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For Immediate Release

Banpil Photonics, Inc. announces MCT-SIM™: high-performance Mercury Cadmium Telluride (MCT) device simulator software

SANTA CLARA, California - May 15, 2013 - Banpil Photonics, Inc., a leading company expanding the boundaries of optics and electronics through innovations, today announced the availability of MCT-SIM™, a high-performance Mercury Cadmium Telluride (MCT or HgCdTe) device simulator software. MCT-SIM is a design tool for evaluating the performance of MCT diodes in photo-detection and imaging applications. It has been developed to help designers to simulate device performance prior to fabrication thereby achieving significant cost savings during the development process, estimated to be as much as 40%, and will ultimately contribute to competitively priced MCT imagers.

Targeted at image sensor devices that extend from Mid-wave to Long-wave Infrared (MWIR & LWIR) spectrums, MCT-SIM extracts the photovoltaic characteristics of HgCdTe diodes and image sensors exposed to MWIR/LWIR radiation. This includes physical modeling of blackbody radiation, HgCdTe material properties, P-N junction, and device dimensions & temperature. Calculation parameters include Figures of Merit, Photocurrent, Dark Current, Quantum Efficiency, Responsivity, Dynamic Resistance, Specific Detectivity, and Noise Equivalent Temperature Difference (NEDT). MCT-SIM provides the user with options to model both single and multiple stack devices.

MCT-SIM provides highly accurate results at shorter computation times and simulation results have been verified with measured results of fabricated HgCdTe devices. MCT-SIM is available now and can be requested free of charge from Banpil's website at www.banpil.com/designtools.htm. It is packaged on a free standing software CD as a simulation tool making it easy for users to install and use. A first of its kind device simulator for MCT designers, MCT-SIM is only available from Banpil.

"We are very pleased to release the Banpil's MCT-SIM device simulator and help engineers to optimally design next generation MCT imagers," said Dr. Achyut Dutta, Banpil's CEO. "MCT-SIM provides the ability to investigate the potential use of novel and new device structures for infrared imaging using HgCdTe material systems. It eliminates cumbersome finite-element based methods and provides highly accurate results in at greatly truncated computation durations, adding to its value in the device design process. In addition, design-simulation results obtained using MCT-SIM is well correlated with measured results displayed on the same graph."

MCT-SIM is executable on Windows Operating Systems (7, Vista, XP), Linux, and UNIX platforms. It is available on a per-user license. Other licensing options including site license agreements are also available on request. Interested parties should contact Banpil at http://www.banpil.com/contact_us.htm. Banpil also welcomes opportunities to work with MCT device developers and system vendors on new applications. The company is actively seeking licensees and strategic partnerships with camera makers, imaging application and systems vendors, and investors.

About Banpil Photonics, Inc.

Banpil Photonics is expanding the boundaries of optics and electronics through innovations. Banpil develops and manufactures next generation multispectral image sensors for automotive & medical imaging systems, security & surveillance, and machine vision applications; high-efficiency energy harvesting devices for energy applications; and low-power, high-speed electrical interconnects for chip-to-chip, chip-to-board, board-to-board, and rack-to-rack applications in high-performance computing and networking. The company has an extensive IP portfolio of these innovations available for licensing. For more information, visit www.banpil.com.

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