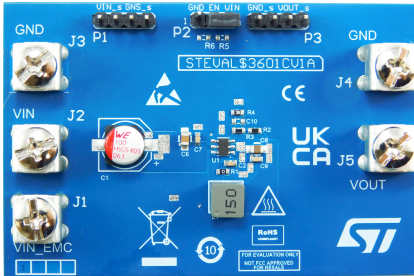


36 V, 1 A synchronous buck converter evaluation board based on DCP3601



Features

- 110 uA input quiescent current
- 1 MHz fixed switching frequency
- 3.3 to 36 V input operating voltage range
- 5 V output voltage
- Synchronous rectification
- Internal compensation network
- Peak current mode control
- Precision enable
- WEEE and RoHS compliant

Description

The [STEVAL-3601CV1](#) demonstrates a smart converter design able to deliver up to 1 A output current from a 3.3 to 36 V input, with a 5.0 V output voltage.

The board features the [DCP3601](#) miniaturized synchronous step-down converter, which implements enhanced peak current control and advanced design circuitry to minimize quiescent current.

The [STEVAL-3601CV1](#) demonstrates how highly efficient conversion can be achieved with just the [DCP3601](#), an inductor, two small capacitors, and two resistors.

The board highlights key application benefits made possible by the [DCP3601](#), including high efficiency and small PCB size, and is ideal for power conversion solutions in major appliances, smart metering, industrial 24 VBUS conversion and general-purpose wide vin power supplies.

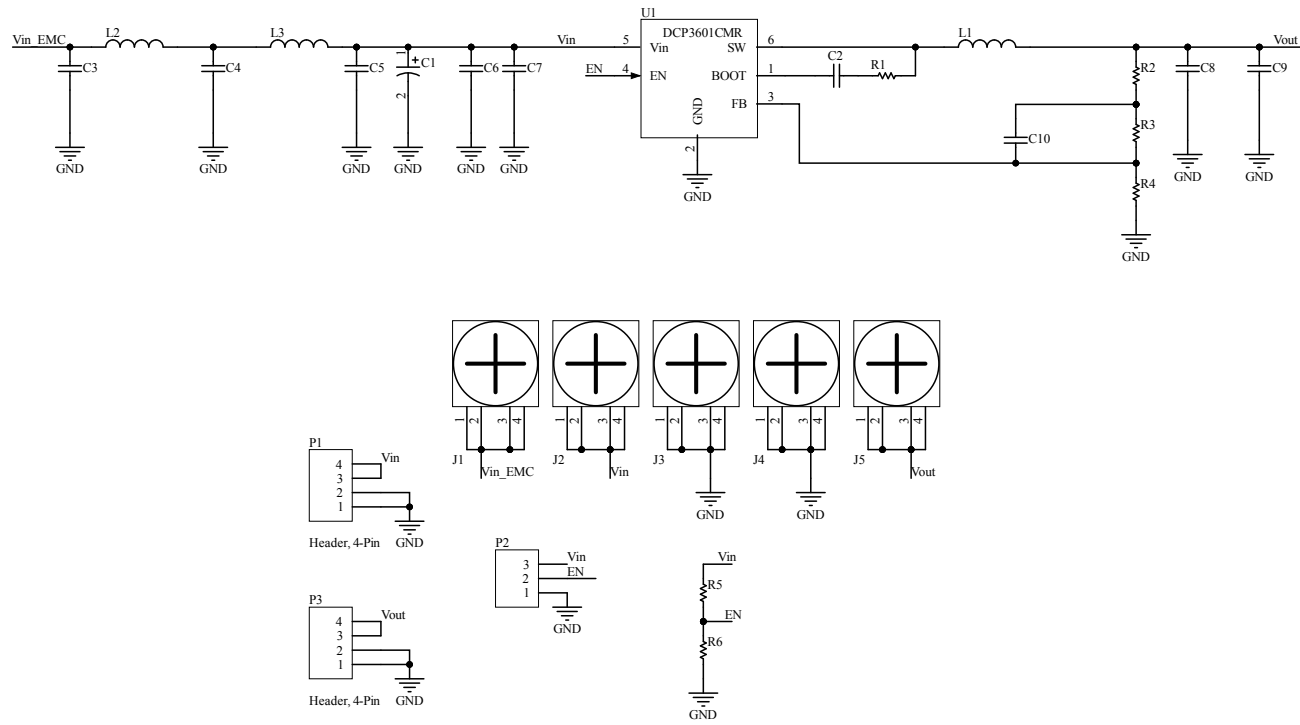
The device used on this board is supplied in the thin SOT23-6L package.

Product summary

36 V, 1 A synchronous buck converter evaluation board based on DCP3601	STEVAL-3601CV1
36 V, 1 A synchronous step-down converter in SOT23-6L	DCP3601CMR
Applications	Buck converter

1 Schematic diagrams

Figure 1. STEVAL-360CV1 circuit schematic



Revision history

Table 1. Document revision history

Date	Revision	Changes
07-Nov-2024	1	Initial release.
19-Dec-2024	2	Updated title in cover page, Section Description and Section Product summary .

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