

FRAUNHOFER HEINRICH HERTZ INSTITUTE

PRESS RELEASE

PRESS RELEASE

September 28, 2017 | Page 1

25G/50G Low-Latency Ethernet MAC, Optimized for Xilinx Ultrascale+ Transceiver Technology

The German Fraunhofer Heinrich Hertz Institute HHI and Silicon Valley Missing Link Electronics (MLE) collaborate to optimize 25G/50G Ethernet Low-Latency Media Access Controller (MAC) for Xilinx Ultrascale+ Transceiver Technology.

“With Xilinx Ultrascale+ transceivers reaching up to 30.5 Gbps, 100 Gigabit Ethernet connectivity becomes a reality. This is reflected by the fact that Xilinx has integrated hard macros for 100GE MAC into their devices. However, many high-performance embedded, test & measurement or automotive applications are fully served by more cost-efficient 25G or 50G Ethernet. Our Low-Latency MAC soft IP Core addresses that gap”, says Dr. Johannes Fischer, Head of Fraunhofer HHI’s Digital Signal Processing Group.

“MLE has been collaborating with Fraunhofer HHI for several years on enabling high-speed connectivity solutions for Xilinx customers. Our team currently markets and supports Fraunhofer HHI’s proven 10GE MAC, and a corresponding TCP/IP stack, all made available through the Xilinx website. We are looking forward to offering 25G/50G Ethernet solutions to our customer base, soon”, underlines Dr. Endric Schubert, CTO at MLE.

The 10GE MAC IP-Core from Fraunhofer HHI is a low latency Ethernet Media Access Controller (MAC) according to the IEEE802.3 -2008 specification. The IP Core was specifically designed to have the lowest possible latency, and to be as resource efficient as possible at the same time. The 10GE MAC IP-Core is listed at Xilinx library of Intellectual Property (IP) under <https://www.xilinx.com/products/intellectual-property/1-o0w4k1.html>.

The 25GE MAC IP-Core will be released early Q4 2017, and its’ 50GE MAC IP-Core counterpart later that year. Device Family Support will include Xilinx Virtex UltraScale+ Kintex UltraScale+ Zynq UltraScale+ MPSoC Virtex.

FRAUNHOFER HEINRICH HERTZ INSTITUTE

Innovations for the digital society of the future are the focus of research and development work at the **Fraunhofer Heinrich Hertz Institute HHI**. In this area, Fraunhofer HHI is a world leader in the development for mobile and optical communication networks and systems as well as processing and coding of video signals. Together with international partners from research and industry, Fraunhofer HHI works in the whole spectrum of digital infrastructure – from fundamental research to the development of prototypes and solutions. www.hhi.fraunhofer.de

PRESS RELEASE

September 28, 2017 | Page 2

Missing Link Electronics:

Missing Link Electronics (MLE) is a Silicon Valley based technology company with offices in Germany. MLE is a licensee of Fraunhofer HHI, and offers a range of technology services, sublicenses and business models compatible with customer's ASIC or FPGA projects, world-wide.

More information can be found here:

<https://www.missinglinkelectronics.com/index.php/menu-products/low-latency-10-gige-mac>

Xilinx FPGA customers can find information here:

<https://www.xilinx.com/products/intellectual-property/1-o0w4k1.html#overview>

Press Contact:

Diana Gnensch; Phone: +49 731 141149-15

E-Mail: diana.gnensch@missinglinkelectronics.com

Missing Link Electronics, Inc.
2880 Zanker Road, Suite 203
San Jose, CA 95134
United States

Missing Link Electronics GmbH
Industriestraße 10
89231 Neu-Ulm
Germany

<https://www.missinglinkelectronics.com/>

The Fraunhofer-Gesellschaft is the leading organization for applied research in Europe. Its research activities are conducted by 69 Fraunhofer Institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of some 24,500, who work with an annual research budget totaling 2.1 billion euros. Of this sum, 1.9 billion euros is generated through contract research. More than 70 percent of the Fraunhofer-Gesellschaft's contract research revenue is derived from contracts with industry and from publicly financed research projects. International collaborations with excellent research partners and innovative companies around the world ensure direct access to regions of the greatest importance to present and future scientific progress and economic development.

Press Contact: **Anne Rommel** | anne.rommel@hhi.fraunhofer.de | phone +49 30 31002 353

Technical Contact: **Johannes Fischer** | johannes.fischer@hhi.fraunhofer.de | phone +49 30 31002 556