

# Discontinuous Conduction Mode (DCM) Interleaved PFC IC SSC2102S

## General Descriptions

SSC2102S is controller ICs intended to implement a DCM (Discontinuous Conduction Mode) interleaved PFC (Power Factor Correction) circuit.

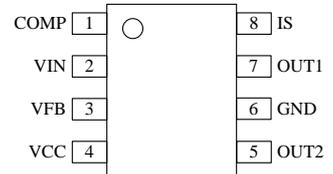
Using the two-phase interleaved control incorporated in this IC, it is possible to achieve a low cost, high performance PFC system with low input / output ripple currents, low noises and few external components.

## Features

- No Auxiliary Windings on Inductors Required
- Voltage Mode Control
- Maximum ON Time Control Circuit
- Soft-start Function
- Built-in High Speed Response Function (HSR)
- Protections
  - Dual level Overcurrent Protection (OCP) Pulse-by Pulse
  - Dual level Overvoltage Protection (OVP)---Auto-Restart
  - Under Voltage Protection (UVP) ----- Auto-Restart
  - Thermal Shutdown with Hysteresis (TSD)
    - Auto-Restart
  - Open Loop Detection (OLD) ----- Auto-Restart
  - VFB pin /VIN pin / IS pin Open Pin Protection (OPP)

## Package

SOP8



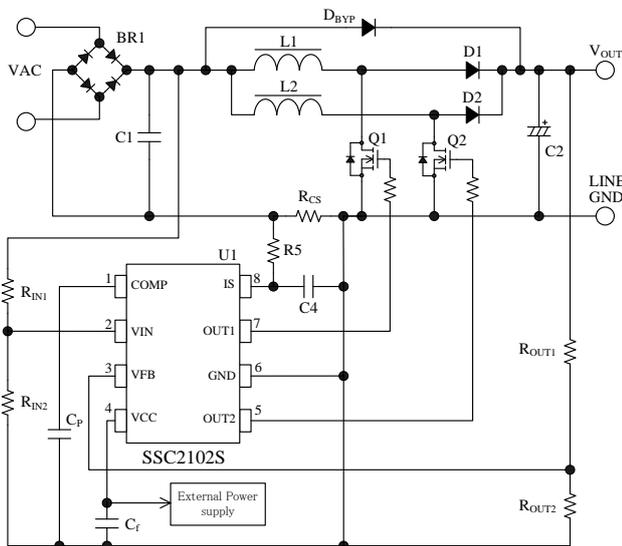
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## Electrical Characteristics

Maximum ON Time,  $t_{ONMAX} = 20.7 \mu s$ (typ.)  
 Error Amplifier Reference Voltage,  $V_{FB(REF)} = 3.5 V$ (typ.)  
 OUT Pin Peak Source Current,  $I_{OUT(SO)} = -0.5 A^*$   
 OUT Pin Peak Sink Current,  $I_{OUT(SI)} = 0.5 A^*$

\*Design assurance item

## Typical Application Circuit



## Applications

PFC Circuit up to 300 W of Output Power such as:

- AC/DC Power Supply
- Digital Appliances (Large Size LCD Television and so forth)
- OA Equipment (Computer, Server, Monitor, and so forth)
- Communication Facilities
- Other SMPS