



Kawasaki Microelectronics Achieves First-Silicon Success with Mixel's MIPI and MIPI/LVDS Unified Solutions

Mixel Continues to Gain Market Share with Major Global Customers Deploying its MIPI Solutions

San Jose, CA — September 18th, 2012—[Mixel](#)[®], the leader in mobile mixed-signal intellectual property (IP), announced today that [Kawasaki Microelectronics Inc.](#) (K-Micro), a leader in high-end ASICs with state-of-the art design and development capabilities, has licensed Mixel's silicon-proven MIPI[®] and MIPI/LVDS unified solutions and is deploying the IP in multiple Integrated Circuits (IC).

Mixel provided K-Micro with a complete MIPI solution including the PHY and Controller. K-Micro licensed both the MIPI PHY ([MXL-D-PHY-DSI-RX](#)) and MIPI/LVDS combo PHY [MXL-MIPI-LVDS-RX](#). The first IP is optimized for [D-PHY](#) DSI RX applications while the second IP supports both LVDS and MIPI. Both products support 4 data lanes and operation up to a 1.0 Gbps data rate.

The Controller was developed by [Northwest Logic](#), an active participant in [Mixel's MIPI Central Ecosystem Partnership Program](#), which brings together best-of-class MIPI ecosystem stakeholders. The Controller provides a full set of DSI features including 1-4 lanes, Peripheral and Host, DPI, and DBI support. Mixel and Northwest Logic have successfully delivered the complete MIPI solution, including the PHY, Controller, and the MIPI validation platform to multiple customers since they announced their partnership back in [2009](#). That partnership enables their customers to obtain the complete MIPI solution seamlessly integrated from one vendor.

"Mixel and Northwest Logic's leadership position in the MIPI IP's PHY and Controller markets respectively, was one of the factors that influenced our decision," said Yusuke Yamamoto, K-Micro's senior manager, Marketing & Strategic planning department. "The first-silicon success and the outstanding support that we have received during multiple tape-outs validated this important choice. We're looking forward to a long-term collaboration with both companies," he added.



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Mixel's [MIPI D-PHY IP](#) supports all the D-PHY use-cases, namely [CSI master](#), [CSI slave](#), [DSI master](#), and [DSI slave](#), in addition to the [MIPI PLL](#), and has been silicon proven to support 1.0 Gbps operation since [2007](#), and 1.5 Gbps since [2011](#). Mixel has so far silicon-proved its MIPI PHY in five different foundries and six different process nodes.

"We are glad that K-micro has joined Mixel's substantial and fast-growing list of MIPI licensees. We are also delighted that Mixel can contribute to K-micro's innovative product line supporting multiple interfaces such as MIPI and LVDS, sharing the same high frequency interface pins," said Ashraf Takla, [Mixel](#) President and CEO. "The fact that first-tier global players such as K-micro, choose the Mixel MIPI solution is a testament to the competitive edge that our customers attain by working with Mixel and our MIPI ecosystem partners."

Mixel will be demonstrating its [D-PHY](#) and [M-PHY MIPI](#) solutions at the [TSMC Open Innovation Platform](#) at the San Jose Convention Center, and [MIPI Alliance](#) face-to-face [meeting](#) in Miami, on October 16, 2012.

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About Mixel®:

Mixel is the leader in mixed-signal mobile IPs and offers a wide portfolio of high-performance mixed-signal connectivity IP solutions. Mixel's mixed-signal portfolio includes PHYs and SerDes,



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such as Mobile PHYs (MIPI[®] D-PHY, M-PHYSM, DigRF, and MDDI, and LVDS), general purpose Transceivers, and high-performance PLL and DLL IP cores. For more information contact Mixel at info@mixel.com or visit www.mixel.com.

About Northwest Logic

[Northwest Logic](http://www.nwlogic.com), founded in 1995 and located in Beaverton, Oregon, provides high-performance, silicon-proven, easy-to-use IP cores including high-performance [Memory Interface Solution](#) (DDR4/3/2, LPDDR3/2/1, RLD RAM 3/II), [Expresso Solution](#) (PCI Express 3.0/2.1/1.1 cores and drivers including DMA support), and [MIPI Solution](#) (CSI-2, DSI). These solutions support a full range of platforms including ASICs, Structured ASICs and FPGAs. For additional information, visit www.nwlogic.com or contact info@nwlogic.com.

About Kawasaki Microelectronics:

K-micro's innovative ASIC and ASSP technologies and world-class design support are used in the consumer electronics, computer, office-automation, networking and storage markets. The company is an active participant in various industry standards organizations including Home Phoneline Networking Alliance (HomePNA), Video Electronics Standards Association (VESA), International Telecommunication Union (ITU) and High Definition Power Line Communications (HD-PLC). K-micro has design centers in San Jose, Taipei, and Tokyo. K-micro is a subsidiary of MegaChips Corporation. (1st section of the TSE: 6875) MegaChips Corporation was established in 1990 as an innovative fabless company dedicated to system LSIs with goal of integrating LSIs and systems knowledge. Their focus is on the development of cutting-edge system LSIs and systems products incorporating original algorithms and architecture in the area of imaging, audio, and communications, and using the advances they achieve to offer outstanding products and solutions that meet the needs of their customers. For additional information for K-micro and MegaChips Corporation, please visit <http://www.k-micro.com> and <http://www.megachips.co.jp/english/top.html>

About The MIPI Alliance

MIPI (MIPI[®]) Alliance is a global, collaborative organization comprised of companies spanning the mobile ecosystem that are committed to defining and promoting interface specifications for mobile devices. MIPI Specifications establish standards for hardware and software interfaces which drive new technology and enable faster deployment of new features and services across the mobile ecosystem. For more information, go to www.mipi.org.

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