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**1.82 V – 500 mA, 6 MHz synchronous step-down converter  
based on the ST1S15**

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Data brief

**Description**

The STEVAL-ISA131V3 is a product evaluation board designed around the ST1S15, a high-efficiency miniaturized step-down converter able to provide 500 mA output current from an input voltage of 2.3 V to 5.5 V.

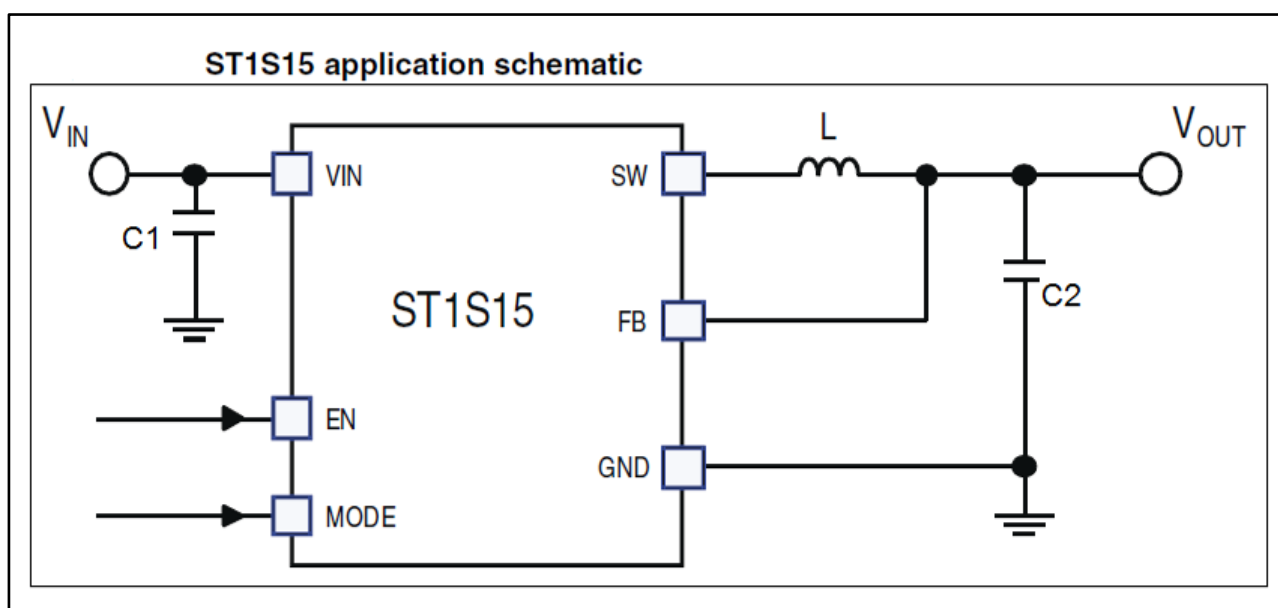
The converter operates at a switching frequency of 6 MHz and is specifically designed for applications where high efficiency and small application areas are key factors.

**Features**

- 85% typical efficiency
- 500 mA output current capability
- 45  $\mu$ A typical quiescent current
- PFM or PWM operation for best efficiency over the entire load range
- Ultra-fast load and line transients
- Short-circuit and thermal protection
- Tiny external components
- Auto or forced PWM selection using a dedicated pin
- ST1S15TPUR in DFN6 (2 x 2 mm)
- RoHS compliant

# 1 Application schematic

Figure 1: ST1S15 application schematic



## 2 Revision history

Table 1: Revision history

| Date        | Revision | Changes         |
|-------------|----------|-----------------|
| 22-Jan-2013 | 1        | Initial release |

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