

UNITRONIX Pty Ltd

PO Box 486, Morisset NSW 2264
 NSW: Tel: 61 2 4977 3511 Fax: 61 2 4977 3522
 WA: Tel: 61 8 9455 2424 Fax: 61 8 9455 2458
 unitsyd@unitronix.com.au www.unitronix.com.au

AFDX/ ARINC664 Resource Component

PBA.pro-AFDX

The PBA.pro-AFDX component handles single or multiple AFDX/ ARINC664 resources providing access to all Capture, Send and Simulation Ports with Network Databus Analyzer functions and supersedes the legacy fdXplorer Software.

The PBA.pro-AFDX component is fully scriptable (using the optional PBA.pro-TSM component) and is accessed via the PBA.pro™ Resource Manager.



AFDX/ARINC664

Index	TimeTag	DiffTime	Alias	Type	Source	Port	Mode	Protocol	Speed	Priority	QoS	Sequence
0	198d:10h:38m:27.153024s			Chronologic Rx-Frame	ste-u...	64	Full	IPv4 and UDP	100MBit/sec	A	N/A	33
1	198d:10h:38m:27.253024s	100,000		Chronologic Rx-Frame	ste-u...	64	Full	IPv4 and UDP	100MBit/sec	A	N/A	33
2	198d:10h:38m:27.353024s	100,000		Chronologic Rx-Frame	ste-u...	64	Full	IPv4 and UDP	100MBit/sec	A	N/A	34
3	198d:10h:38m:27.453024s	100,000		Chronologic Rx-Frame	ste-u...	64	Full	IPv4 and UDP	100MBit/sec	A	N/A	34
4	198d:10h:38m:27.553024s	100,000		Chronologic Rx-Frame	ste-u...	64	Full	IPv4 and UDP	100MBit/sec	A	N/A	35
5	198d:10h:38m:27.653024s	100,000		Chronologic Rx-Frame	ste-u...	64	Full	IPv4 and UDP	100MBit/sec	A	N/A	35
6	198d:10h:38m:27.753024s	100,000		Chronologic Rx-Frame	ste-u...	64	Full	IPv4 and UDP	100MBit/sec	A	N/A	36

www.aim-online.com

Avionics Databus Solutions

General Board & Status Information

The PBA.pro-AFDX Resource Overview offers visualization and control of resource/board level information. AFDX/ ARINC664 ports can be configured for Single or Redundant Operation and support Capture, Send or EDE Subscriber Simulation modes.

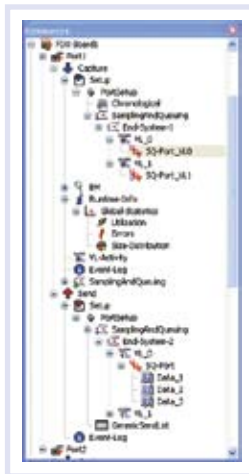
Capture

Capture ports can be operated in "Chronological" or "Sampling and Queuing" mode.

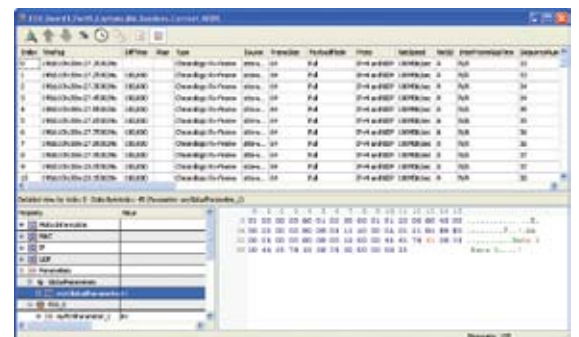
Chronological Mode (Bus Monitor)

The receiver captures all frames in a chronological manner:

- Protocol Decoding of MAC-, IP- and UDP-address fields
- Decoding of AFDX specific fields (VL, SN)
- Enhanced Error Information
- Various Payload Reduction and Save modes supported
- Real Time - Online Activity Monitor



- Tabular session files with search, filter, merge, data export options and customizable column ordering (incl. data columns)
- Detailed message display with 'stack-walk' controls and displays of all message attributes
- Event marker generation and correlation with stack display
- Filter library for definition and handling of conditions applied to captured messages for online (stream scanner) and offline (post analysis) operations
- Alias definition for customized packet analysis



PBA.pro™ a modular, scalable and integrated approach for a broad range of avionics and more applications.

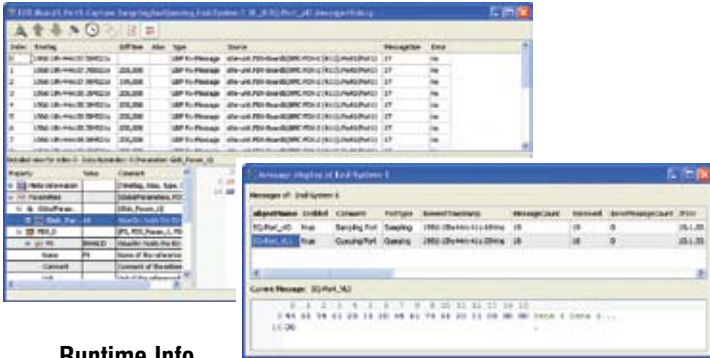


AIM-USA

Sampling and Queuing Mode

The receiver operates in a receiving End-System simulation mode:

- Support of multiple End-Systems
- Virtual Link (VL) definition
- Integrity Checking, Redundancy Management and Traffic Shaping configurable per VL
- Sampling/ Queuing port definition with configurable message history
- Import of fdXplorer Capture setups supported



Runtime Info

The Runtime Info node provides global statistics, VL-Activity and Event-Log information.

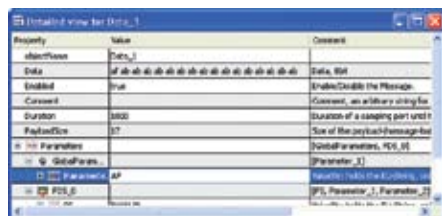
Send

Send ports can be operated in "Sampling and Queuing", "Generic Send List" or "Replay" mode.

Sampling and Queuing Mode

The Send ports operate in a receiving End-System simulation mode:

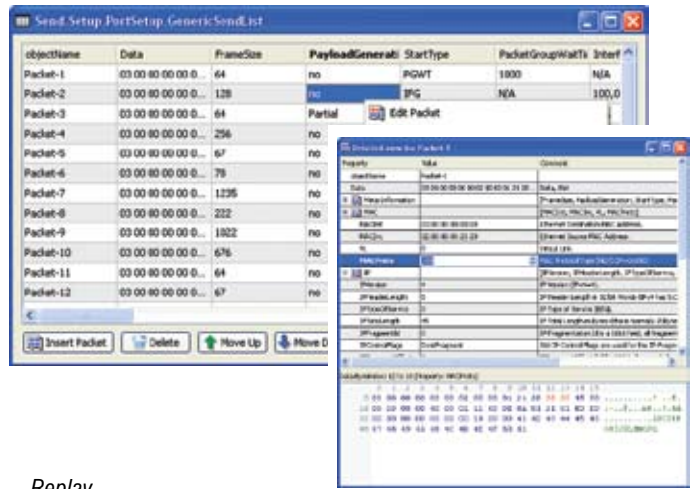
- Support of multiple End-Systems
- Virtual Link (VL) definition
- Sampling/ Queuing port definition with message generation
- Message Scenarios
- Enable/ Disable VL's or Sampling/ Queuing ports on the fly
- Error Injection features
- Import of fdXplorer Send setups supported



Generic Send List Mode

Traffic is generated using a list of data packets:

- Programmable timing and sequencing of packets
- Programmable Wire Speed Scenarios
- Error Injection features like CRC, MAC, Alignment etc.
- Payload Generation and Timetag insertion supported for Latency Measurements
- Automatic or User Defined control of Sequence Numbering
- Support for synchronization between multiple ports by means of strobe inputs and outputs
- Definable Skew of redundant frames
- Import of fdXplorer Send setups supported



Replay

The Replay node supports replay of previously recorded AFDX/ ARINC664 recording files physically to the bus. Multiple AFDX/ ARINC664 ports can be selected for synchronous replay.

Simulation

Simulation operation is only available for AFDX/ ARINC664 interfaces including the Boeing specific extensions (EDE). Detailed documentation upon request.

Database Manager

(using optional PBA.pro-AFDX/ ARINC664-DBM component)

The AFDX/ ARINC664 Database Manager component provides Engineering Unit Conversion and several extensions:

- Display parameters on resource node
- Parameter information added to individual messages in the chronological bus monitor
- Use parameters to setup messages of a Sampling/ Queuing port or packets of the Generic Send List
- Assign displays to show dedicated properties of an object or parameters with options to check and control parameter values
- Export of parameters for off-line analysis via PBA.pro™ (tabular and graphically) or third party tools
- Import of ParaView databases (.pdi format) supported

Ordering Information

PBA.pro-AFDX-2 AFDX/ ARINC664 2 Ports
Based on API-FDX-2/ AMC-FDX-2/ APM-FDX-2/ APX-GNET Hardware

PBA.pro-AFDX-X2/ ARINC664 Additional 2 Ports
Based on API-FDX-2/ AMC-FDX-2/ APM-FDX-2/ APX-GNET Hardware

PBA.pro-AFDX-M4 AFDX/ ARINC664 4 Receiver Ports
(Monitoring Only) (for operation with fdXTap)

PBA.pro-AFDX-DBM Data Base Manager, required for Engineering Unit Conversion

AIM Office Contacts:

AIM-USA
Seven Neshaminy Interplex
Suite 211 Trevose PA 19053 USA
Tel: 267-982-2600
Toll Free: 877-520-1553
Fax: 215-645-1580
email: salesusa@aim-online.com

AIM GmbH
Sasbacher Str.2
79111 Freiburg
Germany
Tel: +49 761 45 22 90
Fax: +49 761 45 22 93 3
email: sales@aim-online.com