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News Release

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Kalray Announces 1st samples of MPPA-256 processor in 28nm

(Orsay, Paris, France) September 10, 2012 — Kalray SA, today announced the availability of first samples of the 28 nanometer (nm) MPPA-256 processor targeting embedded applications among them Imaging and signal processing. This resulted from the 28nm development and production partnership established with GUC and TSMC. First products to be ramped in volume will be processors for signal processing in an imaging application. Product qualification is scheduled for completion in Nov 2012.

Created in 2008, Kalray is a fabless semiconductor and software company which develops, markets & sells a new generation of manycore processors for Imaging, Telecommunication infrastructures, Data Security & Network Appliances embedded applications.

Kalray's technology is called MPPA® for Multi-Purpose Processor Array and has solved the major two challenges of multi-core processing: the energy efficiency as well as the software scalability.

Led by Joël Monnier, former vice president of STMicroelectronics, Kalray employs 55 engineers and is backed by French investment funds, local funds, private investors, and OSEO, a French public-sector institution who finance innovative projects brought by SME's.

The first MPPA®-256 processor integrates 256 processors onto a single silicon chip through a high bandwidth Network on Chip. The 256 processors work in parallel and communicate together via a network-on-chip just as large clusters of computers do on the Internet. The MPPA-256 is organized as 16 clusters of 16 processors and multiple MPPA chips can be interconnected at the PCB level through Interlaken interfaces to increase the processor array size and performance capability.

MPPA-256 is manufactured in 28 nm technology by world-class foundry TSMC with the lowest power consumption and highest cost efficiency. Under the TSMC VCA program, GUC provided design support as well as logistical support and manufacturing interface

for Kalray. A key reason for the unmatched efficiency of the MPPA-256 device comes from early access to TSMC's leading-edge 28nm High Performance process.

Along with the MPPA[®] processor family, Kalray provides customers with its software development environment AccessCore as well as development boards integrating in MPPA-Developer. It offers standard GNU C/C++ development tools and libraries including primitives for task parallelism and data parallelism. The development environment also supports automatic mapping on MPPA hardware and memory resource sizing to assist developers in obtaining optimal performance.

The AccessCore[®] development environment provides a C-based programming model, which speeds up application development and debug. Several programming levels are provided for different user profiles, from Linux support for legacy functions, to a unique high level dataflow environment. Standard GCC & GDB technologies are used for compilation & debug. The Kalray processor cores implement a proprietary VLIW architecture with advanced low-power design techniques, and integrate a high-performance IEEE 754 floating-point unit.

"Kalray's technology has been developed with many OEM partners across several vertical markets, as well as partnering with third party software vendors," says Joël Monnier, CEO. "Our first processor achieves a global processing power of 500 billion operations per second, along with a much lower power consumption than competitive solutions. Embedded designers will get the benefit of high processing power, low power consumption and high level programming to develop innovative applications in the fields of image processing, signal processing, control, communications and data security. The access cost of MPPA processors makes them optimum for all low to medium volume applications."

"Kalray has developed a world beating technology for Multi-Purpose Processor Arrays which addresses real-world needs in signal processing while delivering the performance this market requires," said Maria Marced, President, TSMC Europe. "Innovation in Europe is clearly demonstrated by Kalray's 28nm design. We are pleased to be part of this success story, and the release to production marks a major milestone in the collaboration between Kalray, GUC and TSMC."

"Kalray is a very exciting company, which only started up in 2008", said Jim Lai, President GUC. "The innovation within Kalray's design demonstrates how new companies using most advanced nodes can design world beating products. We are thrilled to be part of this success, since it clearly shows the benefit of close collaboration on advanced technology to bring a whole new class of multicore microprocessors to market."

About Kalray

Created in 2008, Kalray is a fabless semiconductor and software company which develops, markets & sells a new generation of manycore processors for low to medium volume high performance applications. Typical applications are: image, audio and signal processing, scientific computing, communications infrastructures, control command. Led by Joël Monnier, former vice president of STMicroelectronics, Kalray employs 55 engineers and is backed by French investment funds, local funds, private investors, and OSEO, a French public-sector institution who finance innovative projects brought by SME's. Kalray's technology is developed within a collaboration

with the CEA, including a joint laboratory of 30 engineers. For more information about Kalray please visit <http://www.kalray.eu>.

About TSMC

TSMC is the world's largest dedicated semiconductor foundry, providing the industry's leading process technology and the foundry segment's largest portfolio of process-proven libraries, IPs, design tools and reference flows. The Company's managed capacity in 2011 totaled 13.22 million (8-inch equivalent) wafers, including capacity from three advanced 12-inch GIGAFAB™ facilities, four eight-inch fabs, one six-inch fab, as well as TSMC's wholly owned subsidiaries, WaferTech and TSMC China, and its joint venture fab, SSMC. TSMC is the first foundry to provide 28nm production capabilities. Its corporate headquarters are in Hsinchu, Taiwan. For more information about TSMC please visit <http://www.tsmc.com>

About GUC

GLOBAL UNICHIP CORP. (GUC) is the Flexible ASIC Leader™ whose customers target IC devices to leading edge computing, communications and consumer applications. Based in Hsinchu, Taiwan, GUC has developed a global reputation with a presence in China, Europe, Japan, Korea, and North America. GUC is publicly traded on the Taiwan Stock Exchange under the symbol 3443. For more information, go to www.globalunichip.com

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