

Levelshifter4X

The Levelshifter4X is a compact USB to UART converter designed for automotive test benches and laboratory setups. It converts a single USB connection into up to four independent UART channels (3.3 V CMOS levels), providing a simple and reliable way to access trace and debug signals from infotainment and other ECU modules.



The Levelshifter4X comes in two designs, differing in the number of available channels to suit a wide range of applications. Both designs feature an integrated mounting hole that enables secure and convenient installation, for example on a test bench or development fixture. At the core of the device is the FT4232HL chip, providing reliable USB communication through multiple channels and ensuring seamless operation with standard terminal software (e.g. PuTTY, Terminal).

Typical applications

- ✓ Accessing UART trace and debug channels of infotainment and connectivity units
- ✓ Integration into automotive HIL/test benches
- ✓ Standalone laboratory setups for development boards and UART-based devices
- ✓ Automated testing and logging of UART communication via custom tools and scripts

Standard Delivery Content:

- › Levelshifter4X module
- › USB 2.0 cable

Technical Parameters

Connectors	USB 2.0 Type-C D-Sub9 female (UART interface)
Weight	Up to 70 g
Dimensions (W × D × H)	Up to 88 x 46 x 39 mm
Power supply	From USB port
Operating temperature	0 °C to 50 °C (no condensation)
Ingress protection (IP rating)	IP20