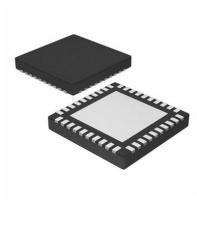


PD70224ILQ-TR

Power Over Ethernet PSE Controller 57V 95W 32-Pin VQFN EP

Manufacturer:	Microchip Technology, Inc.
Package/Case:	VQFN-40
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free Works
Lifecycle:	Active



Images	are for	reference only

General Description

The entire drive circuitry for driving the MOSFETs is on-chip, including a charge pump for driving the high-side N-channel MOSFETs. The total forward drop (bridge offset) introduced by the IdealBridgeTM rectifier is only 180mV at 0.6A, compared to a standard bridge rectifier that typically presents 2000mV of forward drop. PD70224 IdealBridgeTM can support over 1A current, making it the ideal choice not only for modern energy-saving 2-pair applications compliant with IEEE802.3af and IEEE802.3at (Type 1 and Type 2), but also 4-pair Powered Devices such as for UPOE (51W) and POH (Power over HDBase-T, 73W). In addition, PD70224 is capable of helping to identify at the physical layer itself whether a 2-pair PSE or a 4-pair PSE is providing power over the cable. It does that by sensing the voltage on the line (un-rectified) side of the pairs.

Key Features

- Active circuit with low forward-drop to replace dissipative passive diode bridges
- Self-contained drive circuitry for MOSFETs
- Designed to support IEEE802.3af/at, UPOE and Power over HDBase-T (PoH)
- Integrated 0.160hm N-Channel MOSFETs for 0.320hm total path resistance
- Low leakage, $< 12\mu A$ during detection
- Wide operating voltage range up to 57V
- Available in 40 pin package
- **RoHS** Compliant

Recommended For You

Application

Power over Ethernet (all IEEE compliant 2-pair modes)

Proprietary 4-pair standards, UPOE (Universal PoE) and POH

PD70224LILQ-TR

Microchip Technology, Inc QFN

1N5299

Microchip Technology, Inc DO-7

1N5311

Microchip Technology, Inc DO-7

1N5313

Microchip Technology, Inc DO-7

UM9441

Axial

Microchip Technology, Inc

MURS160T3

Microchip Technology, Inc SMB

1N5306

Microchip Technology, Inc DO-7

1N5289 Microchip Technology, Inc DO-7

MSC030SDA120B Microchip Technology, Inc TO247

APTDR90X1601G Microchip Technology, Inc SP1

CD5301

Microchip Technology, Inc BGA

1N5287

Microchip Technology, Inc DO-7

1N5305

Microchip Technology, Inc DO-7

1N5298

Microchip Technology, Inc DO-7

UM9401F Microchip Technology, Inc SMD3225