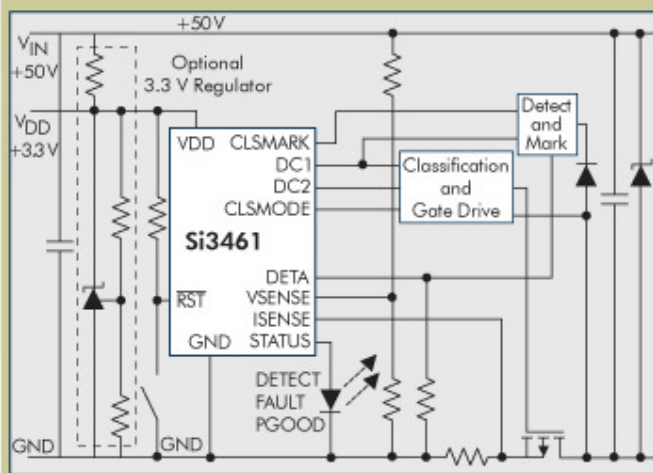


## Power Sourcing Equipment

### Si3461 Single Port PoE+ PSE

The Si3461 is an IEEE 802.3at™ (D4.2) compliant, single-port Power over Ethernet (PoE) controller for embedded power sourcing equipment (PSE) applications. The Si3461 is designed to source a single PSE port with up to 30 W for higher power PDs, such as multi-radio wireless access points, VoIP phones, Pan-Tilt-Zoom (PTZ) video surveillance cameras, Point-of-Sale terminals, and industrial automation equipment.

### Block Diagram



### Features

- Single port PoE+ PSE
- IEEE 802.3at™ compliant
- Sources up to 30 W
- Autonomous operation requires no host processor or software
- Pin selectable operating modes
- Classification-based power management
- Robust 3-point detection algorithm
- 2-Event classification
- IEEE-compliant disconnect
- Inrush current control
- Short-circuit output fault protection
- UNH Interoperability Lab test reports
- -40 to +85 °C
- 3 x 3 mm, 11-pin QFN

### Applications

- Endpoints (switches)
- Midspans (power injectors)
- Embedded PSEs
- Cable modem gateways
- IP gateways
- DSL gateways
- PON gateways
- WiMAX base stations
- Wireless LAN access points
- FTTH media converters

The Si3461 simplifies development efforts, reduces system costs and eliminates specification compliance challenges for designers of a broad range of emerging PoE+ applications, such as security and surveillance equipment, in-home gateways, set-top boxes, cable modems, DSL modems and Voice over IP systems.

Fully IEEE 802.3at (D4.2) compliant, the Si3461 is a single-port power management controller for Power Sourcing Equipment (PSE). The IEEE-required Powered Device (PD) detection feature uses a robust 3-point algorithm to avoid false detection events. The Si3461's reference design kit also provides full IEEE-compliant classification and PD disconnect. Intelligent protection circuitry includes input under voltage lockout (UVLO), classification-based current limiting, and output short circuit protection. The Si3461 is designed to operate completely independently of host processor control. An LED status signal is provided to indicate the port status, including detection, power good, and output fault event information. The Si3461 is pin programmable to support four available power levels, endpoint and mid-span applications, and auto-retry or restart after disconnect functions. A comprehensive reference design kit is available (Si3461-KIT), including a complete schematic, layout files and bill-of-materials (BOM) for an IEEE-compliant PSE solution.