



ICB2FL01G

Highly integrated Smart Ballast Controller for Fluorescent Lamps

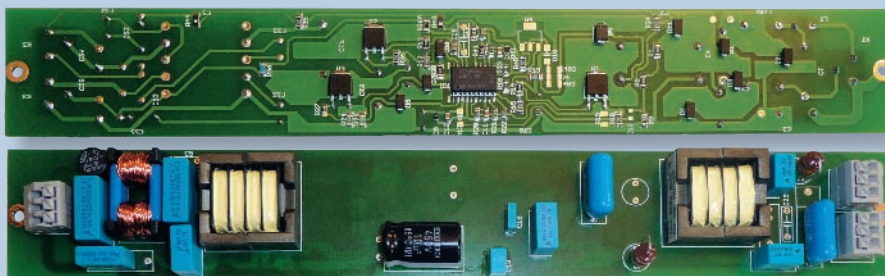
The ICB2FL01G is the next generation of Smart Ballast Control IC's from Infineon. The product integrates all of the lamp start, run and protection features required by current and future Fluorescent Lamp Ballasts. Digital Mixed Signal Power Control is employed enabling speedy, cost effective ballast designs with the minimum of external components. Reliable and robust high voltage isolation is achieved using Infineon's proprietary Coreless Transformer Technology (CLT).

Typical Applications

- Linear Fluorescent Lamp Ballasts for T5 and T8 Lamps
- Compact Fluorescent Lamp Ballasts
- Dimmable Fluorescent Ballasts
- Emergency Lighting Ballasts
- Multi-Lamp Ballasts up to 4 lamps
- Multi-Power Ballasts

Benefits

- Fast Time to Market
- Reliable, stable highly featured Ballast designs
- Significantly reduced system costs
- Reduced Ballast production test time and cost
- High-efficiency operation
- Robust and reliable



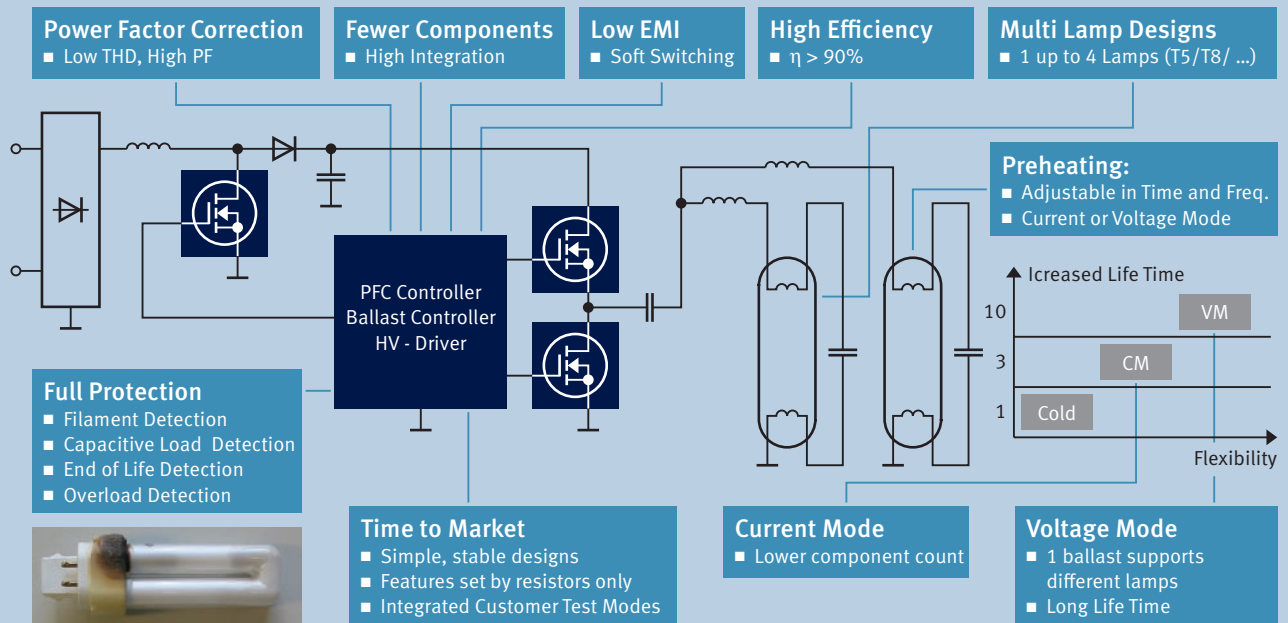
Features

- Fully Integrated Smart Ballast Controller IC
- High Performance PFC Stage
- Intelligent Digital Power Control
- Extremely robust High Voltage Half Bridge driver
- Drives up to 4 lamps with few external components required
- Dramatically reduced external component count
- Special In-circuit test mode for shorter ballast production test times
- THD Performance better than 5%
- Compliant with standards for emergency lighting (according to DIN VDE 0108)
- Optimised Lamp ignition control
- Wide programmable preheat time range: 0 to 2500ms.
- Highly compatible with dimmable ballasts
- Suitable for wide range line input voltage (90V up to 270V)
- Adjustable lamp EOL detection modes
- Intelligent restart behaviour after line input surge events
- Very low EMI due to Adaptive Dead Time Control
- Highly accurate timing and frequency control over a wide temperature range

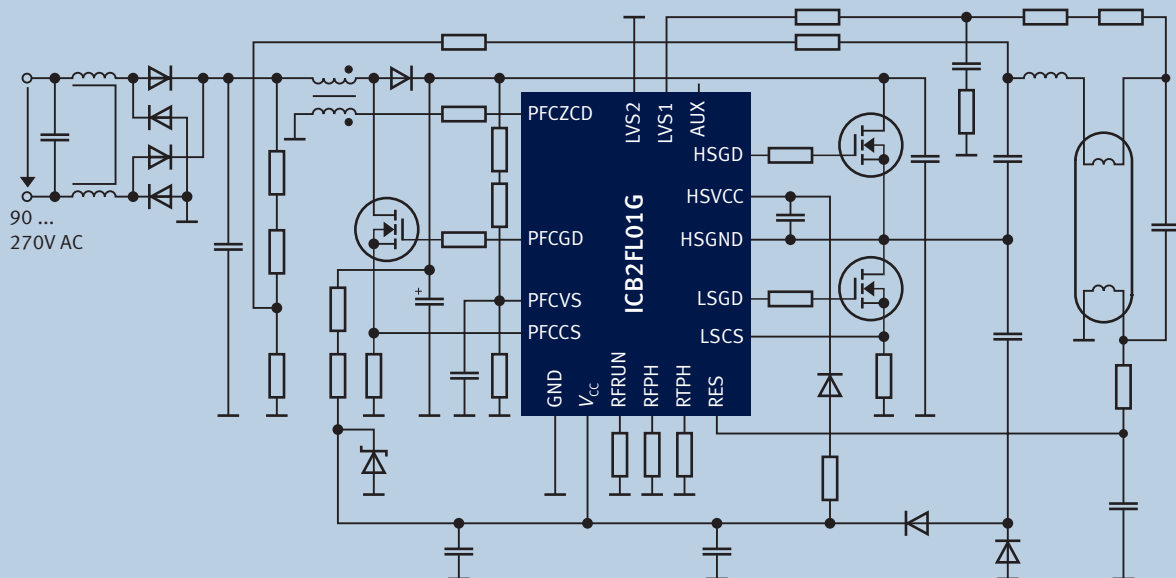
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Simplified Schematic



Application Example



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