

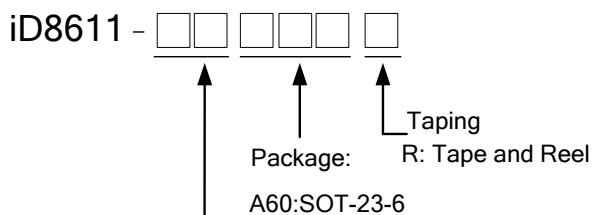
## 1uA Ultra low IQ SOT23-6 1A Synchronous Step-up Convertor

### General Description

iD8611 is a high efficiency synchronous step-up converter with ultra- low quiescent current down to 1uA. It is capable of delivering at least 2W of power from a low voltage source, i.e. 0.4A at 5V output. It also features a true-shutoff function that disconnects the input from output during shutdown and output short-circuit conditions. This eliminates the need for an external MOSFET and its control circuitry to disconnect the input from output and provides robust output overload protection. A switching frequency of 1.4MHz minimizes solution footprint by allowing the use of tiny and low profile inductors and ceramic capacitors. An internal synchronous MOSFET provides highest efficiency and with a current mode control that is internally compensated, external parts count is reduced to minimal. With the ultra-low IQ feature, iD8611 is ideal for solution that requires low standby power and compact board size such as IoT applications.

iD8611 is housed in a SOT23-6 package

### Ordering Information



Output Voltage	Voltage Code
Adjustable	AD
3.3V	33
5.0V	50

### Applications

- Tablet, MID
- Smart Phone
- Power Bank
- Satellite STB
- Portable Power

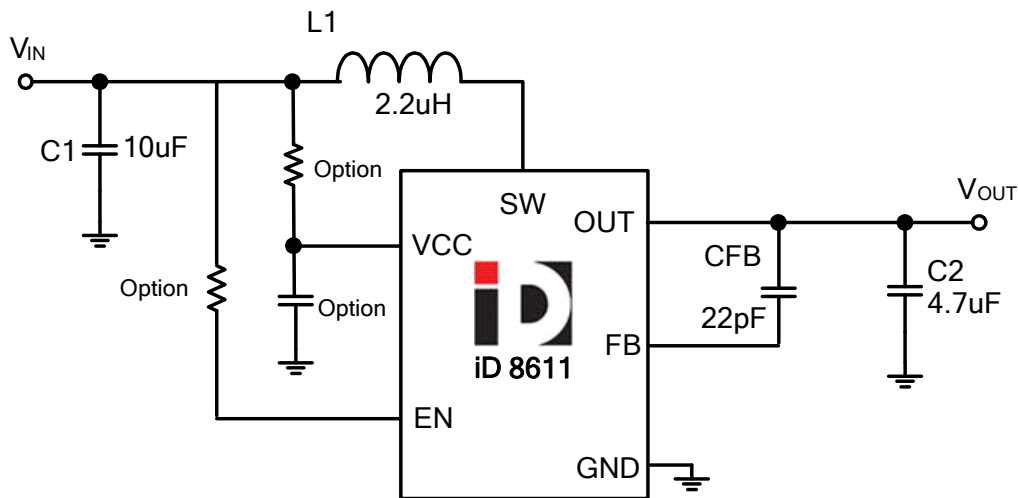
### Features

- Ultra low IQ when No Switching :1uA
- Output Disconnect
- Short-circuit Protection
- 5V/0.4A Output Power
- Output to Input Reversed Current Protection
- Up to 94% Efficiency
- Internal Synchronous Rectifier
- Logic Control Shutdown and Thermal Shutdown
- Available in the 6-pin SOT-23-6 Packages

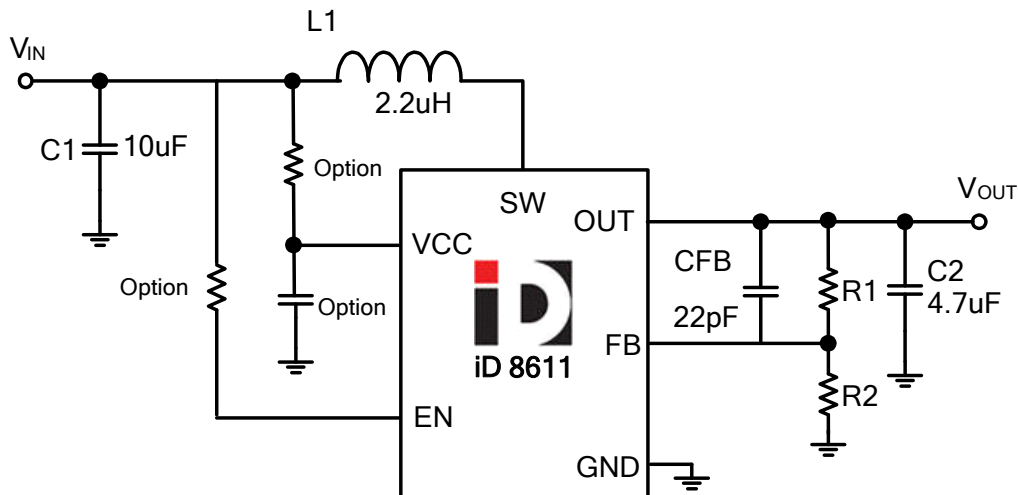
### Marking Information

For marking information, please contact our sales representative directly or through distributor around your location.

### Typical Application Circuit (Fixed Operation)



### (Adjustable Operation)



#### Absolute Maximum Ratings (Note 1)

VCC Voltage	-0.3V to 6.5V
SW Voltage	Internally Limited
EN, FB Voltage	-0.3V to $V_{IN}+0.3V$
Power Dissipation, $P_D$ @ $T_A=25^\circ C$	
SOT-23-6	550mW
Thermal Resistance, $\theta_{ja}$	
SOT-23-6	180°C/W
Thermal Resistance, $\theta_{jc}$	
SOT-23-6	90°C/W
Lead Temperature	260°C
Storage Temperature	-65°C to 150°C

#### Recommended Operating Conditions

Input Voltage $V_{IN}$	0.8V to 5V
EN Input Voltage	0V to $V_{IN}$
Junction Temperature	-40°C to 125°C
Ambient Operating Temperature	-40°C to 85°C