

SpaceWire Backplane activity

Activity:

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Abstract:

The Final Presentation describes the activities performed and the results obtained during the execution of the SpaceWire Backplane contract (No. 4000104085, ESA reference TEC-EPD/2010.88). During the activity TAS-UK analysed and traded different backplane architectures and technologies, this used work performed under previous ESA activities as well as proposals made by members of the SpaceWire Working Group. The identification of an impedance matched backplane connector suitable for SpaceWire signalling applications was one of the key objectives, such a connector could either be adapted from existing terrestrial applications or be specifically tailored depending on the identified requirements for the SpaceWire backplane. A suitable connector could not be identified, so a prototype SpaceWire backplane modular connector was developed and tested by Smiths Connectors (Hypertac) and TAS-UK. Draft ECSS SpaceWire Backplane and ESCC Detail specifications were also produced.