

IoT news from STMicroelectronics

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Wireless power Tx/Rx system for small systems requiring easy recharging

Using an STM32F0-based wireless battery charger transmitter and an integrated STWLC03 wireless power receiver, the STEVAL-ISB039V1 is for small systems up to 2.5 W that can be recharged easily. Tx firmware consists of a single STM32CubeMX library providing an easily customizable solution. The STWLC03



receiver can act as a power supply with configured output voltage or as a simple configurable CC-CV battery charger. Its I²C interface allows the customization of parameters and storage of configurations in embedded NVM. Read more

Low-voltage dual DC motor driver boosts runtime of battery-powered IoT devices

The STSPIN240 motor driver integrates control logic and two full-bridge low $R_{DS(on)}$ power stages, with up to 1.3 A_{RMS} output current each, in a small 3x3 mm QFN package. Operating over a wide current and temperature range from an input voltage as low as 1.8 V, it can



be forced into a zero consumption state – with quiescent current down to less than 80 nA – which allows significant power saving and makes the IC ideal for mobile gear and wearables requiring an extended battery lifetime. Read more

New evaluation kit helps you reach full compliance with stringent HDMI™ 2.0 standards

The STEVAL-CCH003V2 evaluation kit provides easy access to all HDMI control stage signals and power supplies. Able to be used in a standalone configuration as a plug-and-play board to show the interface is working properly, it can also be used to demonstrate the capability of the HDMI2C1-14HD device to drive cables with a high



capacitance load (poor quality or long HDMI cable) or to evaluate power consumption in various operating configurations. Read more

Tiny, high PSRR, 200 mA LDO extends battery life and reduces board space

The STEVAL-ISB034V1 board features the LDBL20 high-performance linear voltage regulator configured to convert a DC input voltage from 2.85 to 5.5 V into a precise and stable 2.5 V output voltage solution using only two small ceramic capacitors. Featuring high PSRR and low quiescent current in a minute 0.47 x 0.47 mm ST Stamp™ chipscale package, it is designed for low-power battery-operated



scale package, it is designed for low-power battery-operated devices such as smartphones, tablets and wearables. Read more

Enhanced baluns simplify RF complexity and offer stability with low dispersion over temperature

Designed on non-conductive glass substrate to ensure low IL and distortion, ST's BALF-112X ultraminiature baluns integrate both matching network and harmonics filter with a matching impedance customized for the CC1120, CC1125, CC1175 and CC1200 transceivers. Offering stability and low dispersion over temperature,



ST's single component solution reduces RF complexity and provides optimized link budget in less than 3 mm² footprint for the BALF-112X-01D3 and less than 3.7 mm² for the BALF-112X-02D3. Read more

New tool to evaluate our ultra-low-power MEMS digital output motion sensor

Evaluate ST's LIS2HH12 ultra-low-power high-performance 3-axis linear accelerometer (with full scales of ±2g/±4g/±8g and built-in self-



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test feature) using our STEVAL-MKI164V1 adapter board. Fitting a standard DIL24 socket, it provides the complete LIS2HH12 pinout and comes ready-to-use with the required decoupling capacitors on the VDD supply line. The board offers an effective **Events** solution for fast system prototyping and device evaluation directly within the user's own application. Read more

Recent blog posts

ST helps developers shake up the IoT movement

ST is excited to be part of the IoT movement that is impacting existing industries and creating new ones. The Internet and its ecosystem of cloud computing offers many opportunities to build new applications and refresh them over the air. This in turn enables new capabilities, services and business models that create more value for consumers and developers. Read more



IoT at the heart of the ST Developers Conference

One recurring theme of this year's conference was the Internet of Things (IoT) and ST's central contributions to this expanding market. ST's BlueCoin, SensorTile, and Bluetooth Low Energy were front and center and created big buzz. ST also addressed the increasingly important security in IoT, which is too often overlooked. Read more



European Utility Week 2016

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