

The Embedded Newsletter

No: 15

CAN SPECIAL

CAN is being used more and more in industrial networks as well as in the car, bus and lorry applications for which it was originally designed. Its advantages are that it is a very secure error detecting protocol, with a reasonable speed (40Mbytes/sec) and a low latency for high priority messages

There are a wide range of tools now available for linking CAN to PC's and COMSOL are pleased to distribute the Peak range which has been expanding steadily over the last few years. So we are taking the whole of this newsletter to introduce some of their more recent products.

For more details of all these products visit

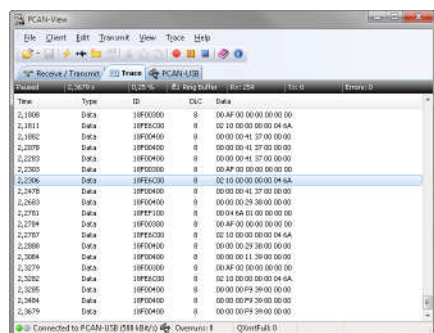
www.computer-solutions.co.uk/CAN.htm

PCAN-USB Pro Interface

Built into a small aluminium case that is rugged enough for mobile applications the PCAN-Pro interface can support a total of 2 CAN and 2 LIN busses simultaneously at full bit rates of 1Mbit/sec and 2 Kbit/sec respectively. All CAN-LIN and USB parts are optically isolated from each other and the unit can operate over an extended temperature range (-40°C to +85°C).

Its use as a test and development tool is enhanced by its ability to measure bus loads and to introduce error frames if required. A major enhancement is that the interface provides the PC with a time stamp for each CAN message with a resolution of 1 µsec.

The LIN channels can be set for automatic bit rate detection, used in master or slave mode, access LDF files and process schedule tables.



New Feature on PCAN-View

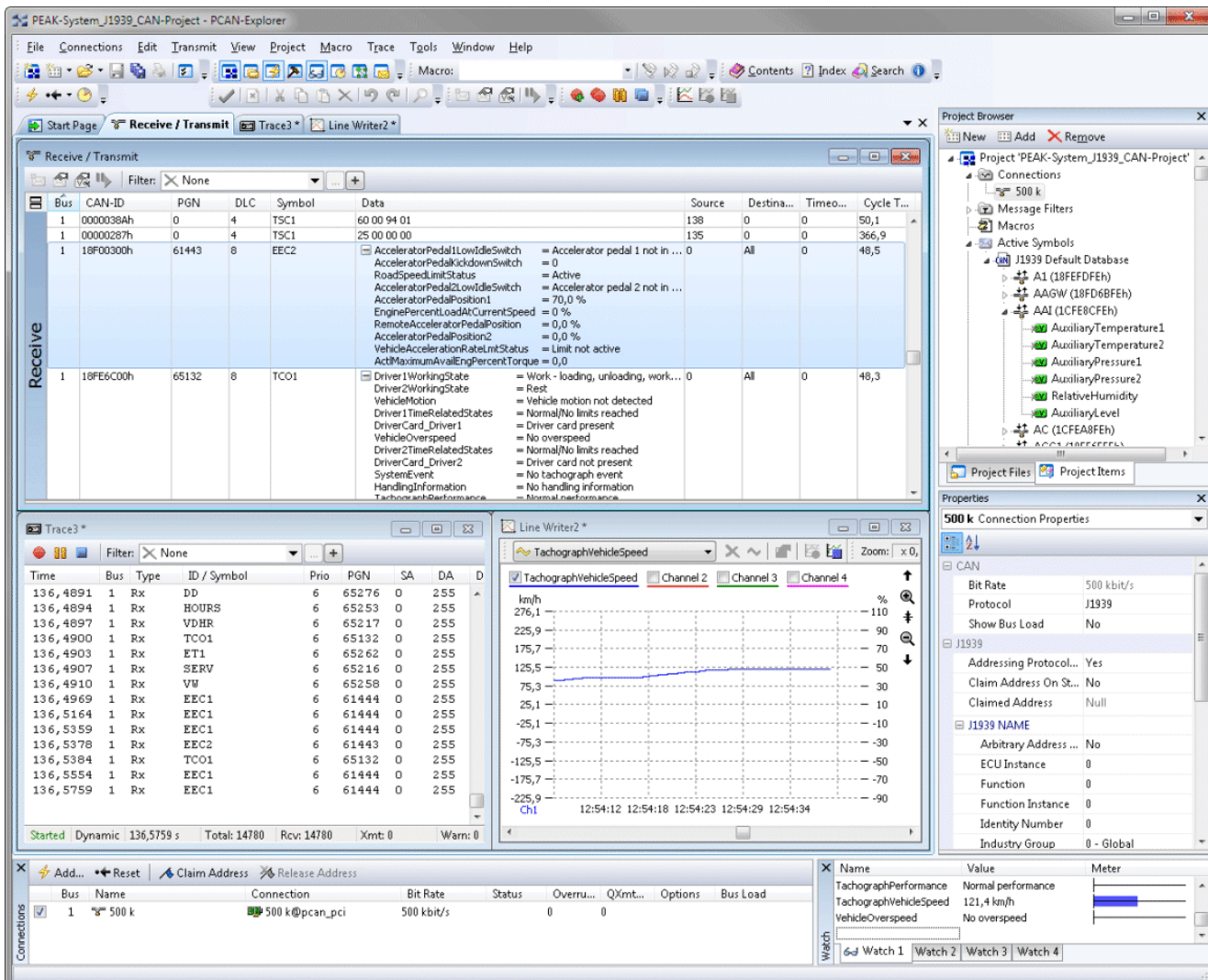
The free PCAN-View package used to transmit and receive CAN frames from the PCAN range of interfaces has been enhanced to include a Trace window. This allows the user to view the time tagged CAN messages in real time, to save them and then to review them at leisure. The new version of PCAN-View is available from Peaks website to allow all our CAN users to replace their current PCAN-Lite packages.

New API PCAN-Basic

PCAN-Basic is a new API with substantial advantages over its predecessor PCAN-Lite. It will support up to 8 channels addressed from within a single application and One DLL supports all interface types. The high precision time stamps of PCAN-USB Pro are available to the programmer who can also set hardware parameters such as "listen only" mode and reset. We recommend that any new applications be written in PCAN-Basic which is available from Peaks website free of charge to all users of Peak CAN interfaces.

PCAN-Explorer V5

In Version 5 Explorer has been given a face lift to follow the Windows 7 look and feel.



Major functional enhancements include its reorganisation around a project structure so that applications or test routines need have only the variables, displays, windows and device definitions that are appropriate to that project and are not cluttered with unused definitions. Multiple Busses can be displayed, Bus loads are shown and message descriptions can include multiplexing where different values in one field of a message defines how the remainder of the message will be interpreted. Current copies of V3 and V4 can be upgraded to Version 5 at a discount – call COMSOL.

PCAN-Explorer J1939 Option

A new Explorer option has been added to allow projects to be created that refer to J1939 parameters by name – see top window. Up to 254 ECU's can be addressed and multi packet messages are supported. It includes a J1939 database whose definitions are available in source to the user. Current versions of V3 and V4 can be upgraded to Version 5 at a discount – call COMSOL.

New to CAN ?

If you would like to find out more about CAN we have prepared a short tutorial which has links to our own products and many other sources of CAN information.

www.computer-solutions.co.uk/CANtutorial.htm