MI2U Control Flight Software in COMS

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The COMS spacecraft bus is based on a generic E3000 platform catalogue product, so the COMS OBS (On-Board Software) also derives from the E3000 product line. The COMS mission being largely devoted to meteorological and oceanographic imaging, the spacecraft will carry the dedicated equipment (MI and GOCI) with new electronic interface, MI2U (Meteo Image Interface Unit). The MI2U hardware achieves the interface between the SCU and the MI (Meteo Imager) which is one of three payloads on COMS. The MI2U is connected to SCU through MIL-STD-1553B system bus. MI2U ORB (On-board Reconfiguration Block) function which is a part of the flight software executed on SCU (Spacecraft Computer Unit). The MI2U ORB function manages MI2U/MI redundancy and reconfiguration, monitors MI2U/MI equipment, performs FDIR (Failure Detection Isolation and Recovery) and provides the routing service of commands from ground or IP (Interpreted Program) through the current used 1553 channel.