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ECMA finalizes 60GHz  
standard  
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## **ECMA 60GHz Standard Offers 6.4Gbps Transfer Rates**

*A new standard to be used for streaming uncompressed high definition video*

ECMA has announced the finalization of a standard for short range wireless communications on the 60 GHz frequency band. According to the association, the new standard offers the possibility to stream uncompressed high definition video. The ECMA TC48 standard has already seen implementation, and one of the first products to feature it is the Georgia Electronic Design Center (GEDC) single-chip 60 GHz CMOS radio.

The GEDC chip has a power consumption of less than 100 milliwatts, features an embedded antenna array and 60 GHz front-end and multi-gigabit baseband signal processing into a standard QFN package. In early November, the chip was used as a key element in a demonstration in ISO/IEC networking plenary. 200 Mega byte sized data and image files were transferred by the 60GHz radio in less than a second, which out paced by far other wireless technologies. .

The same 60 GHz radios showcased High Definition uncompressed video streaming (which is also known as 720p/1080i) at multi-Gigabit data rates. The multi-Gigabit per second file transfer and 1080i uncompressed HD video streaming was demonstrated by ECMA International members in Montreux.

The standard for 60 GHz short range unlicensed communications has been finalized by ECMA International. The association says that the standard is able to provide high rate wireless personal area network (point-to-point as well) carrying for bulk data transfer and multimedia streaming. Moreover, the new standard allows video streaming and WPAN applications in a 10-meter range. It seems that the 60GHz standard can provide up to 6.4Gbps transfer rates while using high gain trainable antennas.

ECMA International members' General Assembly announced that the 60GHz standard would be approved for publication and for subsequent submission for fast-track balloting by ISO and IEC members on December 4, 2009.

"The combination of a very low power multi-gigabit 60 GHz CMOS wireless solution and the enormous unlicensed bandwidth makes the imminent application of 60 GHz technology in the consumer electronic marketplace possible. It enables a whole range of new consumer and business applications at the intersection of gaming and connectivity," said Dr. Joy Laskar, Director of the Georgia Electronic Design Center.

"Small and large industry members along-side with leading academia institutes from Asia, Europe and the US are actively developing this technology is a promising sign for global application," said Onno Elzinga, CTO of Ecma International.