STEVAL-1PS01AJR



Data brief

Evaluation board based on ST1PS01AJR 400 mA nano-quiescent synchronous step-down converter





Product summary		
evaluation board based on ST1PS01AJR 400mA nano- quiescent synchronous step- down converter	STEVAL-1PS01AJR	
400 mA nano- quiescent synchronous step- down converter with digital voltage selection and power good	ST1PS01	

Features

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- 1.8 V to 5.5 V input operating range
- Up to 400 mA output current capability
- Tiny external components: L=2.2 µH typ.
- Selectable output voltages: 1.9 V to 2.8 V
- Output voltage Power Good
- Dynamic output voltage selection (D0, D1)
 - Suitable for the following applications:
 - Wearable applications
 - Personal tracking monitors
 - Smart watches, sport bands
 - Energy harvesting, wireless sensors
 - Wearable and fitness accessories
 - Industrial sensors, portable low power devices
 - Single cell Li-Ion battery applications
 - Bluetooth® low energy
 - Zigbee
- WEEE and RoHS compliant (hardware only)

Description

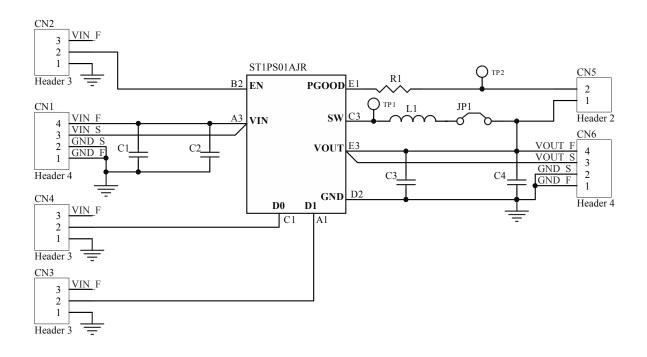
The STEVAL-1PS01AJR evaluation board features the ST1PS01 miniaturized, nanoquiescent, synchronous step-down converter designed for applications where high efficiency, PCB size and thickness are the key factors. The converter can provide up to 400 mA output current with a 1.8 V to 5.5 V input voltage range. The output voltage can be dynamically adjusted from 1.9 V to 2.8 V using two digital control inputs.

Thanks to the enhanced peak current control (PCC), the ST1PS01 can achieve very high efficiency conversion using only a 2.2 μ H inductor and two small capacitors. Furthermore, the converter's advanced design circuitry reduces quiescent current to a minimum.



1 Schematic diagram

Figure 1. STEVAL-1PS01AJR board schematic



Revision history

Table 1. Document revision history

Date	Version	Changes
04-Apr-2019	1	Initial release.