

Keywords: USB, step-up converter, DC-DC converter, ceramic capacitors

APPLICATION NOTE 477

All-Ceramic 200mA Step-Up Converter for USB

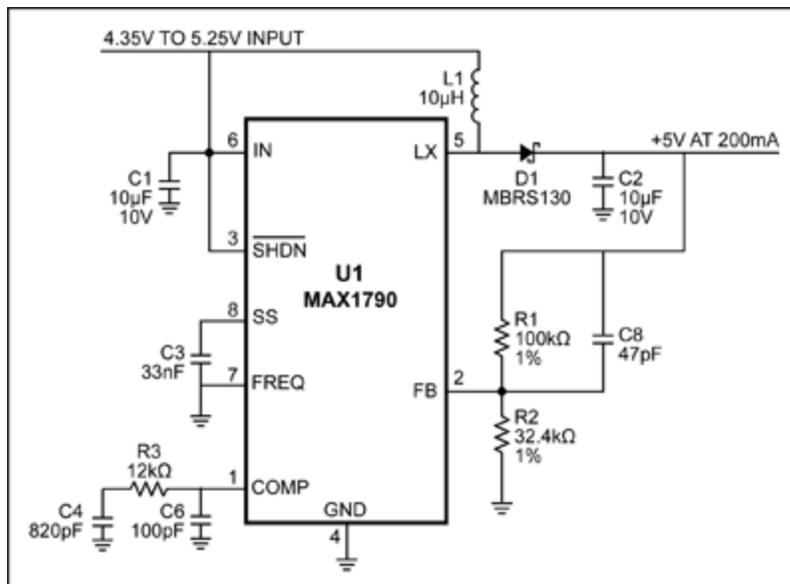
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Abstract: Design note shows a step-up DC-DC converter for USB that delivers 5V at 200mA with > 90% efficiency. Use of all-ceramic capacitors enables lowest profile and highest availability. The MAX1790 step-up converter is featured.

Additional information:

- [Technical support: power](#)

A USB-powered device is constrained to draw no more than 0.5A from the input supply. The input-supply voltage must be re-regulated to provide $+5V \pm 5\%$. Efficiency is paramount in order to maximize the power available from the port. In addition, this application can be implemented with all-ceramic capacitors for lowest profile and high availability. This [MAX1790](#) circuit delivers +5V at 200mA from +4.35V input with > 90% efficiency.



Related Parts

[MAX1790](#)

Low-Noise Step-Up DC-DC Converters

[Free Samples](#)

More Information

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