Harness Reduction: Future Trends and Prospects

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Harness is one of the key element of any spacecraft. Under this generic term, we can find different type of harnesses that we will separate in 3 different groups: power, signal and special (RF, high data rate, 1553). We will examine several ways that may be envisaged for reducing the harnesses mass, volume and integration time. We will focus on 4 subjects: individual component (connector and cable), bundle optimisation, system optimisation and integration and test issues.