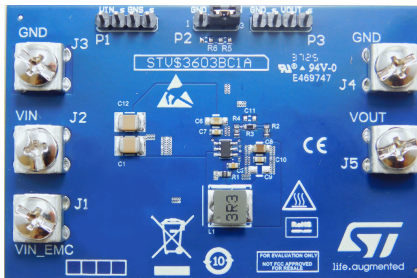


## Evaluation board based on DCP3603 - 36 V, 3 A synchronous buck converter in SOT23-6L



### Features

- 85 uA input quiescent current
- 1 MHz fixed switching frequency
- 3.3 V 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 (hardware only)

### Description

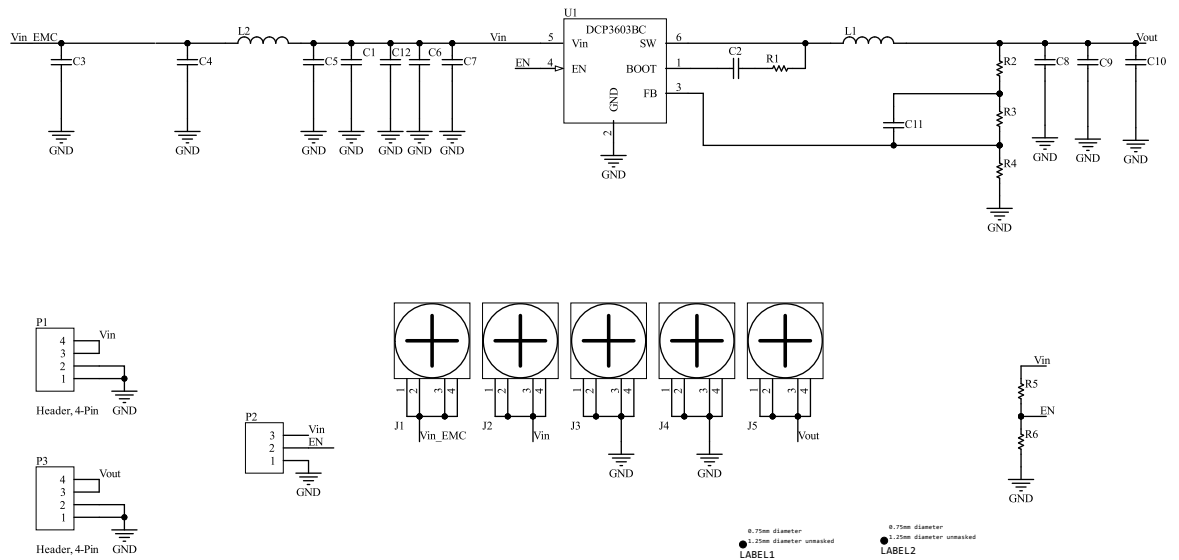
The **STEVAL-3603BC1** evaluation board demonstrates a smart converter design, able to deliver up to 3 A output current from a 3.3 V to 36 V input, with a 5.0 V output voltage. The board features the **DCP3603** miniaturized synchronous step-down converter, which implements enhanced peak current control and advanced design circuitry to minimize quiescent current.

The board demonstrates how highly efficient conversion can be achieved with just **DCP3603**, an inductor, two small capacitors, and two resistors. The board highlights key application benefits made possible by **DCP3603**, including high efficiency and small PCB size, and is ideal for power conversion solutions in major appliances, smart metering, industrial 24 V bus conversion, and general-purpose wide Vin power supplies. The device used on this board is supplied in the thin SOT23-6L package.

Product summary	
Evaluation board based on DCP3603 - 36 V 3 A synchronous buck converter in SOT23-6L	STEVAL-3603BC1
Miniaturized synchronous step-down converter	DCP3603BCMR
Applications	Buck converter Industrial power supply

# 1 Schematic diagrams

**Figure 1. STEVAL-3603BC1 circuit schematic**



## 2 Board versions

**Table 1. STEVAL-3603BC1 versions**

Finished good	Schematic diagrams	Bill of materials
STV\$3603BC1A <sup>(1)</sup>	STV\$3603BC1A schematic diagrams	STV\$3603BC1A bill of materials

1. This code identifies the STEVAL-3603BC1 evaluation board first version.

## Revision history

**Table 2. Document revision history**

Date	Revision	Changes
13-Oct-2025	1	Initial release.

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