

Power Over Ethernet PD Controller 0V 57V 13W 14-Pin TSSOP

Manufacturer:	Texas Instruments, Inc	<input type="text" value="TPS23753APWR Image"/>
Package/Case:	TSSOP14	Images are for reference only
Product Type:	Power Management ICs	<input type="button" value="Inquiry"/>
RoHS:	RoHS Compliant/Lead free 	
Lifecycle:	Active	

General Description

The TPS23753A is a combined Power over Ethernet (PoE) powered device (PD) interface and current-mode DC-DC controller optimized specifically for isolated converter designs. The PoE implementation supports the IEEE 802.3at standard as a 13-W, type 1 PD. The requirements for an IEEE 802.3at type 1 device are a superset of IEEE 802.3-2008 (originally IEEE 802.3af).

The TPS23753A supports a number of input-voltage ORing options including highest voltage, external adapter preference, and PoE preference.

The PoE interface features an external detection signature pin that can also be used to disable the internal hotswap MOSFET. This allows the PoE function to be turned off. Classification can be programmed to any of the defined types with a single resistor.

The DC-DC controller features a bootstrap start-up mechanism with an internal, switched current source. This provides the advantages of cycling overload fault protection without the constant power loss of a pullup resistor.

The programmable oscillator may be synchronized to a higher-frequency external timing reference. The TPS23753A features improvements for uninterrupted device operation through an ESD event.

Key Features

Enhanced ESD Ride-Through Capability

Optimized for Isolated Converters

Complete PoE Interface

Adapter ORing Support

12-V Adapter Support

Programmable Frequency With Synchronization

Robust 100-V, 0.7- Ω Hotswap MOSFET

Small 14-Pin TSSOP Package

15-kV and 8-kV System Level ESD Capable

-40°C to 125°C Junction Temperature Range

Design Procedure Application Note – SLVA305

Adapter ORing Application Note – SLVA306

Description

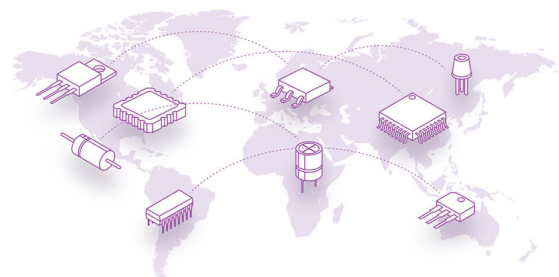
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Recommended For You

TPD3S014DBVR

Texas Instruments, Inc
SOT23-6

TPS2065CDBVR

Texas Instruments, Inc
SOT23-5

TPS2557DRBT

Texas Instruments, Inc
SON8

TPS2042BDR

Texas Instruments, Inc
SOP8

TPS2051BDR

Texas Instruments, Inc
SOP8

TPL7407LPWR

Texas Instruments, Inc
TSSOP16

TPS2116DRLR

Texas Instruments, Inc
SOT5X3-8

TPS259460ARPWR

Texas Instruments, Inc
VQFN-10

TPS23751PWPR

Texas Instruments, Inc
HTSSOP16

TPS65150QPWRQ1

Texas Instruments, Inc
HTSSOP-24

TPS2410PWR

Texas Instruments, Inc
TSSOP-14

TPS22914BYFPR

Texas Instruments, Inc
DSBGA4

TPS2115ADRBR

Texas Instruments, Inc
VSON8

TPS2113ADRBR

Texas Instruments, Inc
SON8

TPS51716RUKR

Texas Instruments, Inc
WQFN20