



DRIVING EMBEDDED EXCELLENCE



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Press Release

Business alliance between electrical measuring instrument manufacturer HIOKI and measurement and calibration solutions vendor ETAS

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ETAS K.K.

HIOKI E.E. CORPORATION

HIOKI E.E. Corporation (Headquarters: Ueda, Nagano, President & CEO, Kazutoshi Hosoya, hereinafter "HIOKI"), which engages in electrical measuring instrument development, production, sales, and services, and ETAS K.K. (Headquarters: Nishi-ku, Yokohama, President & Representative Director, Takayuki Yokoyama, hereinafter "ETAS"), which provides measurement and calibration solutions for ECU software announce a business alliance. The purpose of this alliance is to fuse high-precision electrical measuring technology and measurement and calibration solutions, which are essential to improving the efficiency of electric powertrain development.

Market background

In the automotive industry, there is currently a demand for the massive technology innovation represented by CASE (Connected, Autonomous, Shared, and Electric).

Larger capacity for storage batteries represented by lithium-ion batteries, inverters with increased switching frequencies through the evolution from IGBTs to SiC, and new electrical measuring technologies based on the higher responsiveness of the motor system are needed, particularly in the electrification arena. There is also demand for the efficient development of ECU software for controlling these technologies.



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Effect of the business alliance

The solutions provided by ETAS will be fused with high-precision electrical measuring technology provided by HIOKI for everything from advanced development of electric powertrains to actual vehicle experiments.

As one example, in electric powertrain development, motor operating conditions and output are determined by using ECU software to calibrate voltage and current while measuring electrical parameters such as voltage/current values and power loss. Synchronizing electric energy measurement using HIOKI's Power Analyzer PW6001 with ECU software calibration using ETAS INCA will greatly contribute to more efficient electric powertrain development.

Furthermore, HIOKI has realized the SP7001 non-contact CAN/CAN FD sensor to apply electrical measuring technology. Combining this sensor with INCA will make it possible to measure information from vehicle-mounted networks without fabricating harnesses.

Solution features

Add-ons that record HIOKI power analyzer measurement data in INCA. Connecting INCA with HIOKI's PW6001/PW3390 will enable seamless execution from actual PCU verification to calibration on test benches.

Solution advantages

Recording ECU control values and CAN communication via a single measurement data element can enhance analysis efficiency. Expressing power analyzer measurement data with INCA's rich GUI will prevent worker analysis errors. Furthermore, since power analyzer settings can be changed from INCA, main unit operations can be reduced.

Additionally, power analyzer measurement data can be input to INCA directly via digital communication without errors, which will improve calibration accuracy. This also contributes to high-precision plant model generation since high-precision data can be obtained when plant models are generated from actual measurement data.

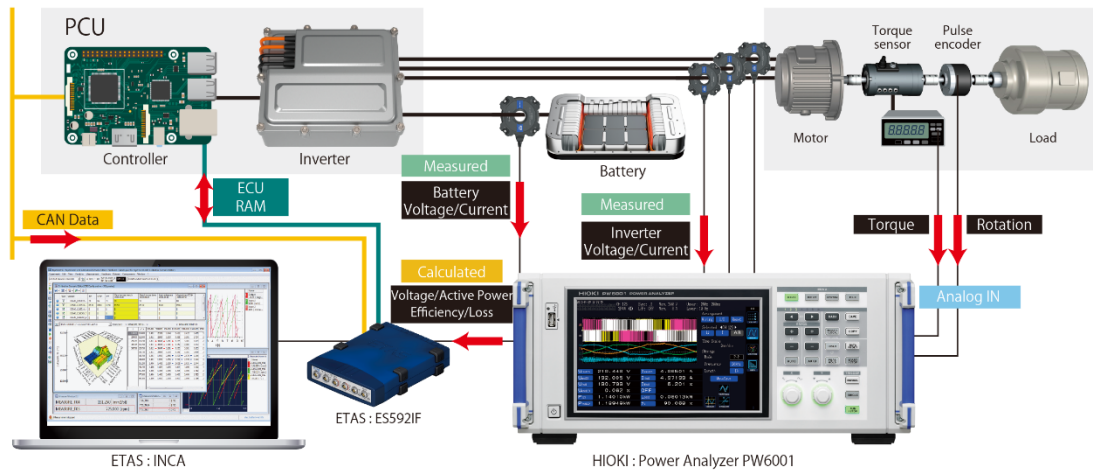


Figure: INCA Add-on HIOKI Integrated High-Precision Electrical Measurement Package



[Left in the photo] **Takahiro Okazawa**, Director and Senior Managing Executive Officer in Charge of Sales and Services, HIOKI E.E. Corporation

(Scheduled to take office as President & CEO as of January 1, 2021)

[Right in the photo] **Takayuki Yokoyama**, President & Representative Director, ETAS K.K.

About ETAS K.K.

ETAS provides innovative solutions for the development of embedded systems for the automotive industry and other sectors of the embedded industry. As a systems provider, ETAS supplies a multifaceted portfolio that covers the range from integrated tools and tool solutions to engineering services, consulting, training, and support. Holistic IoT security solutions are offered via ETAS subsidiary ESCRYPT. Established in 1994, ETAS GmbH is a 100-percent subsidiary of the Bosch Group, with international subsidiaries and sales offices in Europe, North and South America, and Asia. Further information online at www.etas.com



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About HIOKI E.E. Corporation

HIOKI provides electrical measuring solutions in various fields including vehicles, electronic components, environment/new energy, and infrastructure. Electrical measuring instruments, called industrial mother tools, are necessary and essential in all situations, such as research and development, production lines, and maintenance services. HIOKI promotes the safe and effective use of energy by customers and contributes to the security and development of society with solid technology and unique innovation cultivated through its 85 years of single-minded focus on electrical measurement.

HIOKI provides timely solutions to customers around the world through speedy collaboration of the headquarters in Japan, where development, production, and management functions are concentrated, its domestic sales branches, and its eight sales subsidiaries spread throughout Asia, America, and Europe.

For details, please go to <https://www.hioki.co.jp/>.

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