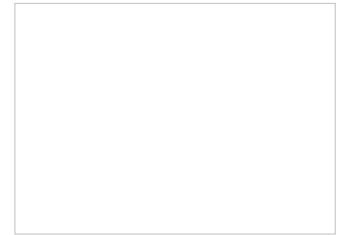


Extension board for prototyping system

The DS1513 I/O board by Dspace (United Kingdom) is an extension for the Micro-Auto-Box II, a real-time prototyping system with CAN channels and analog inputs and outputs. The board increases the number of available CAN channels to six.

THE CAN MESSAGES AND COMMUNICATION STRATEGY can be programmed using the RTI CAN or RTI CAN Multi-Message blockset. The hardware is designed to meet future requirements for partial CAN networking. This feature will enable engineers to prototype energy optimization strategies by allowing selective switching of CAN nodes. The software functionality to benefit from this hardware capability will be included in a future release of the company. The board can be combined with a freely programmable FPGA (Field Programmable Gate Array) to help prototype software functionality requiring high-speed computation. Connection to an optional embedded PC enables further functionalities to integrate various sensors.



Additional analog I/O channels address the requirements for advanced emission control applications for combustion engines. The I/O board increases the number of analog I/Os to 32 ADCs and 8 DACs. These I/O interfaces as well as the CAN interfaces can be configured via a user-intuitive Real-Time Interface (RTI) blockset in the Simulink environment.

Micro-Auto-Box is a real-time system for performing fast function prototyping in full-pass and by-pass scenarios. It operates without user intervention, just like an ECU and can be used for many different rapid control prototyping (RCP) applications such as powertrains, chassis control and body control, electric drives control, and aerospace applications. Depending on the model, the system normally provides two or four CAN channels, which can be increase to six with the I/O board.