DESCRIPTION

The PT5615 is a ballast control IC, with the 650V half-bridge driver and full protections, designed to drive all types of fluorescent lamps. The features such as programmable preheat time and frequency, programmable and precise run frequency, self-adapting ignition time regulator and auto-restart for lamp replacement, provide a high degree of flexibility for the ballast design engineers. The protection features include the filaments detection, ignition failure and end-of-life protection for lamp and the over-current protection for half bridge. It is easy to provide a protection for multi-lamp application. The PT5615 is available in both DIP16 and SOP16 packages.

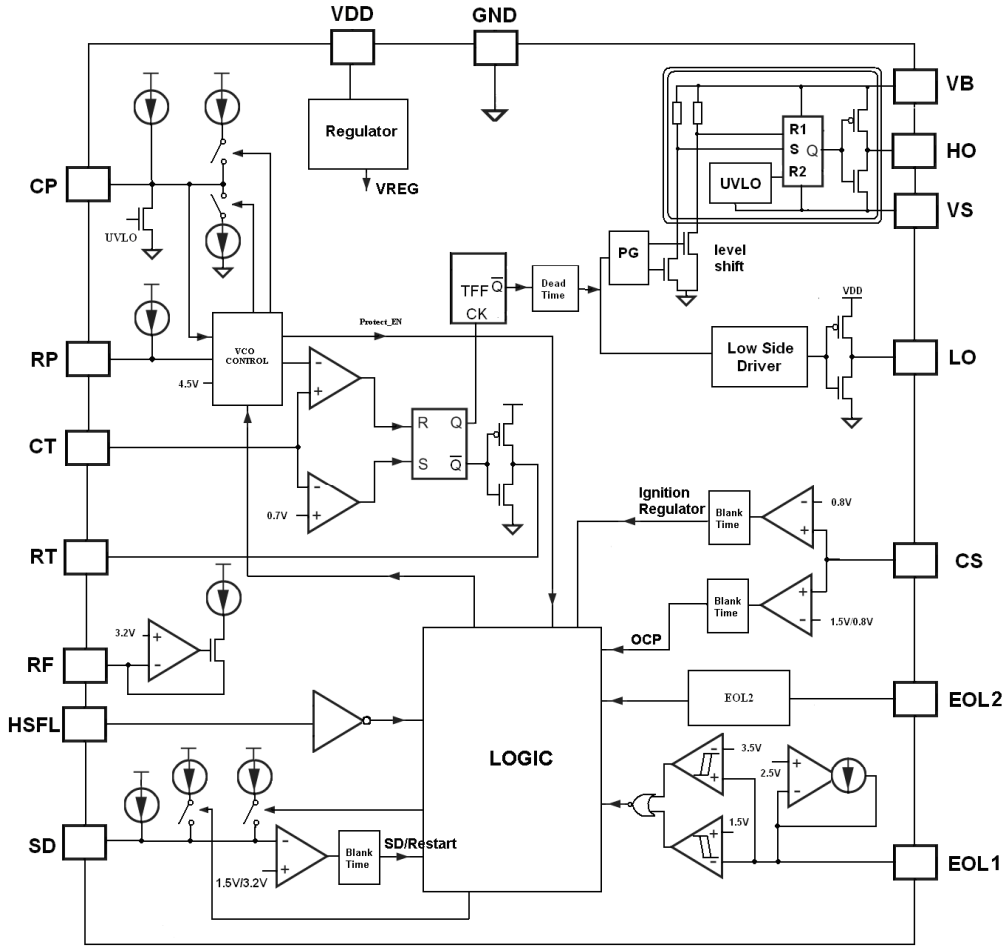
FEATURES

- 650V half-bridge driver
- Programmable and precise oscillator
- Programmable preheat time and frequency
- Sweeping-frequency ignition
- Fixed dead time
- Self-adapting ignition time regulator
- Ignition failure protection
- End-of-life protection
- Programmable half-bridge over-current protection
- Low side and high side filaments detection
- Auto-restart for lamp replacement
- Support multi-lamp design

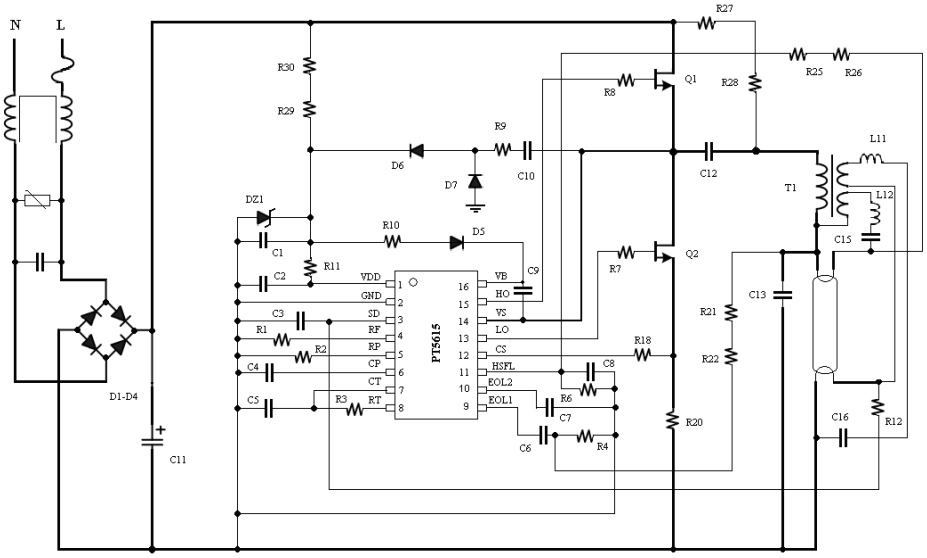
APPLICATION

- Electronic ballast for all types of fluorescent lamps

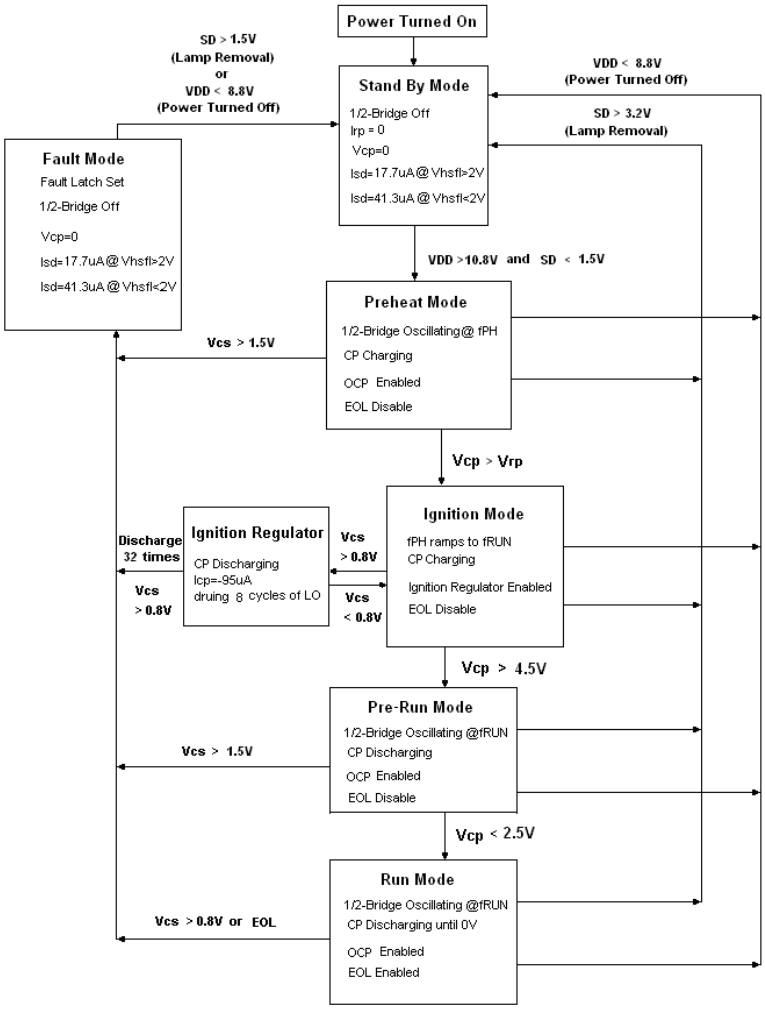
BLOCK DIAGRAM



TYPICAL APPLICATION



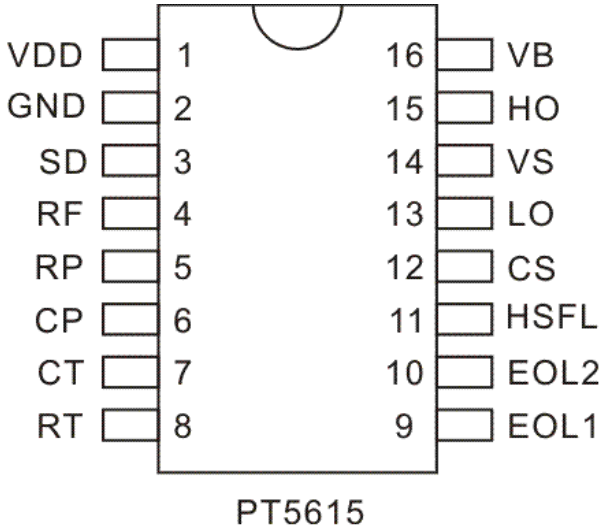
STATE DIAGRAM



ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT5615-S	16 Pins, SOP, 150mil	PT5615-S
PT5615-D	16 Pins, DIP, 300mil	PT5615-D

PIN DESCRIPTION



PIN DESCRIPTION

Pin Name	Description	Pin No.
VDD	IC power supply	1
GND	System ground	2
SD	Low side filament sensing and shut-down control	3
RF	Internal current bias control, connecting a external resistor (68K, typ.) to GND	4
RP	Preheat frequent setting	5
CP	Preheat time setting	6
CT	Capacitor of the RC oscillator	7
RT	Resistor of the RC oscillator	8
EOL1	End-of-life sensing for Lamp1	9
EOL2	End-of-life sensing for Lamp2	10
HSFL	High side filament sensing	11
CS	Half-bridge current sensing	12
LO	Low side gate driver	13
VS	High side driver floating ground	14
HO	High side gate driver	15
VB	High side driver floating supply	16

IMPORTANT NOTICE

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