Norelsys Shows Innovative USB 3.0 to Multi-channel eMMC/SD/TF Controller NS1081

TAIPEI - June 3, 2014 - Norel Systems Limited (Norelsys), a China fabless semiconductor company that specializes in high-speed mixed-signal and innovative I/O technologies, introduced its USB 3.0 to multi-channel eMMC/SD/TF controller NS1081 series at 2014 Computex Taiwan.

Norelsys is the first IC company from mainland China that has received the USB Implementers Forum (USB-IF) SuperSpeed USB (USB 3.0) certification. Certified in February 2013, the company’s USB 3.0 to SATA bridge controllers NS1066 and NS1068 have been in mass production at Lenovo and other major brands. In September 2013, Norelsys released its second USB 3.0 controller chip NS1081, targeting both USB 3.0 flash drive and USB 3.0 card reader markets. In February 2014, NS1081 series controllers NS1081/NS1081S/NS1081C were awarded the USB-IF USB 3.0 certification (TID: 340000107) and Microsoft WHQL certification. Since then, NS1081 series ICs have been in volume production by brand customers and OEM manufactures.

NS1081 employs patented parallel architecture and efficient RAID-0 technologies. When used in a two-channel configuration, NS1081 can double the read/write speed and achieve up to 200MB/s read/write speed.

Unlike the traditional USB 3.0 flash drives using direct NAND flash controller IC, NS1081-based flash drives use eMMC chips for storage. The eMMC chips are widely adopted in smart phones and tablets and are designed to meet the demanding requirements of mobile devices. The use of eMMC chips allows the NS1081-based flash drives to achieve a level of reliability and performance not seen in the majority of USB 3.0 flash drives. Furthermore, NS1081 supports all types of eMMC chips with a unified firmware, regardless the variations in eMMC semiconductor process, capacity and speed class. There is no complex firmware tuning in the production and test process. NS1081 offers one of the most competitive solutions for USB 3.0 flash drives.

In addition to flash drives, NS1081 can also be used as a high-end USB 3.0 card reader. When it is applied to a multi-LUN card reader, two memory cards can work simultaneously at the SuperSpeed USB data rate. When it is applied to a two-channel RAID-0 card reader, the storage capacity and read/write speed of the card reader are doubled. NS1081 supports a variety of memory cards, including but not limited to MMC, SD, and microSD (TF), with the storage capacity up to 2TB. NS1081 also supports advanced speeds, such as SD 3.0 UHS-I and eMMC 4.5 HS200.
Offered in a small footprint 6x6 QFN48 package, NS1081 integrates a high-efficiency 5V to 1.2V DC-DC regulator as well as 5V to 3.3V/1.8V LDO regulators. Together with NS1081, Norelsys also released the single-channel eMMC controller NS1081S and single-channel card reader NS1081C. NS1081S targets the smaller capacity USB 3.0 flash drive applications. NS1081C provides cost savings to customers not demanding in performance.

As a leader in USB technology developments, Norelsys is also developing a USB 3.1 transceiver IC operating at 10Gbps.

For more information on Norelsys and its products, please visit [http://www.norelsys.com](http://www.norelsys.com)

**About Norelsys**
Norel Systems Limited is a fabless semiconductor company headquartered in Tianjin, China and with sales and support offices in Shenzhen. Norel Systems was founded in 2009 by Silicon Valley semiconductor veterans and China’s local marketing and sales experts. The company has closed two rounds of investments from Legend Capital, SAIF Partners and Legend Star.

The company specializes in the design and development of complex SOC chips requiring high-speed mixed signal expertise. With in-house developed PHY IPs covering USB 3.0, SATA1/2/3, PCIe, HD-SDI, HDMI, Displayport, MIPI and Thunderbolt (Lightpeak), Norel Systems is positioned to lead the market in providing turn-key solutions for mobile devices, consumer electronics and PCs.