Development of a New VLBI Sampler Unit (K5/VSSP32) Equipped with a USB 2.0 Interface

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National Institute of Information and Communications Technology (NICT) has been developing a new VLBI sampler unit named K5/VSSP32 dedicated to e-VLBI which is a successor to the K5/VSSP. The maximum sampling frequency per channel of the K5/VSSP32 is 32 MHz, which is twice that of K5/VSSP. When the number of quantization bit is limited to one, the sampling frequency of 64MHz is possible. In addition to the maximum sampling frequency, there is a difference in the interface to a host PC. A USB 2.0 (Universal Serial Bus specification revision 2.0) interface is used to connect the sampler with a host PC in the K5/VSSP32, while a PCI-bus interface is in the K5/VSSP. It is hence possible to use even a notebook PC for VLBI observations with the K5/VSSP32. We will report the results of some test observations using K5/VSSP32 at the meeting.