

Product Overview

XS2186 is an 8-ch Power Sourcing Equipment (PSE) power controller designed for IEEE® 802.3at/af compliant PSE.

This device provides Power Device (PD) detection, classification, current limiting, and load disconnection detection. with dual-event classification.

The device also supports auto and manual power-on mode. In manual mode, the device supports full software control. The built-in EEPROM controller allows for external EEPROM to configure the chip's initialization, which is automatically loaded in auto mode, enhancing application design flexibility.

Its single power supply delivers up to 30W per port.

The I2C interface for software configuration and programming provides real-time data on port current, voltage, and power. The comprehensive programmability enhances design flexibility for various applications. Moreover, its field diagnostic functionality meets the requirement for various non-standard system applications.

Built-in serial LED controller to indicate port status or overload conditions in real-time.

XS2186 has compact QFN48 (7 mm × 7 mm) power package, operating in an extended temperature range (from -40 °C to 85 °C).

Features

- ◆ Compatible with IEEE 802.3at/af
- ◆ Current sensing resistor of 0.1 Ω
- ◆ Built-in power MOSFET
- ◆ Up to 30 W per port
- ◆ 10-bit real-time monitoring of port current, voltage, and temperature
- ◆ I2C control interface, supporting up to 16 chips in expansion
- ◆ Supports DC load disconnection detection
- ◆ Built-in serial LED controller
- ◆ Temperature monitoring and over-temperature protection
- ◆ Integrated EEPROM controller for external EEPROM initial configuration
- ◆ 48-PIN QFN (7 mm × 7 mm) power package

Applied for

- ◆ Switcher/Router
- ◆ Midspan power injection

Order Information

PART	TEMP RANGE	PIN-PACKAGE
XS2186	-40 °C to 85 °C	QFN7×7-48

Typical Application Circuit

