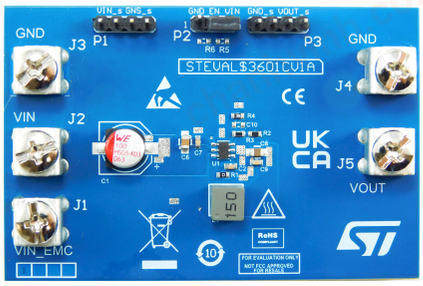
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STEVAL-3601CV1

Data brief

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

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

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.

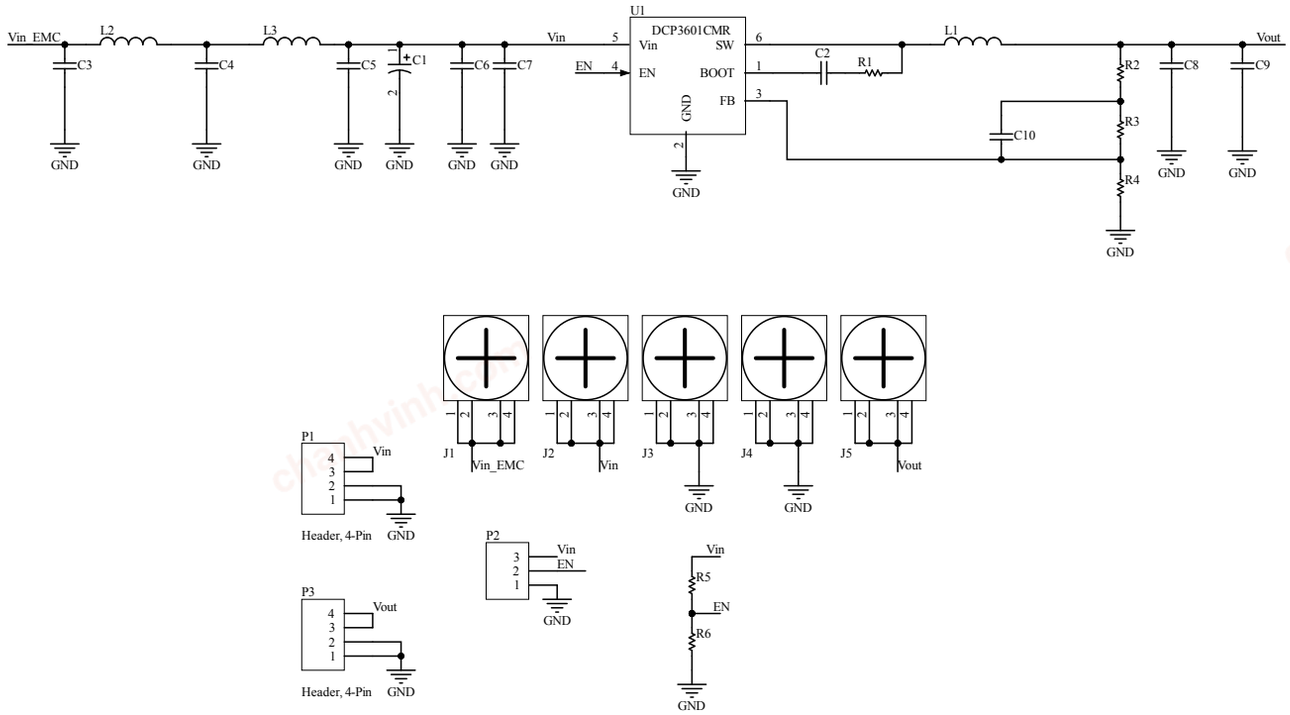
The board highlights key application benefits made possible by the DCP3601, including high efficiency and small PCB size, and is ideal for power conversion solutions in major appliances, smart metering, industrial 24 VBUS conversion and general-purpose wide vin power supplies.

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

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1 Schematic diagrams

Figure 1. STEVAL-360CV1 circuit schematic



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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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