

TEC-ED & TEC-SW Final Presentation Days - May 2020

Space Powerlink Abstract

Current spacecraft architectures include segregated data communication for monitoring discrete lines and power lines. This leads to a bulky and heavy harness (e.g. up to 15% of the dry mass). The Space Powerlink (SPwL) approach aims to reduce this impact through the implementation of a distributed control and monitoring system, based on a 2-wire bus. The initial phase defined the overall architecture, scoped the sizing of the mixed signal ASIC used to control the bus and generated a draft specification for standardisation.

