

## Design and Implementation of On-Board Computers For STSAT-2

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The Engineering Model of on-board computer was developed and tested completely with other sub-systems for STSAT-2. We designed the on-board computer of STSAT-2 which has some improved features compared with that of STSAT-1. A remarkable change is that the on-board computer has a structure of centralized network communication without a Network Controller of the STSAT-1. That is, the on-board computer directly manages a satellite network. In addition, as many logics are implemented by Field Programmable Gate Array, so we can reduce the weight and size of on-board computer. Also, the developed on-board computer has more improved tolerance against Single Event Upsets and faults than that of the STSAT-1.