

# NCP1910

## High Performance Combo Controller for ATX Power Supplies



### Product Overview

For complete documentation, see the data sheet.

Housed in a SO-24WB package, the NCP1910 combines a state-of-the-art circuitry aimed to powering next generation of ATX or flat TVs converters. With a 65 kHz Continuous Conduction Mode Power Factor Controller and a LLC controller hosting a high-voltage driver, the NCP1910 is ready to power 85+ types of offline power supplies. To satisfy stringent efficiency considerations, the PFC circuit implements an adjustable frequency fold back to reduce switching losses as the load is going light. To cope with all the signal sequencing required by the ATX and flat TVs specifications, the controller includes several dedicated pins enabling handshake between the secondary and the primary sides. These signals include a power-good line but also a control pin which turns the controller on and off via an opto coupler. Safety-wise, a second OVP input offers the necessary redundancy in case the main feedback network would drift away. Finally, a fast fault input immediately reacts in presence of an over current condition by triggering an auto-recovery soft-start sequence.

### Features

- PFC frequency fold back
- LLC Skip
- Dynamic Response enhancers
- Adjustable Line Brown-Out Protection
- On/off and power Good Management Signam
- Redundant Vbulk Over Voltage Protection

### Benefits

- Improves light load efficiency
- Improves light load efficiency
- Reduces bulk undershoot
- Rugged Design, Reduce surrounding part count
- Reduce Surrounding Part Count
- Robust Protection

### Applications

- Flat panel display powr converters
- High power ac-dc adpaters for notebooks
- Computing power supplies

### End Products

- ATX or Server power supplies
- LCD or Plasma TVs

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Control Mode	f <sub>sw</sub> Typ (kHz)	Stand-by Mode	UVLO (V)	Short Circuit Protection	Latch	Soft Start	V <sub>cc</sub> Max (V)	Drive Cap. (mA)	Package Type
NCP1910B65DW R2G	1.3455		Active	Half-Bridge	Current Mode	Up to 500	Yes	9/10.4	Yes	Yes	Yes	20	500 / 1000	SOIC-24

# Application Diagram

