

Product Overview

NCL2801: Current Mode CrM Power Factor Controller

For complete documentation, see the data sheet.

The NCL2801 is a current mode CRM Boost PFC control IC which can provide the best class THD performance over extended operating range utilizing ON Semiconductor's THD enhancer technique. Efficiency and standby power are enhanced with Valley Count Frequency Fold-back (VCFF) method.

Features

- Valley Count Frequency Foldback
- Dynamic Response Enhancer
- Soft/Fast OVP
- THD Enhancer
- Line level feed-forward
- Protections
 - Brown Out
 - Thermal Shutdown
 - OVP
 - Over Current limitation
 - Pin open/short protection
- Wide Vcc (10.5~28 V) range/ 3 Vcc startup level
- OTA Error Amp

Applications

- All Off Line Appliances Requiring Power Factor Correction

Benefits

- Maximize efficiency over wide load range
- Lower output undershoot
- Lower output overshoot
- Improve THD performance
- Optimal loop gain in universal input
- High System Reliability

- Design Flexibility
- Easy loop design and lower power loss by higher RFB

End Products

- Lighting Ballasts (LED, Fluorescent)
- Flat TV
- PC Power Supplies

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	PFC Mode	Frequency Operation	Control Mode	Topology	f _{sw} Typ (kHz)	V _{cc} Max (V)	Drive Cap. (mA)	UVLO (V)	Latch	UVP	Inhibition	Package Type
NCL2801CDADR2G	0.3067	Pb-free Halide free	Active	CRM	Variabl e	Curren t Mode	Step- Up	Variabl e	27	500 / 800	12.5	No	Yes	No	SOIC- 8
NCL2801CDBDR2G	0.3067	Pb-free Halide free	Active	CRM	Variabl e	Curren t Mode	Step- Up	Variabl e	27	500 / 800	12.5	No	Yes	No	SOIC- 8
NCL2801CFADR2G	0.3067	Pb-free Halide free	Active	CRM	Variabl e	Curren t Mode	Step- Up	Variabl e	27	500 / 800	10.5	No	Yes	No	SOIC- 8

For more information please contact your local sales support at www.onsemi.com.

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