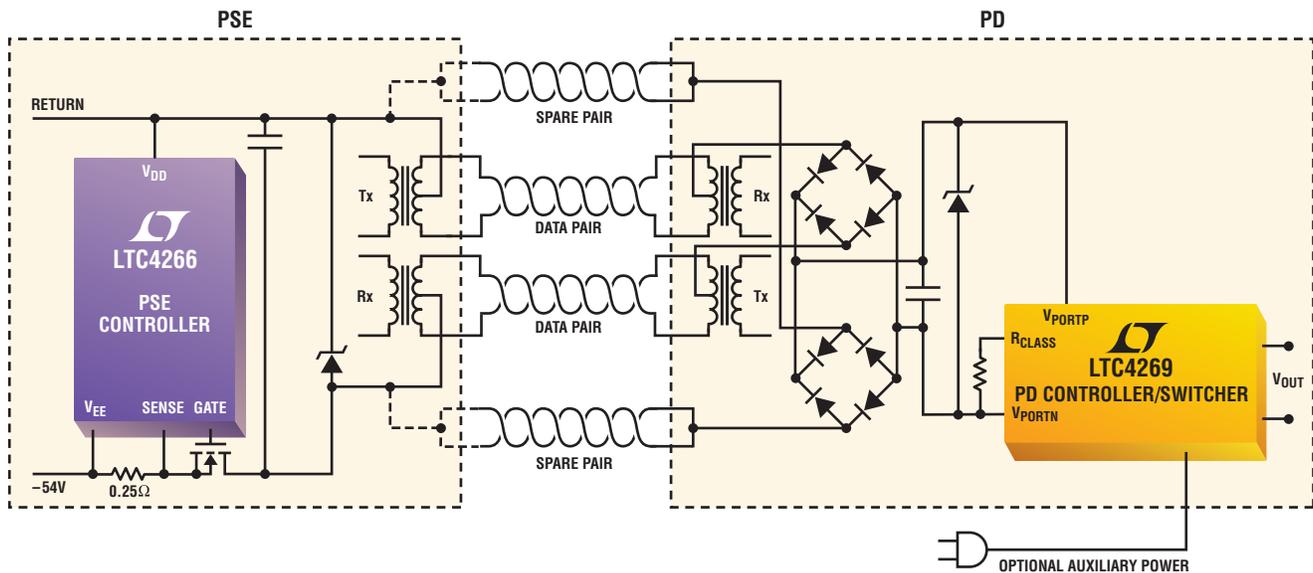


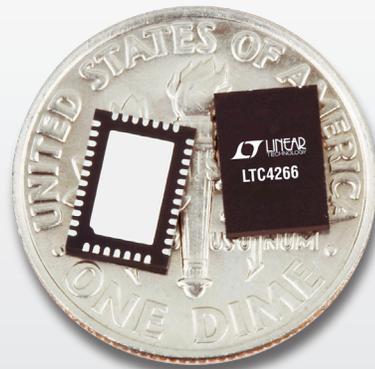
PoE+ for the Power Hungry



Linear Technology now offers a family of Power over Ethernet interface controllers for emerging PoE+ applications, including higher performance wireless access points, PTZ security cameras and RFID readers. The LTC[®]4266 quad and LTC4274 single PSEs, and LTC4265, LTC4269, LTC4278 PDs are IEEE 802.3at compliant solutions that support the new PoE+ standard with 25.5W of PD power and 2-Event Classification signaling. This new family is fully backward compatible with IEEE 802.3af and unlocks the potential for high power PoE applications.

LTC4266 Quad IEEE 802.3at PSE Controller

- Four Independent PSE Channels
- Compliant with IEEE 802.3at Type 1 and 2
- Lowest Power Dissipation in the Industry
 - 130mW/Port at 600mA (Including R_{SENSE} and FET)
- Advanced Power Management
 - 8-Bit Programmable Current Limit (I_{LIM})
 - 7-Bit Programmable Overload Current Limit (I_{CUT})
 - Fast Shutdown
 - 14.5-Bit Port Current/Voltage Monitoring
 - 2-Event Classification
- Very High Reliability 4-Point PD Detection:
 - 2-Point Forced Voltage
 - 2-Point Forced Current
- High Capacitance Legacy Device Detection
- LTC4259A-1 and LTC4258 Pin and Software Compatible
- Supports 2-Pair and 4-Pair Output Power
- 1MHz I²C Compatible Serial Control Interface
- Midspan Backoff Timer
- Supports Proprietary Very High Power Up to 100W
- Available in 38-Pin 5mm × 7mm QFN and 36-Pin SSOP Packages



Smallest-in-Industry Quad PSE

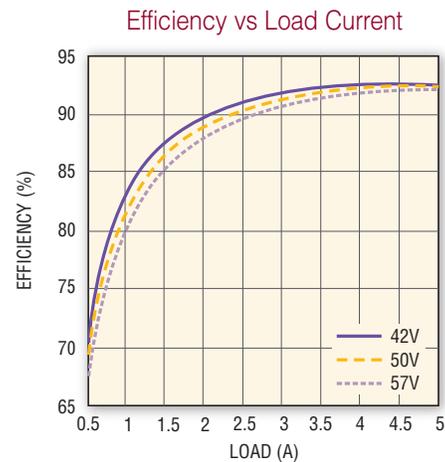


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LTC4269-1/LTC4269-2/LTC4278 IEEE 802.3at PD Controllers with Integrated Switchers

- 25.5W IEEE 802.3at Compliant (Type 2) PD
- 2-Event Classification Signaling
- Integrated State-of-the-Art Synchronous No-Opto Flyback Controller (LTC4269-1, LTC4278) or Synchronous Forward Controller (LTC4269-2)
- Flexible Integrated Auxiliary Power Support
- Superior EMI Performance
- Robust 100V 0.7Ω (Typ) Integrated Hot Swap™ MOSFET
- IEEE 802.3at High Power Available Indicator
- Integrated Signature Resistor, Programmable Class Current, UVLO, OVLO and Thermal Protection
- Short-Circuit Protection with Auto-Restart
- Programmable Soft-Start and Switching Frequency
- Complementary Power Good Indicators
- Thermally Enhanced 7mm × 4mm DFN Package

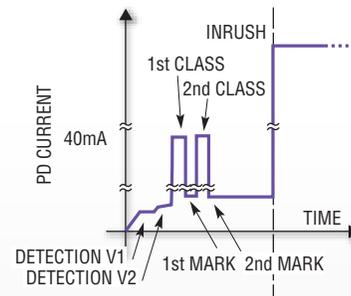
LTC4269-1, LTC4278 = Simple & Cost-Effective
LTC4269-2 = Highest Efficiency



LTC4265 IEEE 802.3at PD Controller with 2-Event Classification Recognition

- IEEE 802.3at Powered Device (PD) Controller
- 2-Event Classification Signaling
- Programmable Classification Current
- Flexible Integrated Auxiliary Power Support
- Rugged 100V Onboard MOSFET with 100mA Inrush Current Limit
- Complementary Power Good Outputs
- Onboard Signature Resistor with Optional Signature Corrupt
- Comprehensive Thermal Protection
- Undervoltage and Overvoltage Lockout
- Available in Compact 12-Pin 4mm × 3mm DFN Package

Current Response to a PSE 2-Event Classification Voltage Probe



PoE+ Portfolio: Up to 25.5W-Compliant and 100W Proprietary Power

Info & Samples

Part Number	PSE/PD	Channels	Description	Package (mm)
LTC4265	PD	1	IEEE 802.3at High Power PD Interface Controller	4 × 3 DFN-12
LTC4269-1	PD	1	IEEE 802.3at High Power PD Interface Controller and Synchronous No-Opto Flyback Switching Regulator with Auxiliary Support	7 × 4 DFN-32
LTC4269-2	PD	1	IEEE 802.3at High Power PD Interface Controller and Synchronous Forward Converter with Auxiliary Support	7 × 4 DFN-32
LTC4278	PD	1	IEEE 802.3at High Power PD Interface Controller with Synchronous No-Opto Flyback Switching Regulator and 12V Auxiliary Support	7 × 4 DFN-32
LTC4266	PSE	4	Quad IEEE 802.3at Power over Ethernet Controller	5 × 7 QFN-38, SSOP-36
LTC4274	PSE	1	IEEE 802.3at Single Power over Ethernet Controller	5 × 7 QFN-38

Telecom, Datacom and Industrial Power Products Brochure



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