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El centro de investigaciones de diseño de Singapur elige los equipos de prueba de RF de Agilent Technologies

Agilent Technologies Inc. (NYSE: A) ha anunciado hoy que la Universidad Tecnológica de Nanyang (NTU) en Singapur ha elegido a Agilent como proveedor de equipos de prueba de RF para su centro Virtus de excelencia de diseño de circuitos integrados. Se espera que esta oportunidad nos permita cultivar una relación a largo plazo centrada en el creciente mercado de la educación en Asia.

Virtus tiene como objetivo convertirse en un centro de diseño de primera fila mundial, desarrollando las tecnologías clave necesarias para diseñar circuitos integrados y

sistemas para su uso en electrónica de consumo, equipos médicos y generación de energías limpias. Los equipos, que incluyen generadores de señales, un analizador de redes y software de análisis y caracterización de circuitos integrados, se utilizarán en proyectos de investigación de frecuencias próximas al terahercio, comenzando por aplicaciones WiGig y proyectos de más alta frecuencia a 325 GHz.

“Agilent nos ha permitido introducir tecnologías y conocimientos nuevos para acelerar el desarrollo de las capacidades de investigación y diseño de la NTU”, comentó el profesor Yeo Kiat Seng, director fundador de Virtus y director de la División de Circuitos y Sistemas en la Escuela de Ingeniería Eléctrica y Electrónica de la NTU. “Además, Agilent ofrece una asistencia y un compromiso excelentes en materia de investigación que han contribuido a mostrar tanto a nuestra facultad como a nuestros investigadores y estudiantes la realidad y las oportunidades de la nueva economía basada en el conocimiento”.

“La educación y la investigación constituyen un importante mercado en crecimiento en Singapur”, afirmó Lawrence Liu, director de ventas del Grupo de Medidas Electrónicas de Agilent para la región Sur de Asia-Pacífico. “Agilent reconoce el talento de los investigadores y estudiantes de la NTU, y está orgulloso de poder contribuir al éxito futuro de la escuela”.

La Universidad Tecnológica de Nanyang (NTU) es una universidad orientada a la investigación con una sólida reputación a escala internacional en ciencia e ingeniería. Los orígenes de la universidad se remontan a 1955, año de la fundación de la Universidad de Nanyang. Actualmente, la NTU posee cuatro facultades con 12 escuelas superiores y tres entidades autónomas, el Instituto Nacional de Educación, la Escuela S. Rajaratnam de Estudios Internacionales y el Observatorio Terrestre de Singapur.

La NTU constituye la principal universidad científico-tecnológica del país, y contribuye significativamente

al renovado impulso que vive el país por la investigación y la innovación liderado por la Fundación Nacional de la Investigación (NRF) de Singapur. La importancia de la NTU en las ciencias biomédicas y las tecnologías medioambientales y del agua, así como los medios interactivos y digitales, reflejan el interés de la NRF por la investigación.

La NTU tiene un fuerte alcance a nivel internacional, con acuerdos de colaboración académica y de investigación con instituciones punteras en EE. UU., Europa y Asia, como el Instituto de Tecnología de Massachusetts (MIT), la Universidad de Stanford, la Universidad de Cornell, Caltech, la Universidad de Washington, el Instituto de Tecnología de Georgia, la Universidad Carnegie Mellon, la Universidad de Cambridge, el Imperial College, el Instituto Federal Suizo de Tecnología, la Universidad de Pekín, la Universidad Shanghai Jiaotong, la Universidad de Waseda y el Instituto Indio de Tecnología. Más información en www.ntu.edu.sg

Ref. N° 1102790

Agilent Technologies Introduce Industry's First LTE-Advanced Signal Generation, Analysis Solutions

Agilent Technologies Inc. today extended its leadership in LTE test with the introduction of dedicated LTE-Advanced signal generation and signal analysis solutions. Both solutions will be showcased at the upcoming *Mobile World Congress in Barcelona, Feb. 14-17 (Hall 1, Stand 1A46)*.

LTE-Advanced is an evolution of LTE. It is initially being specified as part of Release 10 of the 3GPP specification. A number of new technologies are being introduced into LTE-Advanced to enable peak data rates of up to 1 Gbps in the downlink and 500 Mbps in the uplink. To achieve such a high peak data rate, LTE-Advanced supports a maximum bandwidth of 100 MHz via aggregating up to five component carriers, each up to 20 MHz wide.

“As a recognized leader and provider of world-class LTE solutions, Agilent plays a pivotal role in the development, revision and imple-

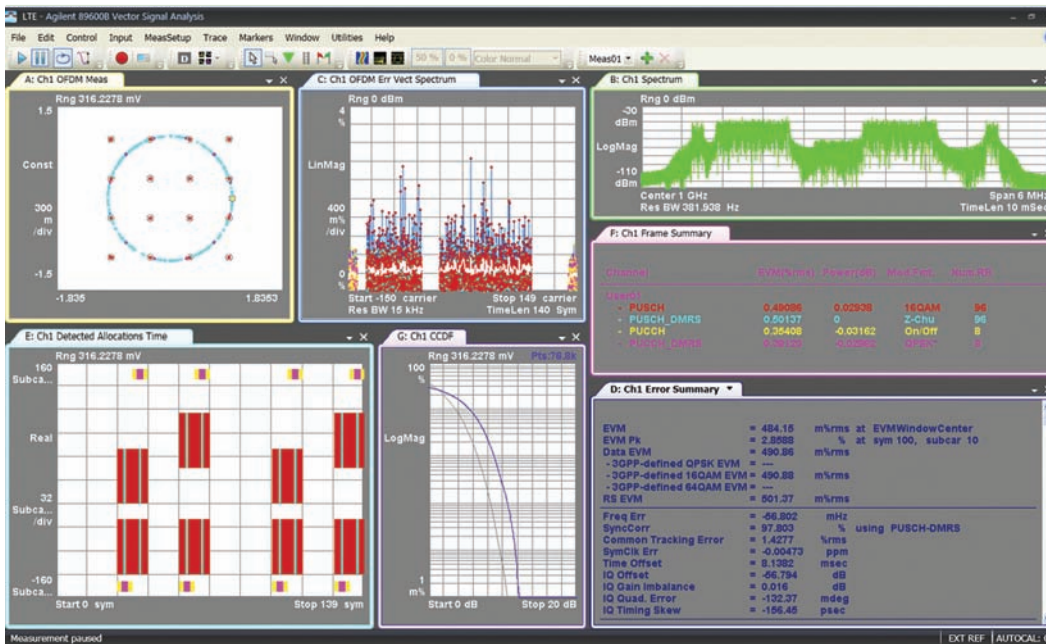
mentation of the new 4G LTE technology, LTE-Advanced,” said Guy Séné, vice president and general manager of Agilent’s Microwave and Communications Division. “Our first-to-market LTE-Advanced signal generation and analysis tools further complement Agilent’s already com-

prehensive portfolio of LTE solutions and reaffirms our commitment to taking a strong and active leadership role in the evolution of LTE to a 4G technology.”

Agilent’s new Signal Studio and 89600B Vector Signal Analysis software for LTE-Advanced support the

generation and analysis of FDD and TDD signals compliant with the 3GPP Release 10 standard. Using these solutions, design engineers can start testing physical layer implementations of LTE-Advanced devices with greater insight and confidence, while gaining deeper insight into the root





causes of design problems. Key features of the new Signal Studio and 89600B VSA software include:

- FDD and TDD per 3GPP Release 10 for both uplink and downlink signal configurations;

- carrier aggregation for both contiguous and non-contiguous component carrier configurations for up to 100 MHz I/Q bandwidth using Agilent's MXG vector signal generators and up to 140 MHz analysis

bandwidth with the Agilent PXA signal analyser;

- independent setup parameters for each component carrier, including any LTE-Advanced specified bandwidth or modulation type;

- simultaneous analysis of up to five component carriers, a feature unique to the 89600B, and troubleshooting of each component carrier using a rich selection of measurements, including EVM, CCDF and more; and
- enhanced uplink-clustered SC-FDMA and simultaneous control and data channel (PUCCH and PUSCH) support.

One of the design and test challenges of carrier aggregation is the fact that non-contiguous allocations require multiple transmit and receive chains in user equipment and eNBs. For single-band non-contiguous allocations, the PXA's 140 MHz analysis bandwidth, combined with the simultaneous analysis of multiple component carriers available in the 89600B, offers engineers greater insight by giving them the ability to test the multiple transmit or receive chains simultaneously.

For more information, visit <http://www.agilent.com/find/lte-advanced-software>.
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Agilent Technologies' PXT Wireless Communications Test Set Now Supports Critical LTE Inter-RAT Handover

Agilent Technologies announced new functional test features for its E6621A PXT wireless communications test set.

Used in conjunction with Agilent's popular E5515C 8960 wireless communications test set, the PXT now supports handover between different radio access technologies (RAT). Both user equipment-initiated and base

station-initiated handovers are now supported, making the PXT an essential tool for efficient development and performance verification of LTE user equipment.

LTE networks will utilise 2G and 3G as a fall-back infrastructure where no LTE service is provided. End-user devices are required to scan for neighbor cells and generate reports, which are used as a basis for cell selection and handover decisions. Such processes can be very demanding for today's cellular devices, which must also multi-task a large number of other applications, making heavy demands on their processors. The consequence of

inadequate response times can be slow handover or no handover and poor user experiences such as dropped connections.

"LTE device developers and network operators are increasing their focus on handover testing to ensure end-user experience is a good one," said Guy Séné, vice president and general manager of Agilent's Microwave and Communications Division. "Today's introduction of LTE inter-RAT features illustrates Agilent's commitment to supporting the needs of the LTE marketplace. We will continue to provide valuable feature updates that keep pace with the needs of our customers."

Inter-RAT testing uses the Agilent PXT wireless communications test set, configured as an LTE base-station emulator, in conjunction with the Agilent 8960 for the provision of base-station emulation for legacy technologies. The advantage of this benchtop arrangement is the ability to run the verification tests in a controlled laboratory environment, adjusting a defined set of

parameters while fixing others, and the ability to automate the testing for repeatable and efficient measurement reporting.

The new inter-RAT feature set is offered on all new Agilent PXTs and to all existing customers via a simple firmware upgrade.

For information about the PXT, go to www.agilent.com/find/PXT. Additional information about Agilent's LTE design and test portfolio is available at www.agilent.com/find/LTE.

The backgrounder "Understanding LTE" is available at www.agilent.com/about/newsroom/tmnews/background/lte. The book "LTE and the Evolution to 4G Wireless – Design and Measurement Challenges" can be ordered at www.agilent.com/find/ltebook.

The Agilent PXT wireless communications test set will be showcased along with other Agilent leading design and test solutions for 3G to 4G at the **Mobile World Congress in Barcelona, Feb. 14-17 (Hall 1, Stand 1A46)**.

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