

NCP1094

Integrated PoE-PD Interface Controller with Vaux support, IEEE 802.3at, 30W



Product Overview

For complete documentation, see the data sheet.

The NCP1093 and NCP1094 are members of ON Semiconductor's Power over Ethernet (PoE) Powered Device (PoEPD) product family and integrate an IEEE802.3af certified interface controller.

Both Variants incorporate the required functions such as detection, classification, under voltage lockout, inrush and operational current limit. A power good and NCLASS_AT signal have been added to guarantee proper control of the DC-DC converter for both type-I and type-II operation. In addition, the NCP1093 offers programmable under voltage lockout while the NCP1094 provides an auxiliary pin for applications supporting auxiliary supplies.

The NCP1093 and NCP1094 are fabricated in a robust high voltage process and integrate a rugged vertical N-channel DMOS suitable for the most demanding environments and is capable of withstanding harsh environments such as hot swap and cable ESD events.

Features

- Fully supports IEEE 802.3af/at specifications
 - Allows for up to 30W of power
 - Certified interoperability between PoE devices
- Overtemperature protection
- Industrial temperature range 40C to 85C with full operation upto 125C junction temperature

Applications

- Voice over IP
- Wireless access points
- IP camera

Benefits

- Full compatibility with other PoE systems
- High reliability
- Extended operating range

End Products

- WiMax

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
NCP1094MNRG	0.534		Active					57		DFN-10