



Terranova announces its new collaboration with Renesas



Terranova is a leading provider of technologies in the Energy & Utilities market. Since 2001 it has supported companies in their process of digitization, growth, business and market position consolidation. All Terranova solutions share the same pattern: they are flexible, modular and tailored to respond to any requirement set by the market.

Renesas is a market leader in the semiconductor industry. Terranova has partnered with Renesas to set up a collaboration that offers ready-to-use electricity meter reference-designs and Smart Meter Platforms with DLMS/COSEM to the market.

Terranova offers the Smart Meter Libraries Suite to Meters, Concentrators and Gateway Manufacturers for the implementation of the most common and widely used protocols: DLMS/COSEM, MBUS, SML, CTR, DNP3 and MODBUS.

The reference-designs are based on Renesas' RL78/I1C series of 16-bit low power single-chip metrology microcontrollers. They are an ideal starting point for rapid development of both single-phase and three-phase electricity meters.

The reference-designs come with free-of-charge software-defined metrology firmware with DLMS/COSEM option, schematics, PCB Gerber files, Bill-of-Material and a comprehensive set of documentation. The source files are based on Renesas' development coding and debugging tools, and allow the user to reprogram and analyze the metrology kernel using the E2/E2lite emulator.

For demanding applications which require the additional power of a 32-bit general purpose microcontroller, such as smart electricity meters, Renesas' RA family of Arm® Cortex®-M based MCUs is also

supported by Terranova's DLMS/COSEM stack.

Thanks to these turnkey solutions the whole development process has been significantly shortened, leading to a much reduced time-to-market and to a more robust outcome.

Prompt adaption to standards and customization to regional requirements are continuously addressed thanks to a dedicated design team, specialised in the development of communication protocols.

With this successful collaboration, Terranova and Renesas have taken an important step towards a complete-system-solution-offering, a partnership which is planned to be extended in the future with focus on further types of protocols and MCUs.

