

Highly Efficient Dimmable LED Driver

Primary Control System Utilizing ICL8001G/ICLS8082G

Infineon enables off-line LED driver designs to achieve cost effective and energy efficient solutions. The Infineon LED driver solution utilizing ICL8001G/ICLS8082G addresses exactly these parameters and sets the new benchmark.

ICL8001G/ICLS8082G are quasi-resonant controller, optimized for phase-cut dimmable off-line LED applications. Precise PWM generation supports phase-cut dimming and power factor correction. Intelligent control allows excellent system efficiencies and provides superb light quality. ICL8001G/ICLS8082G facilitate simple and fast designs for smallest form factor in compliance with regulatory standards. Multiple safety functions ensure a full system protection.

ICLS8082G combines the ICL8001G controller with an integrated CoolMOS™ transistor.

Less Energy – More Light @ Reduced System Cost

ICL8001G/ICLS8082G

Applications

- 100W / 60W / 40W incandescent bulb replacement
- Lamp retrofits, LED tubes / luminaires, downlights

System Highlights

- Leading edge performance
- Best-in-Class BOM cost
- Comprehensive feature set
- Outperforms worldwide regulatory requirements

Key Features

- Single stage, primary control with PFC and dimming function
- High efficiencies of 90% and above available
- Significant BOM cost savings - approx. 30% compared to existing solutions
- Additional energy savings supported within a wide phase-cut dimming range
- Superb light quality - intelligent regulation for flicker free operation
- Unmatched power quality - power factor exceeding 98%
- Isolated driver output for optimized thermal management
- Minimized external component count enables smallest form factor and maximum reliability

www.infineon.com/LED-Bulb

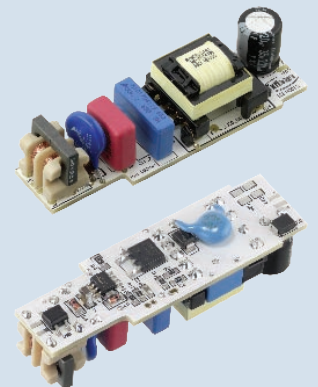
LED Bulb and Driver Board dimmable



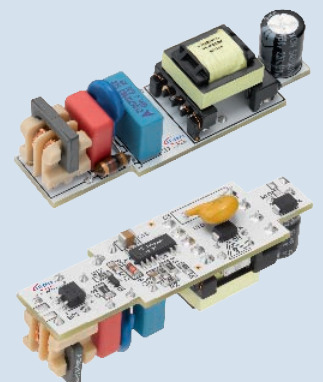
Evaluation Board

- Please contact your local Infineon office
- Documentation:
www.infineon.com/LED-Bulb

ICL8001G Driver Board



ICLS8082G Driver Board

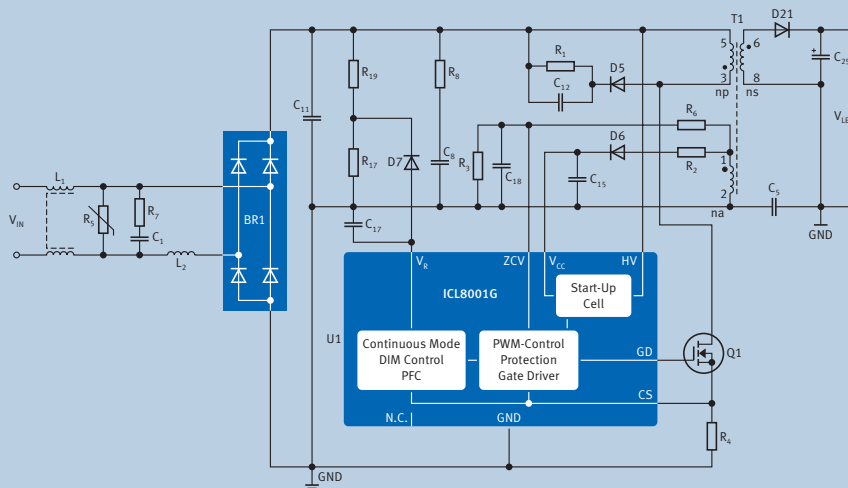


Highly Efficient Dimmable LED Driver

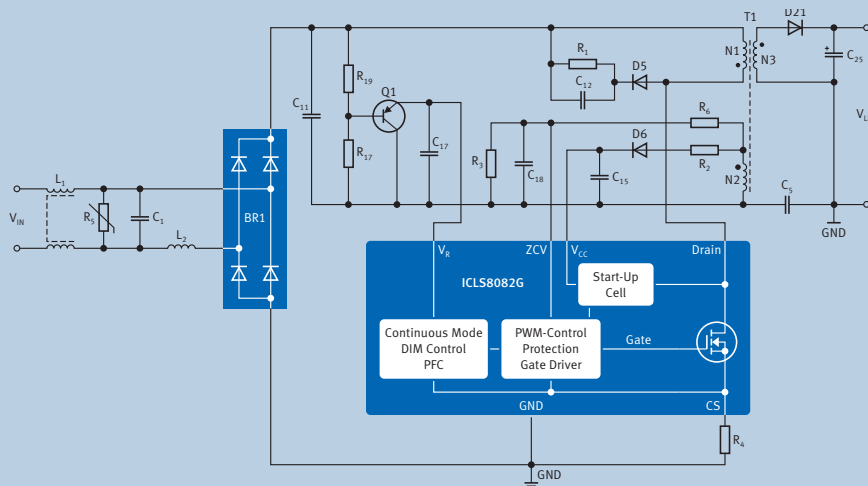
Primary Control System Utilizing ICL8001G/ICLS8082G

Application Circuit Diagrams

ICL8001G

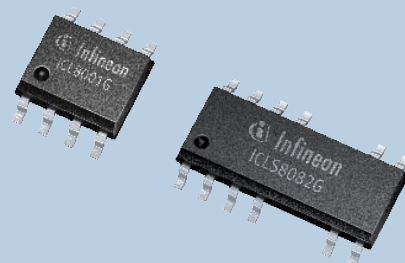


ICLS8082G



Product Information

Part No.	Package	Order. No.
ICL8001G	PG-DSO-8	SP000773086
ICLS8082G	PG-DSO-12	SP000899842



Published by
Infineon Technologies AG
85579 Neubiberg, Germany

© 2011 Infineon Technologies AG.
All Rights Reserved.

Visit us:
www.infineon.com

Order Number: B121-H9443-G2-X-7600
Date: 05 / 2011

ATTENTION PLEASE!

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenheitsgarantie"). With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

INFORMATION

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office (www.infineon.com).

WARNINGS

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office. Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.