W36a Ground Support Electronics for Testing the Preflight Performance of the MAXI-GSC

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MAXI is an X-ray all-sky monitor which will be mounted on the Japanese Experimental Module (JEM) of the International Space Station (ISS) in 2006/07. The Gas Slit Camera (GSC) consists of 12 one-dimensional position sensitive proportional counters and the sensitivity will be as high as 1 mCrab in one-week accumulation in the 2-30 keV band. In order to calibrate the detectors and electronic systems thoroughly before the launch, the fast and versatile Ground Support Electronic (GSE) system is necessary. We have developed a new GSE based on VME I/O boards for a LINUX workstation. These boards carry reconfigurable FPGAs of 100,000 gates, together with 16 Mbytes SD-RAM devices. As an application of using this GSE, we have tested the positional response of the GSC flight module. We present a schematic view of the GSE highlighting the functional design, and some examples of ground tests of the GSC flight sensors.