

IPS4260L

High robustness and rich diagnostics for smart automation



ST's new IPS4260L quad low-side intelligent power switch boosts efficiency and reliability in industrial automation

The demand for increasingly specialized intelligent ICs is rapidly penetrating every aspect of Factory Automation.

Extensive diagnostics and flexibility to adapt in real time to external events are a must, as well as the relentless pursuit of energy efficiency.

ST managed to fit all these capabilities into a new 20-lead HTSSOP intelligent power switch.

Ideal for motor controls, industrial-PC peripherals, PLCs, and general low-side switching of loads, the IPS4260L provides fast switching time ($t_r, t_f < 1 \mu s$), smart demagnetization, protections and rich diagnostics for smart manufacturing applications.

KEY FEATURES & BENEFITS

- Wide application range with 8 to 50 V operating voltage and four independent protected channels with typical operating load current: 0.5 A (per channel) / 2 A (single channel)
- Maximum robustness to cope with harsh industrial environments with full protection for non-dissipative short-circuits, ground and VCC wire breaks, thermally independent junction over-temperature protections and programmable load current limitation
- Adaptability to external conditions with full set of diagnostic features: common open load diagnostics, common thermal shutdown as well as overload and per channel thermal shutdown
- Designed to meet IEC 61131-2 standards on requirements and associated tests for programmable controllers and their peripherals
- Compact HTSSOP20 package (6.4x6.5 mm)

KEY APPLICATIONS

Low-side switching loads in applications such as:

- Programmable logic controllers
- Industrial PC peripheral inputs/outputs
- Numerical control machines
- Motor control



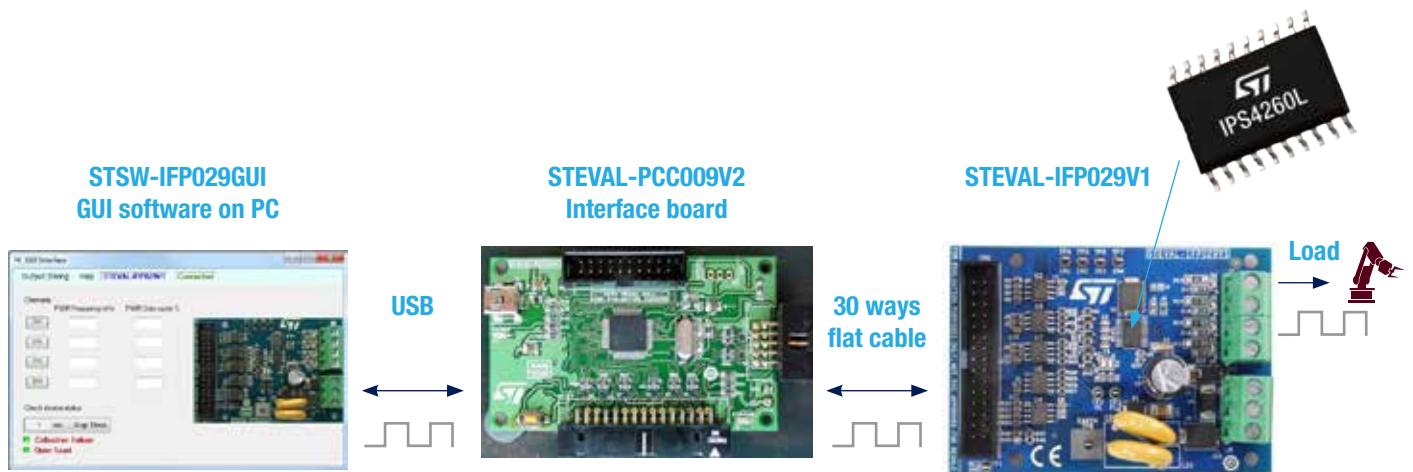
HANDS-ON DEVELOPMENT

You can easily explore the IPS4260L' features and gauge its benefits for your application using its dedicated evaluation board (STEVAL-IFP029V1).

With its thermally-optimized layout, a galvanically-isolated connection

for both the command and diagnostic lines, the board complies with IEC 61000-4-2, IEC61000-4-4, and IEC 61000-4-5 requirements to enable a comprehensive system level evaluation.

The STEVAL-IFP029V1 can be connected through the interface board (STEVAL-PCC009V2) to a PC where the intuitive graphic user interface (STSW-IFP029GUI) provides full access to IPS4260L functions.



Order code	Package	Packing
IPS4260L / IPS4260LTR	HTSSOP20	Tube/ Tape & Reel

Order code	Description	Related documents
STEVAL-IFP029V1	IPS4260L quad low-side driver evaluation board	UM2297
STSW-IFP029GUI	Graphical user interface for the STEVAL-IFP029V1 evaluation board	
STEVAL-PCC009V2	IBU motor control and intelligent power switch (IPS) universal interface board	AN4781

