

IoT news from STMicroelectronics

October 2016

Harvest the maximum power from ambient energy and charge your IoT devices

Ensure full power autonomy of a wireless sensor node or wearables by charging any battery type or supercap using ST's STEVAL-IDS002V1, a fully configurable autonomous wireless sensor node. Based on ST's SPV1050 ultra-low-power PV and TEG energy harvester and battery charger, the kit also comes with a power monitoring board and a dedicated GUI to easily manage MPPT



tracking, system power budget monitoring and temperature, air pressure and 3-axis acceleration data transmissions by Sub-Giga RF radio. Read more

New low-voltage motor drivers boost runtime of battery-powered IoT devices

Simplify the design, save space and extend the lifetime of battery-powered IoT devices with three new monolithic STSPIN motor drivers. Optimized for stepper (with a position accuracy of 256 microsteps per full step), DC brushed, and 3-phase BLDC motors, they operate from a supply voltage as low as 1.8 V and enable power savings thanks to the ultra-low, best-in-class standby current of less than 80 nA.



Available in a 3 \times 3 mm QFN package, they also benefit from comprehensive built-in protection features. Read more

High-efficiency wireless battery-charging chipset for wearables

The combination of ST's STWBC-WA charging-transmitter controller and STWLC04 wireless battery-charger receiver enables power transfers up to 1 W with just 11 mm diameter coils on the receive side and 20 mm for the transmitter, allowing slimmer form factors. The full-featured chipset supports wireless-charging for Li-ion or Li-polymer batteries and includes safety mechanisms such as foreign-object detection, active transmitter-presence detection, and receiver thermal protection. Read more



Ultra-precision and low-power op amp for IoT applications

The TSZ12 series of high-precision op amps offer very low input offset voltages with virtually zero drift. Available in single-, dual-, and quad-channel versions, these op amps offer rail-to-rail input and output, excellent speed/power consumption ratio, and 400 kHz gain bandwidth product, while consuming less than 40 μA at 5 V. These



features make the TSZ12 series ideal for sensor interfaces as well as battery-powered and portable applications. Read more

Recent blog posts

Thanks for making the ST Developers Conference a huge success

Following the recent ST Developers Conference, we have published the conference's session presentations as well as pictures and related blog posts on our post-event webpages. We'll soon publish additional content including videos, new blog posts, etc. To stay up to date,



come back regularly to these pages or use the subscription form to stay informed. $\underline{\text{Read}}$ $\underline{\text{more}}$

STM32L475, a Heart Monitor, and Wireless Charging: Among the Many Innovations at ST DevCon

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Seminars & conferences

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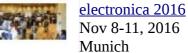
NFC online course

STM32F7 online course

Events

ARM TechCon 2016 Oct 25-28, 2016 Santa Clara, CA (USA)

IoT Planet 2016 Oct 25-27, 2016 Grenoble (France) At the just-concluded ST Developers Conference in Santa Clara, California presenters and enthusiasts shared their passion for smart and powerful technologies. More than 600 attendees had a front row seat to major innovations happening in the Internet of Things, and saw many breakthroughs taking place in the cloud and in consumer and industrial electronics. Read more



European Utility Week Nov 15-17, 2016 Barcelona

TRUSTECH & CARTES 2016
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