CP**7036**

ARINC-429 to USB Converter Avionics Interface Module

Product Features

- Simple to configure and set up
- Compact size from 92 x 68 x 34 mm
- USB powered
- Supplied with Bus Inspector software
- Engineering units display
- Real-time acquisition and bus monitor
- Visual & tabular display formats
- Up to 4 channel transmit and receive
- Independent channel bit rate selection
- 32 bit time tag with 250μS resolution
- ARINC-419/561/568/575 extended operating modes
- Suitable for use with laptops & desktops
- Windows 2000 / XP / VISTA / 7 compatible
- Windows API, LabView & CVI drivers available
- Operating temperature range: -15°C to +55°C

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CP7036

ARINC-429 to USB Converter
Avionics Interface Module

The latest generation in our established range of successful ARINC to USB converter modules, the CP7036 family now provides enhanced functionality and software capabilities

The CP7036 Avionics Interface Module allows easy acquisition and display of Avionic bus data. CP7036 has a standard Universal Serial Bus (USB) giving quick and simple installation and set up with any laptop or desktop computer. The product range converts ARINC-429 to USB across all products and adds the ability to convert ARINC-561, ARINC-568, ARINC-575 with the higher end products. ARINC-419 mode (24 bit), is also available as standard, to read chronometers.

All CP7036 products are provided with both our Bus Inspector Lite and Bus Inspector Pro software providing functionality to suit your needs and demands.

Bus Inspector Lite is ideal for bench or on aircraft acquisition providing simple bus 'Sniff and Display'™ mode for rapid automatic monitoring and acquisition of bus traffic without any set up. Simply select the equipment type/ID to immediately see all the standard ARINC-429 data with engineering parameter names and in full engineering units. User defined words are possible if required for non-standard/special word formats. The received data can be displayed in both a visual and tabular format. Bus Inspector Lite also allows quick set up of simple transmitter data tables with static data or up to 5 parameters may be configured for dynamic ramp generation. Bus Inspector Lite allows user defined engineering units conversion, and the ability to acquire data with time stamps to a file for export to spreadsheets and databases for further analysis.

Bus Inspector Pro provides full functionality ideal for system integration, verification and validation testing. Bus Inspector Pro adds fully configurable set ups to allow display of particular labels, particular source and destination identifiers and the assembly of complex transmitter tables.

Depending on the hardware/software options chosen, Bus Inspector Pro also allows independent channel programmable bit rate (between 9.5kHz and 125kHz) and inter-word gap, simultaneous acquisition and monitor, receiver to transmitter feed through with error injection and bit wise logical AND/OR masking, to provide real time in-system fault injection and tolerance testing.

The CP7036 supports up to 2048 transmitter words per channel, allowing complex bus cycles and timings to be replicated. There is no limit to the number of words which can be received/defined.

Higher end modules have the option for an extended mode of operation providing support for ARINC-561 and ARINC-568 12 volt 6 wire interfaces. These units also have the option of including 12 discrete inputs and 12 discrete outputs, which can support the encoded altitude interface.

The CP7036 family starts with a dual receiver plus single transmitter unit (ideal to go in every engineers' tool box, being small in size, high in performance and very economical in price) and extends to a unit with four channels of both transmit and receive, plus the 6 wire interface, plus discrete inputs/outputs. A number of other popular configurations are available in between. Each unit is available with either high impedance or opto-isolated receiver inputs, as required.

Software libraries and drivers are available for Windows API, LabView and CVI, to allow integration in an automatic test system.

The CP7036 is ready to use straight out of the box, supplied with a USB interface cable and mating connector.

Versions Available

- **CP7036-R2T1-HIZ**
  2 Rx / 1 Tx channel (high impedance input)
- **CP7036-R2T2-HIZ**
  2 Rx / 2 Tx channels (high impedance input)
- **CP7036-R2T2-ISO**
  2 Rx / 2 Tx channels (opto-isolated input)
- **CP7036-R4T4-HIZ-2W-N**
  4 Rx / 4 Tx channels (high imp. input, 2 wire mode)
- **CP7036-R4T4-ISO-2W-N**
  4 Rx / 4 Tx channels (opto-isolated i/p, 2 wire mode)
- **CP7036-R4T4-HIZ-6W-N**
  4 Rx / 4 Tx channels (high imp. input, 6 wire mode)
- **CP7036-R4T4-ISO-6W-N**
  4 Rx / 4 Tx channels (opto-isolated input, 6 wire mode)
- **CP7036-R4T4-HIZ-6W-D**
  4 Rx / 4 Tx channels (high impedance input,
  6 wire mode, discrete I/O)
- **CP7036-R4T4-ISO-6W-D**
  4 Rx / 4 Tx channels (opto-isolated input,
  6 wire mode, discrete I/O)

Please see the ARINC-429 product selector guide on our website for more details

Rev 2.0 Dec 2025
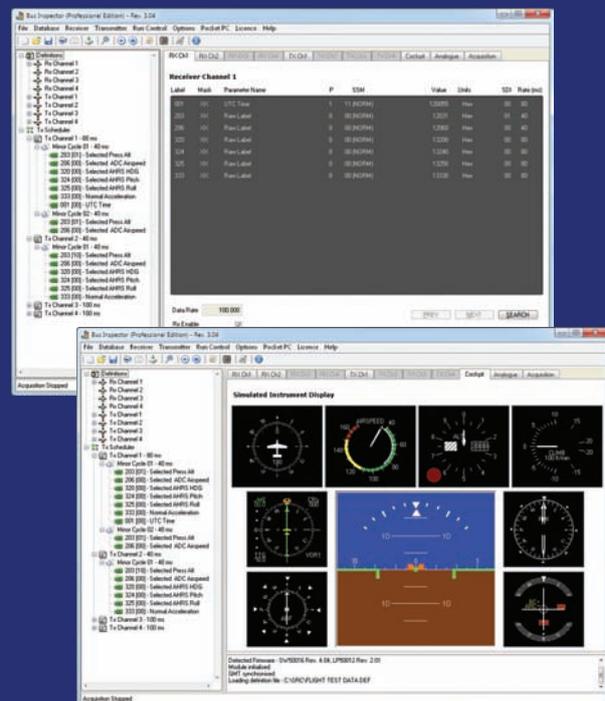
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