

## DESCRIPTION

RS2053 combines a dedicated current mode PWM controller with high performance, high efficiency and low standby power offline fly-back converter applications. PWM switching frequency at normal operation is internal fixed, At light load or no load condition, the IC operates in CRM to minimize switching loss and get higher conversion efficacy. RS2053 offers complete protection coverage including OCP, OLP, OTP, OVP and VDD under voltage lockout (UVLO). It also provide the external OTP and Output OVP. Excellent EMI performance is achieved with proprietary frequency shuffling technique together with soft switching control at the totem pole gate drive output. The frequency 25KHz is minimized in the design and audio noise is eliminated during operation. RS2053 is offered in SOT23-6L package.

## APPLICATIONS

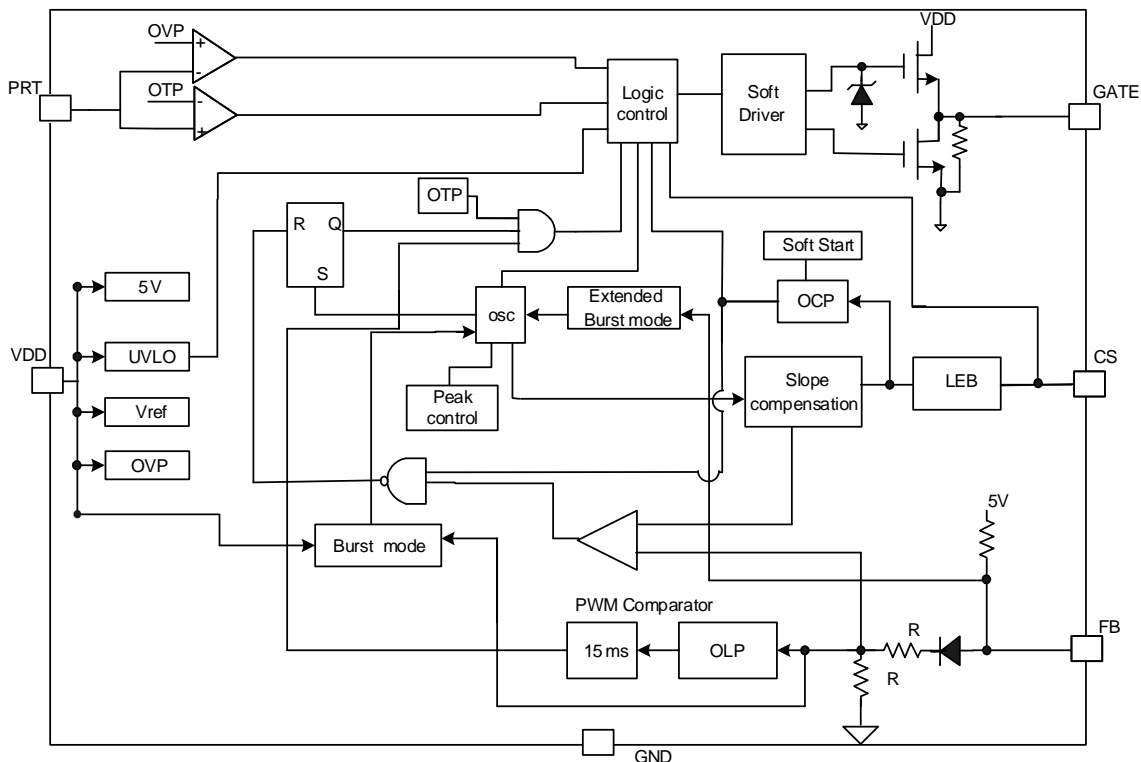
- AC/DC Adaptor
- Printer
- Storage power supply
- Auxiliary power supply for PC and server

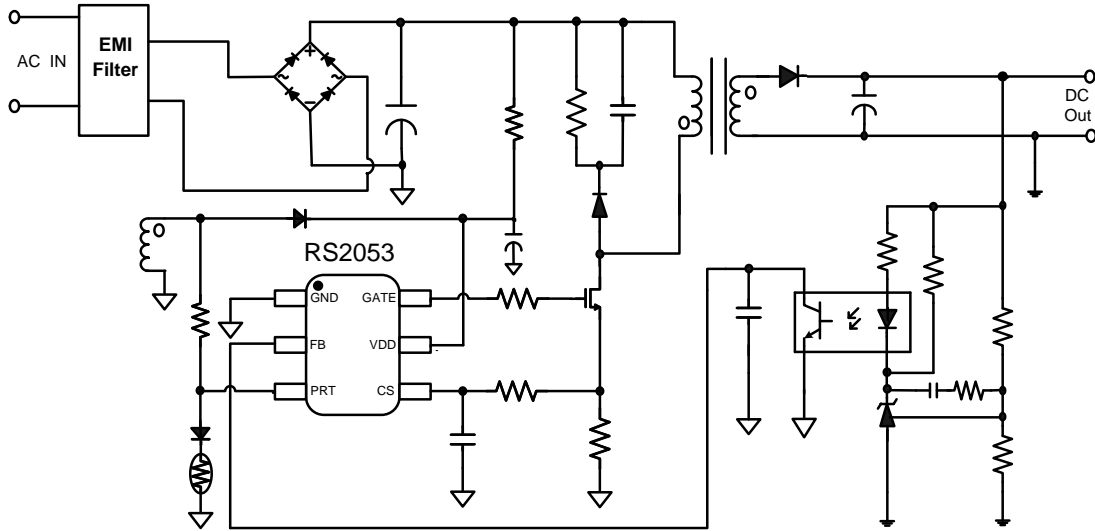
## FEATURES

- Low startup current (about 3 $\mu$ A)
- Low operating current (about 2.5mA)
- Power on Soft Start Reducing Power MOSFET VDS Stress
- VDD OVP and output voltage OVP
- External and internal OTP
- PWM & PFM & CRM Current Control Mode to improve efficiency
- Built-in Synchronized Slope Compensation
- Frequency shuffling for Excellent EMI Performance
- Audio noise free operation
- LEB on current sense input
- Line input compensation
- Overload protection
- GND open protect
- Peak load operation with increased frequency
- SOT23-6L Green Packaging

## BLOCK DIAGRAM

## TYPICAL APPLICATION CIRCUIT

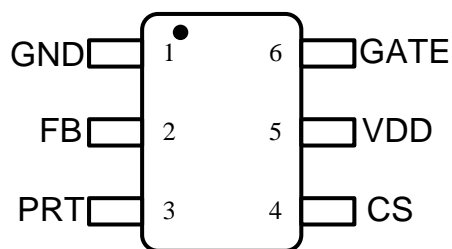




## ORDERING INFORMATION

Valid Part Number	Package Type	Top Code
RS2053	6-Pin, SOT-23	2053

## PIN CONFIGURATION



SOT-23-6

## PIN DESCRIPTION

Name	Description	Pin
GND	GND Pin	1
FB	Voltage feedback pin. The PWM duty cycle is determined by voltage level into this pin and CS pin input.	2
PRT	External OTP detection and OVP trigger	3
CS	Current sense Pin, a resistor connects to sense the MOSFET current.	4
VDD	Supply voltage Pin	5
GATE	Driver output for power MOSFET	6

## **IMPORTANT NOTICE**

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Princeton Technology Corp.  
2F, 233-1, Baociao Road,  
Sindian Dist., New Taipei City 23145, Taiwan  
Tel: 886-2-66296288  
Fax: 886-2-29174598  
<http://www.princeton.com.tw>