

Product Overview

NCP1095: Power Over Ethernet (PoE)– Powered Device Interface Controller, IEEE 802.3bt

For complete documentation, see the data sheet.



The NCP1095 is a IEEE.3bt, IEEE 802.3af, and/or IEEE 802.3at compliant Power over Ethernet Powered Device (PoE-PD) Interface Controller that enables the development of high-power applications including connected lighting and security cameras. The NCP1095 incorporates all functionalities within a PoE system such as detection, classification and current limiting during the inrush phase.

Using an external pass transistor, the NCP1095 provides an output voltage of up to 90 Watts. The NCP1095 also offers Autoclass support for optimized power allocation based on the PD type and classification.

Features

- IEEE 802.3bt, IEEE 802.3af, IEEE 802.3at compliant - Allows for up to 90 W of power - Guaranteed interoperability between PoE devices
- Part of ON Semiconductor's family of solutions for PoE-PD
- Features an internal 71 mΩ pass transistor to support high-power applications
- Includes an auxiliary detection pin for applications powered by PoE or wall adaptors
- Supports Auto-classification (Autoclass) Feature, allowing the Power Sourcing Equipment (PSE) to assign power to each Powered Device(PD) efficiently
- Also available with internal hot-swap FET for a higher level of integration (NCP1096)

Applications

- Power over Ethernet Powered Devices (PoE-PD)
- Internet of Things (IoT)
- IEEE 802.3bt
- IEEE 802.3af
- IEEE 802.3at

End Products

- Digital Signage
- Satellite Data Networks
- Connected Lighting
- Video and VOIP Telephones
- Security Cameras

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Phases	Control Mode	V _{CC} Min (V)	V _{CC} Max (V)	f _{SW} Typ (kHz)	Package Type
NCP1095DB		Pb-free	Active				34.2	57		TSSOP-16
		Halide free								
NCP1095DBR2		Pb-free Halide free	Active				34.2	57		TSSOP-16

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