



WHATS NEW AVIONICS DATA BUS ANALYSIS 2010

The following document gives Engineers insight into the latest tools and capabilities offered by Aim GmbH, for test, simulation, analysis and emulation of avionics data buses. Utilised in ground based test equipment and ATE rigs around the world on all of the main UK, European and US Military aircraft. Unitronix supplies and technically supports the AIM avionics data bus equipment for local customers in New Zealand and Australia. The AIM product range covers 1553, ARINC 429, AFDX (Avionics Ethernet), as well as true JSF Fiber Channel products. New products from AIM in 2010 include PC-104 1553 and ARINC429, USB 1553 / 429 interfaced equipment, a new mini FOMIS and further development and extensions to PBA-Pro. The most comprehensive and easy to use avionics data bus analysis tool in the world. For more information on these products, please contact Tim Marshall on (02) 4977 3511

New for 2010 AIM PC-104 Avionics Data Bus 1553 and ARINC 429.

PC-104 Avionics Data Bus 1553 and ARINC 429:

PC104p-1553 Test and Simulation module for PC-104+ systems with 1, 2 or 4 dual redundant data streams, includes four (4) on board DIO lines for Test Engineers to utilise in their ATE rigs. PC-104 is a small industrial computer standard, it allows for peripheral IO cards to stack onto CPU cards. The AIM PC104p is an IO card and is designed to stack on top of a CPU card with this interface. For more information on this type of kit call Tim Marshall at Unitronix.



Industry first with integrated 'MILScope' for MIL-STD-1553 Electrical Waveform Validation. Option available for AIM's PCI (X), PXI, cPCI 3U/6U and VME cards!

Ask us about our **PBA.pro™** Test Scripts for AS4112 Protocol Testing & Electrical Waveform Testing - or click [here](#) for more information.

MIL-Scope 1553 Electrical Waveform Validation, now available on PCI, PCI (X) and cPCI.

MIL-STD-1553 Electrical Waveform Measurement:

AIM's **PBA.pro-SCR-PTP-E** software package supports the validation of the MIL-STD-1553 Electrical waveform in accordance with the 'SAE AS4112' RT (Remote Terminal) Production Test Plan. This package comprises AIM's MILScope™ (model APX1553-DS-1/2) card which has an on board integrated Digital Scope function plus the **PBA.pro™** Databus Analyser & Analysis Software for Windows or Linux .

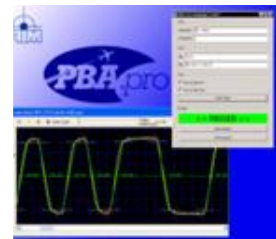
Test Scripts:

The **PBA.pro-SCR-PTP-E** software package comprises a set of test scripts and a user panel, which fully automate the 'Electrical Test' requirements. The dedicated Test Panel has been created via the **PBA.pro™**, Designer Component and the scripts executed and managed by the **PBA.pro™** Test & Script Manager component. A complete test report is generated and can be customised to fully document the equipment under test and the Pass / Fail results for configuration control, document management and traceability.

Test Plan Software for 1553

Test Plan Software:

AIM's 'RT Production Test Plan Software' model for Windows provides a fully interactive and automated test facility for users requiring to run the 'SAE AS4112' RT Production Test Plan (Protocol Only) on MIL-STD-1553B Remote Terminals. The PTP software offers full configuration of the Unit Under Test (UUT), hard copies of the test results plus manual or automated execution of each test. The **API-PTP-LS** software is available for the APM1553, AMC1553, APX1553 & ACC1553 modules plus legacy modules API1553, ACI1553, AXI1553.



AFDX (Avionics Ethernet) Easy Load 615A for Airliners and AFDX Network Tap.

Easy Load 615A Data loading for AFDX/ARINC664:

AIM's software tool performing TFTP/615A Data Loading with AIM's AFDX/ARINC664 modules. Easy to use GUI (Graphical User Interface) for Windows 2000/XP . multiple, simultaneous data loading operations supports data loading to **Airbus or Boeing** aircraft over standard Ethernet and AFDX/ARINC664.

AFDX/ARINC664 Network Tap:

AFDX/ARINC664 Network Tap with 4 Ethernet Taps & Receiver Ports in one small box with a fast USB 2.0 Interface to a host PC versions available for both **Airbus & Boeing variants of ARINC664**. Monitors traffic between end systems & switches and provides advanced trigger and filtering for receiver ports with full AFDX redundancy management.

AIM Range of Configurable Ground Based Test Equipment Platforms Off the Shelf.

AIM AGE: Designed to operate in extreme harsh conditions for in service use. Rugged Chassis are configured to meet customer specific requirements using off-the-shelf modules, cable sets & peripheral items, including trolleys to make up the complete system. PBA/ParaView & PBA.pro Databus Analyser / Visualiser Software provides the advanced user an interface to this Ruggedised Portable Workstation. This system is fully qualified for aircraft flight line use. Modular in design for ease of upgrade and allows for customer specific solutions / configurations to be implemented. Please contact Tim Marshall @ Unitronix for configuration options.



New for 2010 AIM USB 2.0 interfaces to 1553 and ARINC 429.

APU 429-x:

AIM's New USB 2.0 module for ARINC 429 Test and Simulation with Four, Eight, or Sixteen channels, and additional eight bidirectional DIO lines. Powered via USB so no additional PSU required.



APU 1553-x:

AIM's New USB 2.0 module for 1553 Test and Simulation. Dual or Single stream, with eight additional bidirectional DIO lines. Powered via USB so no additional PSU required.



Fibre Optic 1553 Link Extender .

FOL1553-P Fiber Link Extender:

AIM's New FOL1553-P is a Portable, Fibre Optic Link extension system designed for MIL-STD-1553 bus stubs. Comprising of a two part system, it has been designed for applications where the distance from a UUT (Unit Under Test) has to be extended for EMC testing or remote monitoring.



FOL1553-P Fiber Link Extender:

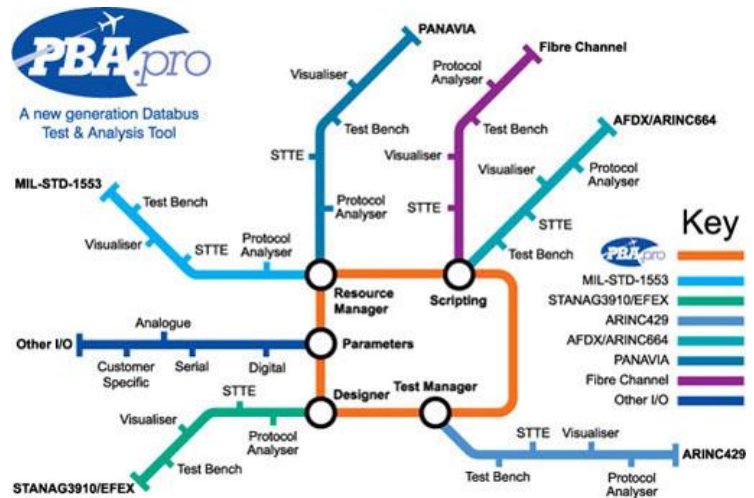
Two types of FOL-P's are available. The SIMULTOR system extends the bus stub up to 100 metres and the MONITOR system up to 500 metres. Portable - Easy to use 'Plug & Play' design Extended temperature version available Integrated Battery Pack for stand alone operation External DC power supply for operation & charging.

AIM PBAPro Fully Featured Test and Analysis software for 1553 and ARINC 429.

PBA.pro Avionics Test and Analysis application:

PBA.pro is the new generation of Avionics Databus test and analysis software using a modular, fully scalable approach for developing high performance test and simulation modules. PBA.pro is a powerful yet cost effective software system covering a wide range of applications from a stand alone databus analyzer to a complete systems test bench or advanced avionics integration facility. The software provides complete Databus Analyzer solution for individual avionics data busses such as 1553, or it allows integration of additional required modules such as ARINC 429, and ARINC 664, into the analyzer software & PC platform to meet your specific requirements. As such it should be considered as a heterogeneous test platform for avionics data busses.

Heterogeneous Avionics Bus Analyzer MIL-std 1553 ARINC429 ARINC664



MIL-STD 1553 cards on PC104, USB, cPCI, VME, PMC, PCI, VXI, PCMCIA.

For further information on these products or for technical support call:

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