



New Product Announcement AP3585A/B/C

Single Phase Synchronous Buck PWM Controller

The AP3585A/B/C is Diodes' 12V input Single phase Synchronous Buck Controller developed to meet the demands of GPU.

This controller integrates internal MOSFET drivers that support 12V+12V bootstrapped voltage for high- efficiency power conversion.

The AP3585 provides protection against a number of potential faults within high current applications:

1. Over Voltage Protection
2. Under Voltage Protection
3. Over Current Protection
4. Over Temperature Protection

The accuracy, transient response and cost make the AP3585A/B/C ideally suited to DT Graphic card/memory applications.



The Diodes Advantage

The AP3585A/B/C provides Single Phase Synchronous Buck Controller solutions for High Current Desktop PC applications.

- **12V+12V Bootstrapped Drivers with Internal Bootstrap Diode**

The bootstrap diode is built-in to simplify the circuit design and minimize external part count.

- **Adjustments**

Compensation, over-current protection and Output Voltage

- **Packages – SO-8 and SO-8EP**

Provides a good thermal solution

- **External Compensation**

Fast Transient Response

Applications

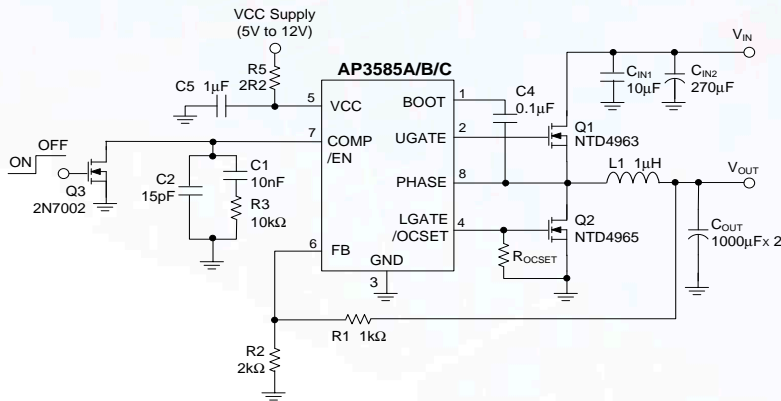
- Desktop Graphic Card
- Motherboards
- IPC



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Typical Application Schematic



12V Single Phase Synchronous Rectified Buck Controller

P/N	V _{in} (V)	OCF	V _{FB} (V)	Freq(KHZ)	Compensation	Package
AP3581A/B/C	4.5~13.2	Adjust	0.6V/0.8V	200/300	EXT	SO-8EP
AP3583	4.5~13.2	Adjust	0.6V	200/300	INT	SO-8EP
AP3585A/B/C	4.5~13.2	Adjust	0.6V/0.8V	200/300	EXT	SO-8/ SO-8EP
AP3586A/B/C	4.5~13.2	Adjust	0.6V/0.8V	200/300	EXT	SO-8/ SO-8EP

To find out more information:

Synchronous Rectified Buck Controller Web page : http://diodes.com/catalog/buck_controller_61/

Datasheets:

http://diodes.com/catalog/buck_controller_61/ap3585a.html

http://diodes.com/catalog/buck_controller_61/ap3585b.html

http://diodes.com/catalog/buck_controller_61/ap3585c.html

Ordering Information

Device	Packaging	Tape Width	Quantity
AP3585AMTR-G1	SO-8	12mm	4000
AP3585AMPTR-G1	SO-8EP	12mm	4000
AP3585BMTR-G1	SO-8	12mm	4000
AP3585BMPTR-G1	SO-8EP	12mm	4000
AP3585CMTR-G1	SO-8	12mm	4000
AP3585CMPTR-G1	SO-8EP	12mm	4000