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## **STCOMET Smart-Meter Platform from STMicroelectronics Passes Important Certification and Interoperability Tests**

*Latest PRIME<sup>®</sup> 1.4 and G3-PLC<sup>™</sup> approvals, plus ready-to-use system-on-chip design support, aid smart-meter deployments across markets and territories*

**Geneva, October 28, 2014 – STMicroelectronics (NYSE: STM)**, a global semiconductor leader serving customers across the spectrum of electronics applications, has announced important new protocol certifications<sup>i</sup> and a strengthened ecosystem for its [STCOMET smart-meter System-on-Chip \(SoC\) platform](#), creating a unified and future-proof platform capable of complying with the major power-line communication (PLC) standards chosen by utilities worldwide.

The STCOMET SoC has become one of the first two ICs to complete the new G3-PLC<sup>™</sup> certification program announced by the G3-PLC Alliance<sup>ii</sup> in September 2014. STCOMET has also recently passed interoperability tests for PRIME<sup>®</sup> 1.4, the latest version of the PRIME Alliance<sup>iii</sup> PLC standard used by over four million smart meters in service today. It is already certified to PRIME 1.3.6, and supports S-FSK IEC61334-5-1, METERS AND MORE<sup>®</sup>, and IEEE 1901.2 PLC standards.

“Support for the latest releases of the leading PLC standards makes STCOMET the industry’s most complete, mature and highly integrated smart-meter solution, helping accelerate roll-out of the smart grids we need to ensure stable, affordable, low-carbon energy for the future,” said Matteo Lo Presti, Group Vice President and General Manager, Industrial and Power Conversion Division, STMicroelectronics.

The latest PRIME protocol, version 1.4, which was announced by the PRIME Alliance in May 2014, contains several enhancements including a new robust mode for reliable communication in electrically noisy environments. STCOMET is among the first chipsets to pass interoperability testing, allowing new equipment to benefit from the latest advances while also ensuring compatibility with existing infrastructure.

G3-PLC is a smart-grid communication protocol with features that help ensure efficient use of frequency spectrum and high immunity to noisy channel conditions. STCOMET is among the first two ICs to pass the G3-PLC certification program, enabling smart-meter producers to create high-performing and interoperable products.

Adding further strength to its offer for smart-meter producers, ST already has a fully featured development ecosystem that enables a fast start for any project targeting the major protocol standards in use today including PRIME 1.4 and 1.3.6, G3-PLC, METERS AND MORE, and IEEE 1901.2. The ecosystem provides protocol stacks, reference designs, hardware for prototyping single-phase or three-phase meters, and tools such as metrology-management software and drivers to support software integration.

As a programmable and firmware-upgradeable SoC platform, STCOMET enables customers to use the same design in multiple product variants complying with the different PLC standards used in various markets and territories worldwide. Advanced integration combines a state-of-the-art ARM® Cortex®-M4 based application processing subsystem, high-accuracy complete metering front-end, on-chip program Flash and RAM, and a dedicated security engine with privacy and anti-hacking protection. The PLC module comprises a programmable DSP (Digital Signal Processing) modem, a complete receive-transmit front end, and a power amplifier with a 28V peak-to-peak output. Extended bandwidth of up to 500kHz encompasses FCC<sup>iv</sup> and ARIB<sup>v</sup> frequency ranges used in North America and Japan. In addition, support for remote configuration minimizes lifetime ownership costs for operators.

STCOMET is available now for selected customers, in a 20mm x 20mm 1mm-high TQFP176 package. Please contact your ST sales office for pricing options, sample requests, and support tools.

At European Utility Week 2014, ST will showcase several STCOMET-based metering products compliant with multiple standards from different customers worldwide.

### **About STMicroelectronics**

ST is a global leader in the semiconductor market serving customers across the spectrum of sense and power and automotive products and embedded processing solutions. From energy management and savings to trust and data security, from healthcare and wellness to smart consumer devices, in the home, car and office, at work and at play, ST is found everywhere microelectronics make a positive and innovative contribution to people's life. By getting more from technology to get more from life, ST stands for life.augmented.

In 2013, the Company's net revenues were \$8.08 billion. Further information on ST can be found at [www.st.com](http://www.st.com).

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<sup>i</sup> The smart meters in any given grid comply with a common communication protocol to exchange information with equipment at the utility's premises. A number of Powerline Communications (PLC) standards are in use worldwide, conceived to support interoperability and enable new smart-grid applications. By testing its smart-meter SoCs in accordance with these protocol specifications, ST enables customers to produce equipment that passes acceptance tests for connection to grids in their target markets.

<sup>ii</sup> The G3-PLC Alliance is a consortium of stakeholders in the smart-grid ecosystem supporting G3-PLC™ powerline communication technology. Members are companies from across the smart-grid industry including electricity utilities, equipment manufacturers, system integrators, IT vendors, automotive, and semiconductor companies. The G3-PLC specification has been posted for all interested parties to promote interoperability and open-endedness among smart-grid implementations. ST is an Executive Member of the G3-PLC Alliance.

<sup>iii</sup> The PRIME Alliance comprises utilities, meter and semiconductor chipset manufacturers, and other industry-related companies, and aims to establish international standards allowing full interoperability among equipment and systems from different providers. The PRIME (Powerline Intelligent Metering Evolution) PLC architecture is public, open and non-proprietary, and specifications are structured to allow new entrants to deliver interoperable solutions. ST is a Principal Member of the PRIME Alliance.

<sup>iv</sup> FCC: Federal Communications Commission. The US governing body for radio-frequency communication.

<sup>v</sup> ARIB. Association of Radio Industries and Businesses. A group of commercial and research organizations chartered by the Japanese Ministry of Internal Affairs and Communications to support the use of radio systems.