PSE controller with integrated MOSFET delivers up to 40W to PDs

Maxim Integrated Products introduces the MAX5971A single-port, power-sourcing equipment (PSE) controller for IEEE(R) 802.3af/at-compliant, high-power, power-over-Ethernet (PoE+) applications. This device integrates a 0.5ohm power MOSFET and sense resistor to save space and cost, while delivering up to 40W/port for powered devices (PDs) such as IP phones, IP cameras, wireless LAN access points, and video surveillance cameras.

The MAX5971A is fully compliant with the IEEE 802.3af and IEEE 802.3at standards. The device operates from 32V to 60V and provides IEEE 802.3af/at-compliant PD discovery, classification, and DC/AC load-disconnect detection. Class 5 and two-event classification are supported for detection and classification of high-power PDs. The MAX5971A is also capable of detecting legacy (noncompliant) PDs that use high capacitance as the discovery signature.

The MAX5971A operates autonomously without the need for host processor intervention or software, thus saving processor overhead. Other features include: input undervoltage-lockout (UVLO) detection, input overvoltage detection, an LED-status indicator, overtemperature protection, and output voltage slew-rate limiting during startup.

The MAX5971A is available in a 28-pin TQFN package, and is fully specified over the -40 degrees Celsius to +85 degrees Celsius extended temperature range. Prices start at $2.52 (1000-up FOB USA). Production samples and evaluation kits are available to speed designs.

Maxim Integrated Products is a publicly traded company that designs,

manufactures, and sells high-performance semiconductor products. The Company was founded over 25 years ago with the mission to deliver innovative analog and mixed-signal engineering solutions that add value to its customers' products. To date, it has developed over 6300 products serving the industrial, communications, consumer, and computing markets.

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