

# Pin Configuration and Functionality

# 1 Pin Configuration and Functionality

### 1.1 Pin Configuration with PG-DIP-8

Pin	Symbol	Function
1	BA	extended Blanking & Auto-restart
2	FB	FeedBack
3	CS	Current Sense/ 650V <sup>1)</sup> CoolMOS <sup>®</sup> Source
4	Drain	650V <sup>1)</sup> CoolMOS® Drain
5	Drain	650V <sup>1)</sup> CoolMOS <sup>®</sup> Drain
6	n.c.	Not connected
7	VCC	Controller Supply Voltage
8	GND	Controller GrouND

<sup>1)</sup> at T<sub>i</sub>=110°C

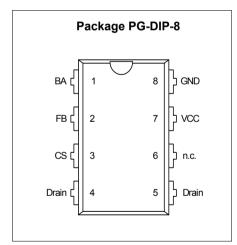


Figure 1 Pin Configuration PG-DIP-8 (top view)

Note: Pin 4 and 5 are shorted

## 1.2 Pin Functionality

#### BA (extended Blanking & Auto-restart)

The BA pin combines the functions of extendable blanking time for over load protection and the external auto-restart enable. The extendable blanking time function is to extend the built-in 20 ms blanking time by adding an external capacitor at BA pin to ground. The external auto-restart enable function is an external access to stop the gate switching and force the IC enter auto-restart mode. It is triggered by pulling down the BA pin to less than 0.33V.

#### FB (Feedback)

The information about the regulation is provided by the FB Pin to the internal Protection Unit and to the internal PWM-Comparator to control the duty cycle. The FB-signal is the only control signal in case of light load at the Active Burst Mode.

#### CS (Current Sense)

The Current Sense pin senses the voltage developed on the series resistor inserted in the source of the integrated CoolMOS® If voltage in CS pin reaches the internal threshold of the Current Limit Comparator, the Driver output is immediately switched off. Furthermore the current information is provided for the PWM-Comparator to realize the Current Mode.

#### Drain (Drain of integrated CoolMOS®)

Drain pin is the connection to the Drain of the integrated  $\mathsf{CoolMOS}^{\$}.$ 

### VCC (Power Supply)

VCC pin is the positive supply of the IC. The operating range is between 10.5V and 25V.

#### GND (Ground)

GND pin is the ground of the controller.



# Representative Blockdiagram

# 2 Representative Blockdiagram

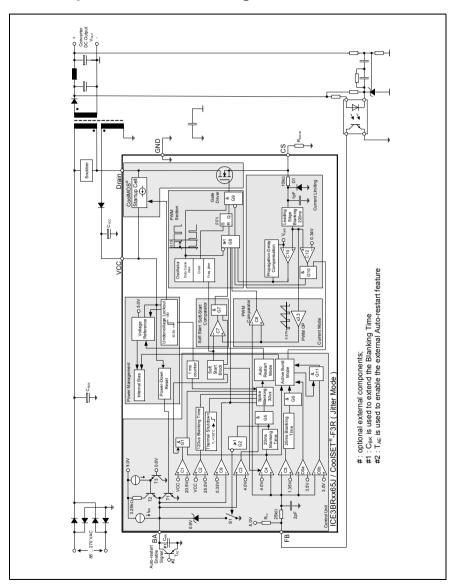


Figure 2 Representative Blockdiagram