

Hello Venkata,

Is the converter you working with a continuous conduction mode (CCM) flyback converter?

The UCC24630 is recommended for CCM flyback converters and the UCC24636 is recommended for discontinuous mode DCM flyback converters. If this is a DCM application you might just be using the wrong synchronous rectifier (SR) driver.

If this is a CCM flyback converter operation can you send me waveforms of some critical pins when the gate driver is not responding, with the recommended component values? The critical signals are voltage across the SR and VPC pin.

The TBLK resistor is to ensure the volt second timing is not triggered for aux winding ringing. The minimum primary on time (t_{pri}) needs to be greater than t_{vpc_blk} . If it is not you cannot use the UCC24630 for this application. Note the blanking resistor sets up this blanking time.

$$R5 = \frac{t_{VPC-BLK} - 100 \text{ ns}}{18 \text{ pF}}$$

Feature Description (continued)

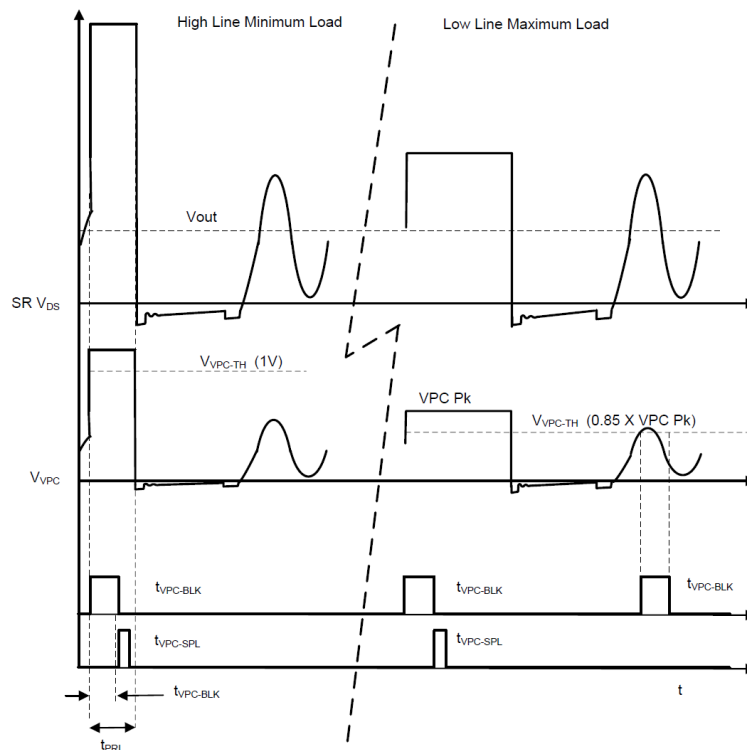


Figure 18. VPC Blanking Time Criteria

If you are running a CCM application and the design's $t_{pri} < t_{vpc_blk}$ the UCC24630 will not work for your application. If this is the case, you might consider using a FET driver that uses V_{ds} sensing to control the gate drive instead. <http://www.ti.com/lit/gpn/ucc24630>

Regards,

Mike