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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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](http://www.infineon.com/LED-Bulb)

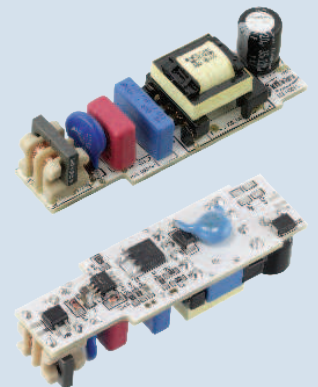
#### LED Bulb and Driver Board dimmable



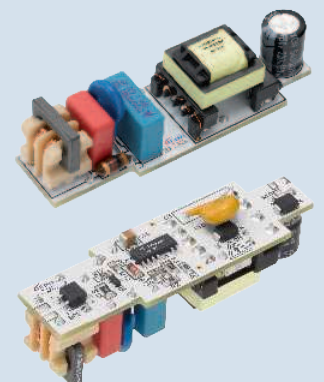
#### Evaluation Board

- Please contact your local Infineon office
- Documentation: [www.infineon.com/LED-Bulb](http://www.infineon.com/LED-Bulb)

#### ICL8001G Driver Board



#### ICLS8082G Driver Board

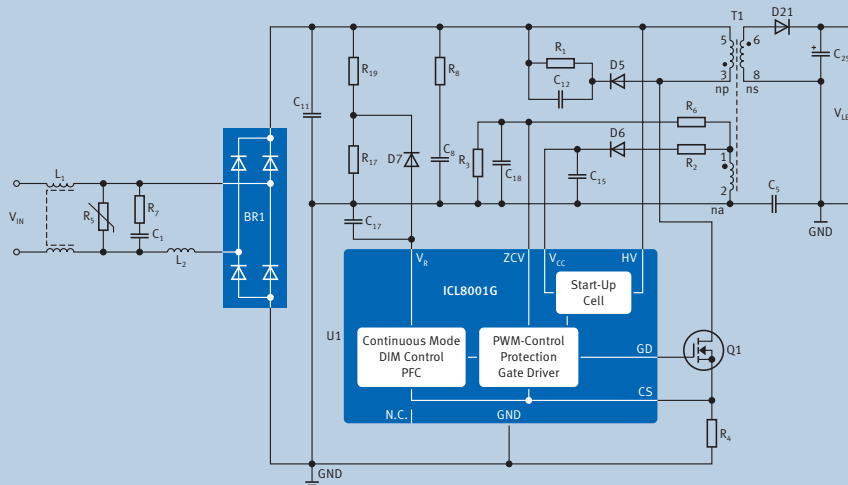


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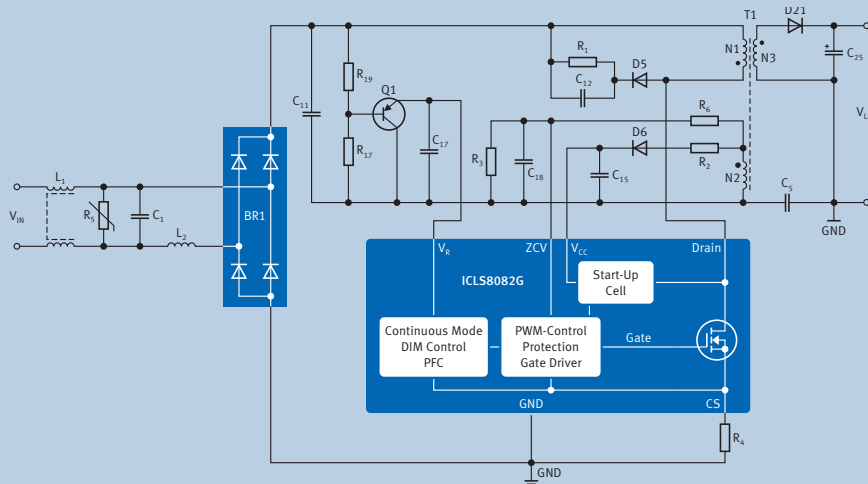
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### Application Circuit Diagrams

ICL8001G

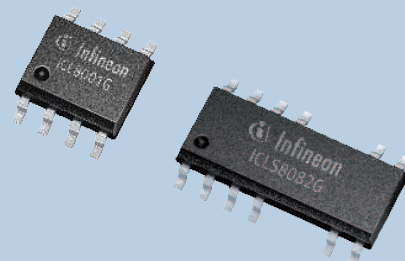


ICLS8082G



### Product Information

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



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