

APPLICATION NOTE 479

# All-Ceramic 320mA Step-Down Converter for USB

*Abstract: This application note shows how a 320mA all-ceramic, step-down converter can generate the high efficiency needed for USB. The MAX1692 low-noise, step-down regulator is featured.*

Additional information:

- [Technical support: power](#)

A USB-powered device is constrained to draw no more than 0.5A from the input supply. Efficiency is paramount in order to maximize the available power from the port, so a synchronous buck regulator with internal switches is the best choice. In addition, this application can be implemented with all-ceramic capacitors for lowest profile and high availability. This MAX1692 circuit delivers +3.18V at 320mA from +5.25V input with 90.7% efficiency.

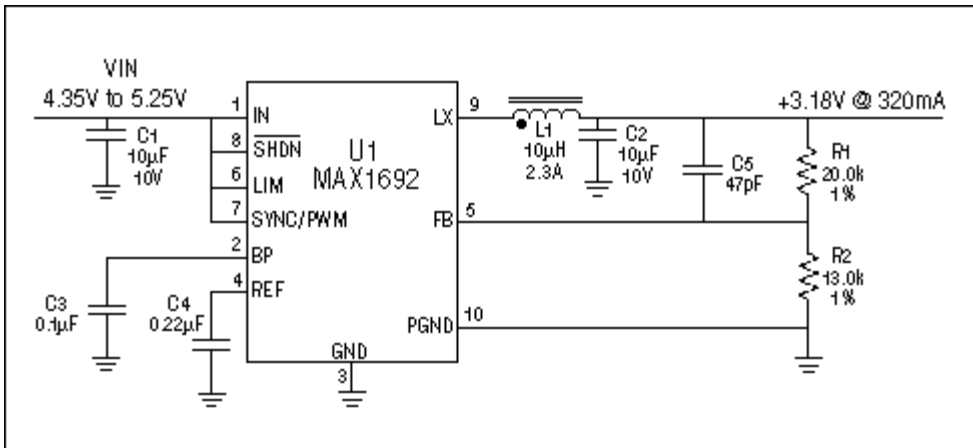


Figure 1.

Related Parts

[MAX1692 Low-Noise, 5.5V Input, PWM Step-Down Regulator -- Free Samples](#)

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