

DC-DC CONVERTER CONTROL CIRCUITS

General Description

The U6119S/SA/SC series is a monolithic control circuit delivering the main functions for DC-DC voltage converting.

The device contains an internal temperature compensated reference, comparator, duty cycle controlled oscillator with an active current limit circuit, driver and high current output switch. Output voltage is ADJ Vol, NO-integrated two external resistors with a 2% reference accuracy.

Employing a minimum number of external components the U6119S/SA/SC devices series is designed for Step-Down applications.

Packages



Key Features

- VIN 200V/100V MOS
- Output Switch ADJ
- 2% Reference Accuracy
- Low Quiescent Current:15μA(TYP.)
- Out MOSFET Frequency Operation To 200KHZ
- Active Current Limiting
- Support Flyback and Buck Topology QR-Buck CC Control (SEL=GND)
- Low Standby Power <70mW
- Programmable Cable Drop Compensation:(CDC) in PSR CV Mode
- Built-in AC Line & Load CC Compensation
- Built in Protections:
 - Short Load Protection(SLP)
 - On-Chip Thermal Shutdown(OTP)
 - Cycle-by-Cycle Current Limiting
 - Leading Edge Blanking(LEB)
 - Pin Floating Protecting
- VDD UVLO OVP & Clamp
- Package(SOP7)

Applications

- Electric-Vehicle, E lectric-Bicycle Apliance
- Industry Controls

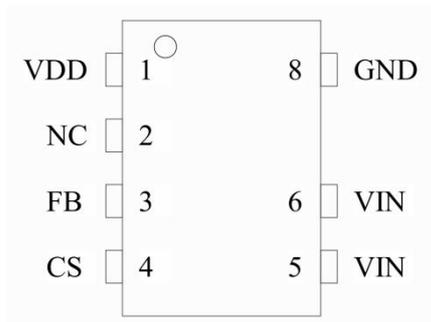
Products Information

| Base Part Number | Package Type | Rsdon | | V _{OFFSET} |
|------------------|--------------|----------|----------|---------------------|
| | | Min(ohm) | Max(ohm) | |
| U6119S | SOP7 | 0.75 | 0.85 | 200V |
| U6119SA | SOP7 | 0.1 | 0.15 | 100V |
| U6119SC | SOP7 | 0.1 | 0.15 | 100V |

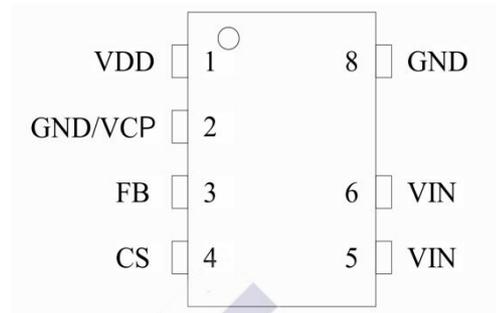
Order Information

| Number | DESCRIPTION |
|-----------|---|
| U6119SC | SOP-7, Halogen-free, Tape & Reel , 3000Pcs/Reel |
| U6119S/SA | SOP-7, Halogen-free、Tape & Reel, 3000Pcs/Reel |

Pin Configuration

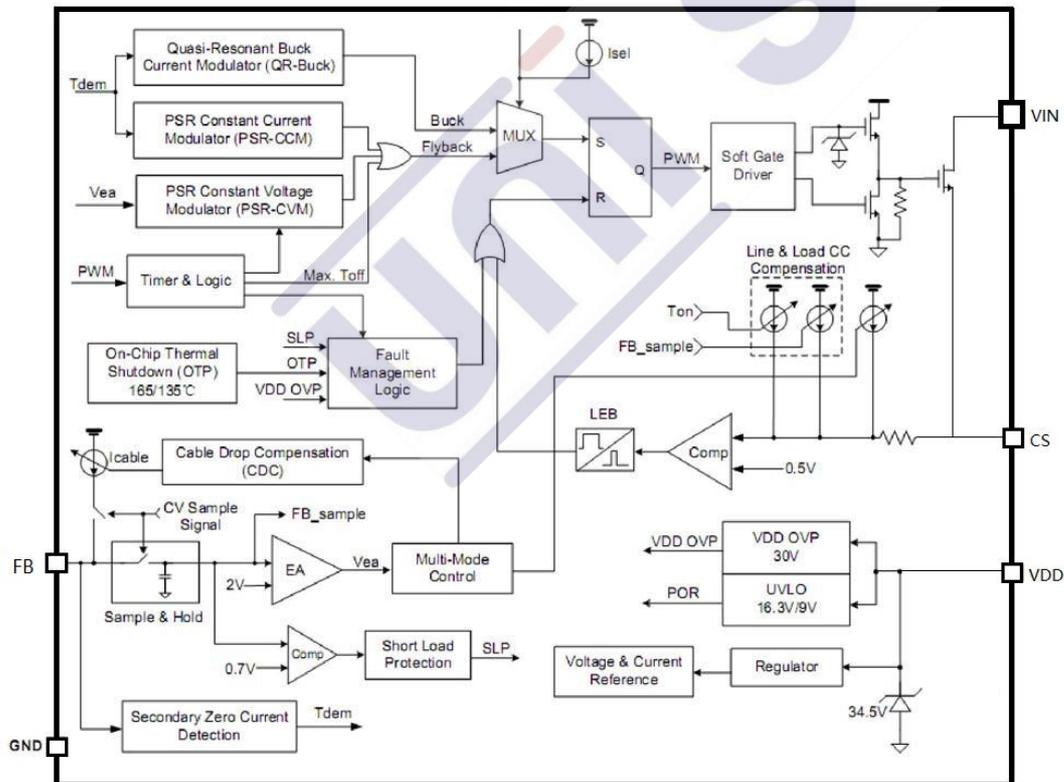


U6119S



U6119SA/SC

Block Diagram



Pin Description

| Pin Num | Pin Name | I/O | Description |
|---------|----------|-----|------------------------------|
| 1 | VDD | P | Power Supply |
| 3 | FB | I | The voltage feedback |
| 4 | CS | I | Current sense input |
| 5,6 | VIN | O | HV VIN Pin. |
| 7 | GND | P | Ground |
| 2 | | P | U6119S:NC U6119SA/SC:GND/VCP |