

USB2.0 Hi-Speed to SpaceWire Bridge

Part Number: BCAI-UHSS

Description

The BCAI-UHSS is a high-speed, compact Universal Serial Bus to SpaceWire adapter for interfacing USB devices with SpaceWire networks or other SpaceWire-compatible equipment. Designed for **ease of use**, it offers an API in C, along with example application code.

Its minimalistic design ensures **rapid integration**, even in non-ECSS compliant systems.

Ideal for testing, prototyping, or embedding into larger systems where space is limited.

Specifications

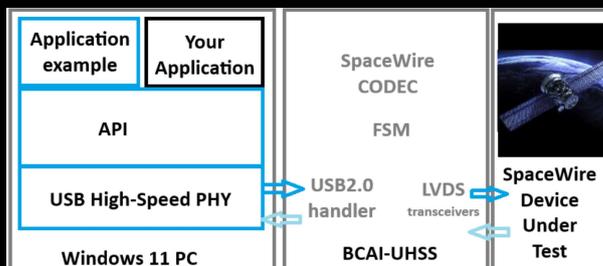
Dimensions	1.975 × 0.867 × 0.45 in ³ (50 × 22 × 12 mm ³)
Power Supply & Data transfer	Via type-C USB connector (provided with Type-A male to Type-C male short cable)
Application Programming Interface	Lightweight DLL driver and documented C library: - bc_listdevices(); - bc_open(); - bc_close(); - bc_read(); - bc_write();
Software	Ready-to-use Application Example, incl. built-in self-test (internal loopback mode).
SpaceWire Port	1x bidirectional link (Designed with reference to the ECSS-E-ST-50-12C standard) 9-contact micro-miniature D-type plug : acts like a SpaceWire cable
SpaceWire Maximum Speed	On-board oscillator with configurable speed rates

Achievable throughput	Up to 39MBytes/s (USB High Speed)
Supported Operating System	Windows 11 Linux Ubuntu Contact us for other OS support

System Block Diagram

Mechanical Drawing

The following diagram illustrates the USB SpW bridge product interconnection between your software application and your DUT.



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