**MP2451数据手册的网站链接**

<https://wenku.baidu.com/view/3f8cb93543323968011c927b.html>

**使能**

使能的意思是负责控制信号的输入和输出，是一个“允许”信号

**反馈**

将系统的输出返回到输入端并以某种方式改变输入，进而影响系统功能的过程，可分为正反馈和负反馈，正反馈增强系统的输出，负反馈减弱系统的输出

**肖特基二极管内部构造和普通二极管的区别**

肖特基二极管以贵金属（金银铝铂等）为正极，以N型半导体B为负极，利用金属-半导体接面作为肖特基势垒，以产生整流的效果，而普通二极管中由半导体-半导体接面产生的P-N接面不同，形成P-N结不同

**什么是PWM**

即脉冲宽度调制技术，通过对一系列脉冲的宽度进行调制，来等效的获得所需要的波形（含形状和赋值）

**PWM控制的原理**

面积等效原理：冲量相等而形状不同的窄脉冲加在具有惯性的环节上时，其效果基本相同。冲量指窄脉冲的面积。效果基本相同，是指环节的输出相应波形基本相同。低频段非常接近，尽在高频段略有差异

**MP2451芯片每个引脚的功能描述**

Pin1:BST:Bootstrap.This is the positive power supply for the internal floating high side MOSFET driver.Connect a bypass capacitor between this pin and SW pin

Pin2:GND:Ground.It should be connected as close as possible to the output capacitor avoiding the high current switch paths.

Pin3:FB:Feedback.This is the input to the error amplifier.An external resistive divider connected between the output and GND is compared to the internal +0.8V reference to set the regulation voltage.

Pin4:EN:Enable input.Pulling this pin below the specified threshold shuts the chip down.Pulling it above the specified threshold encables the chip.Floating the pin shuts the chip down.

Pin5:VIN:Input Supply.This supplies power to all the internal control circuitry,both BS regulators and the high side switch.A decoupling capacitor to ground is required close to this pin to reduce switching spikes.

Pin6:SW:Switch node.This is the output from the high-side switch.A low VF Schottky diode to ground is required close to this pin to reduce switching spikes.