

## The report of the initial result of SWIM on board the SDD-1

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SWIM (Space Wire demonstration Module) onboard the SDS-1 launched with IBUKI by H-IIA on 23 Jan 2009. SWIM is a mini experiment platform that has been developed from 5 years ago to demonstrate the Space Wire communication in spacecraft. The Space Wire is the next generation satellite bus communication standard which is conscious of the network-type dispersion module system. ESA proposes and at present, in addition to ESA/NASA/JAXA / Russia, it discusses international space craft standard and it manages and the use in the satellite has started. JAXA participates in the activity from the step in the early stages as the member of international space wire Standards Committee, and uses for BepiColombo/MMO, ASTRO-H, and the small scientific satellite and so on.

SWIM consists of two modules. As for one, the controller which has an intelligent system (the CPU& software) is the communication BOX (SpaceCube2); the other is BOX (SWIMmn) which supplies the module to test and proof in the space.

The test module can implement the test of the sensor immediately in the space if it has only the interface of the power and the space wire.

SDS-1 ends critical operation and is implementing the check out stage test of the onboard equipments. It is the small communication test of only two components but it has the important role to lower a threshold to the technology proof by the SpaceWire bus and the space demonstration. We report the initial results of the SWIM.