Electrical Interface Compatibility Analysis for COMS DHS

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The aim of this analysis is to verify the electrical compatibility of the interfaces which exist in between DHS equipments and external equipments. It deals with spacecraft computer units, actuator drive electronics, modular payload interface units, meteorological imager interface unit, TCR transponders and thermal hardware. In order to verify the compatibility between equipments, all possible aspects which are including power link, commands, digital & analog telemetries have been studied. In addition with this interface compatibility verification, one of the outputs of this study are electrical and manufacturing constraints to be applied at harness level. The results of this electrical compatibility analysis performed on DHS interfaces have demonstrated the correct sizing and level of robustness of the DHS interface circuits.