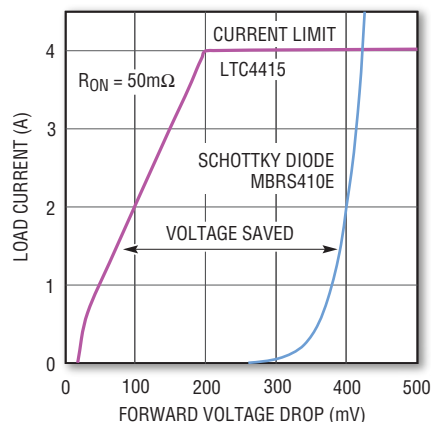


- Connects Highest Priority Valid Supply to Output
- 256ms Long, 1.5% Precise Overvoltage and Undervoltage Validation
- <math><1\mu\text{A}</math> Draw from Supplies Below V_{OUT}
- -42V Reversed Input Protection
- Blocks Reverse and Cross Conduction While Minimizing Output Droop

LTC4415 Dual Monolithic Ideal Diodes with Adjustable 4A Limit



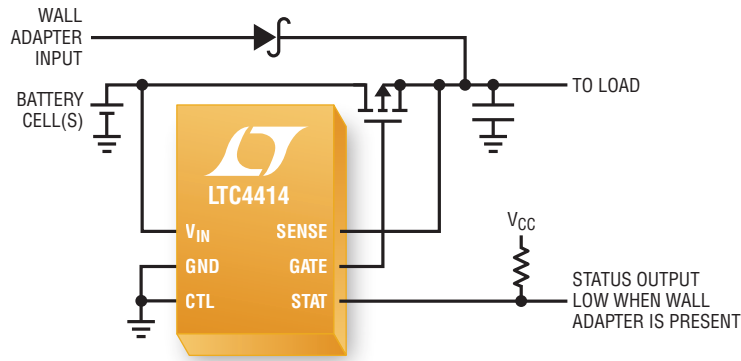
- 15mV Forward Turn-On Voltage
- Smooth Oscillation-Free Diode-OR Switchover
- Load Current Monitor
- Precision Enable Thresholds for Prioritized Switchover
- Current/Thermal Limit Warnings, Status Outputs



LT, LT, LTC, LTM, Linear Technology and the Linear logo are registered trademarks and PowerPath is a trademark of Linear Technology Corporation. All other trademarks are the property of their respective owners.

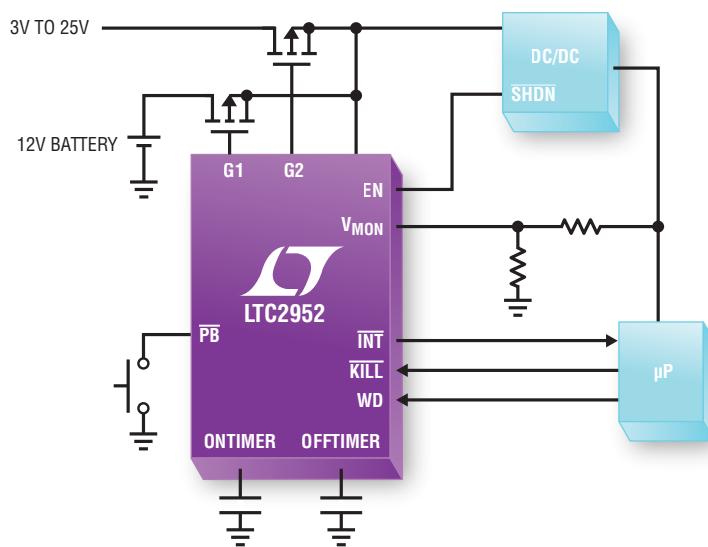
www.BDTIC.com/Linear

LTC4414 3V to 36V Ideal Diode Controller for Large PFETs



- Low Loss Replacement for Power Schottky Diode
- MOSFET Gate Protection Clamp
- -14V Reversed Input Protection
- Off Control Input
- Status Output Drives Auxiliary PFET

LTC2952 Pushbutton and Dual Ideal Diode-OR Controller with System Supervisor



- Dual Input Ideal Diode-OR Control
- Pushbutton On/Off Control of Downstream DC/DC Converter
- Adjustable On/Off Debounce Timers
- Simple Interface for Graceful Microprocessor Shutdown
- ±8kV HBM ESD on Pushbutton Input

Linear Technology PowerPath Controllers

Part Number	V _{IN} Range (V)	Max Current	I _Q (µA)	Function	Packages (mm)
LTC4411	2.6 to 5.5	2.6A	40	17mV Turn-On, 140mΩ Ideal Diode with 2.6A Limit	TSOT23-5
LTC4412HV	2.5 to 36	FET	18	Ideal Diode Controller with Off Control Input	TSOT23-6
LTC4413-1/ LTC4413-2	2.5 to 5.5	2.6A	40	18mV Turn-On, 140mΩ Dual Ideal Diodes with 2.6A Limit	3 × 3 DFN-10
LTC4414	3 to 36	FET	36	Ideal Diode Controller for Large PFETs	MSOP-8
LTC4415	1.7 to 5.5	4A	44	15mV Turn-On, 50mΩ Dual Ideal Diodes with Adjustable 4A Limit	3 × 5 DFN-16, MSOP-16E
LTC4416	3.6 to 36	FET	70	Dual Ideal Diode Controller with Enable Inputs	MSOP-10
LTC4417	2.5 to 36	FET	28	Triple Supply Prioritized PowerPath Controller	4 × 4 QFN-24, SSOP-24
LTC2952	2.7 to 28	FET	65	Pushbutton and Dual Ideal Diode-OR Controller, System Supervisor	4 × 4 QFN-20, TSSOP-20