News & Updates from ST

September 2016

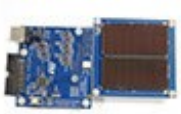
STSPIN low-voltage stepper motor driver delivers best-in-class performance

Optimized for battery-powered systems in terms of low input voltage (down to 1.8 V), low noise, and minimal power consumption at full load as well as in standby conditions (less than 80 nA), ST's STSPIN220 low-voltage stepper motor driver provides accurate positioning and unprecedented smoothness of motion with up to 256 microsteps per full step. Available in a QFN package measuring only 3 x 3 mm, it is the world's smallest single-chip motor driver (control logic + power stage). Read more

60 V intelligent power switch ready today for tomorrow's factory automation

The IPS160H is a single high-side switch with protections and diagnostics for Safety Integrity Level (SIL2 and SIL3) compliant systems. With a supply voltage range up to 60 V, the IPS160H intelligent power switch (IPS) is capable of safely driving complex (resistive, capacitive and inductive) loads with one side connected to ground such as valves, relays and lamps in factory automation or process control applications. Read more

Ultra-low-power energy harvester and battery charger module with power monitoring



Based on the SPV1050 ultra-low-power energy harvester and battery charger, the STEVAL-ISV021V1 demo kit represents a standalone harvesting module that can interface with a wireless sensor node to supply the MCU, transmitter and sensors with the energy scavenged. It includes a power monitoring board along with a software GUI to monitor and plot PV panel and battery voltage and current as well as system performance including MPPT accuracy and conversion efficiency. Read more

Find your way with digital wall dimmer for halogen and low-consumption lamps

The STEVAL-ILD004V2 evaluation board represents a low-cost power topology for wall dimmers using two sensitive TS820-600FP SCRs and a single STGF10NC60KD IGBT to dim 100 - 240 V halogen lamps, SELV halogen lamps through magnetic or electronic transformers, and new CFL and LED dimmable lamps. Running on an STM8S103F2 MCU, this board introduces a buck SMPS instead of a linear power supply, for compatibility across all dimmable LED and CFL lamps. Read more

Raise ruggedness, stability and efficiency with our 36 V op amps in automotive and industrial applications

The TSB572 and TSB611 high-voltage op amps feature a wide supply-voltage range, stability in challenging operating conditions, and ESD up to 4 kV (HBM) to help ensure peace of mind for designers. Developers will especially appreciate our interactive product selector apps for Android and iOS devices and an extensive set of SPICE and PSPICE simulation models. Read more

Manage LED current, voltage and dimming using 60 W, digital 3-LED channel evaluation board

The STEVAL-ILL077V1 evaluation board is a complete and configurable solution able to independently manage up to 3 LED channels using the features of the STNRG388A digital controller, which embeds advanced peripherals tailored to generate high-resolution PWM signals. Every LED channel can be configured through the same GUI to set certain parameters like maximum LED channel voltage and current, and dimming mode. Read more

0.5 A, floating boost LED driver board for driving multiple high-power LEDs in series

---

The STEVAL-ILL084V1 evaluation board is based on the LED6000 switching regulator designed to source up to 3 A DC current for high-power LED driving. Applications with a floating boost topology can benefit from its wide input voltage range to drive many power LEDs in series. An adjustable current limit threshold and high switching frequency optimize applications, whose overall size is minimized thanks to its compatibility with ceramic output capacitors. Read more

ST IGBT Finder app – easily select the right IGBT for your design

---

The ST IGBT finder enables you to explore ST's wide portfolio of IGBTs and easily filter and select the device that best fits your application via a parametric search. Available for Android and iOS, this free app for smartphones and tablets lets you download datasheets, access the main product specifications as well as share the information via email or social media. Read more

Video

Get started with pre-loaded multi-function analog op amp expansion board

---

This 3-minute video explains how to get started with the X-NUCLEO-IKA01A1 multi-functional op amp expansion board. Part of the STM32 Open Development Environment (STM32 ODE), a fast and affordable way to develop innovative devices and applications, the board includes sample applications that lets developers use several pre-built signal conditioning circuits for various use cases based on 3 different op amps. Watch now