GOEBEL | ARINC 429

Goebel extends capabilities for Arinc 429 by incorporating actual avionics transceiver chips in our simulation and tests boards. Whether in the HIRF lab or a typically noisy lab environment you can be assured the bus signals are generated and received according to spec. Powerful APIs for data acquisition, data generation and error injection are easily mastered. For maximum capability with minimum effort our Goebelyzer with Gtools productivity products offer unparalleled capability and features. Whether your application requires simple output of a 429 label, or full multi channel IO simulation or error injection, we have shown the highest performance and the greatest level of functionality. Uniquely our passthru data modification allows changing data from one LRU to another. Our products are used in high-level systems simulation, as well as LRU design, verification and manufacturing test. Now featuring our newest addition, 615a data loading.

ARINC 429 hardware features

- 32 or 16 channels individually configurable as transmit or receive.
- Actual Avionics approved drivers chips provide transmit signals without artifacts.
- Actual Avionics approved receiver chips allows receiving signals rejected by other comparator based cards.
- Can receive data that is transmitted on same channel for BIT testing.
- Channels can be baud rate controlled individually from 8 to 500 KHz. Baud rates can be changed dynamically.
- PMC form factor option adaptable to PCIe cPCI, VME, VXI.
- Hardware scheduling of 256 labels per channel by millisecond, Hertz or word times where priority can be specified for individual labels.
- FIFO capability for block data, scheduling of fifo supported.
- Gap time is controllable by channel, or by individual words.
- Timing of receive data has microsecond resolution. Driver converts hardware times to wall clock time of host system
- User upgradable FPGA

Gtools 615a Data Loader

- Supports A615A file formats.
- Supports automatic management of discretes via PDL load connector or breakout box.
- GUI for loading supported.
- Supports FIND protocol to discover loadable LRUs.
- Supports multiple files from CONFIG.LDR.

ARINC 429 software features

- Drivers for Windows and Linux.
- BIT test application.
- Decode based on ICD definitions.
- ICD editing with bus traffic generation based on ICD
- Powerful plotting, triggering, filtering and sorting
- Export CSV, XML, TEXT
- Data pass through modification
- Scripting support for configuring, scheduling reading and writing 429 labels.
- Gtools productivity tools, including data loader, scripting, GIOserver, (Linux only)

Part number	Interface description
GIO-A429-P32	A429 PCI card, 32 channel configurable as rx, tx,
GIO-A429-P16	A429 PCI card, 16 channel configurable as rx, tx,
GIO-A429-E32	A429 PCIe card, 32 channel configurable as rx, tx,
GIO-A429-E16	A429 PCIe card, 16 channel configurable as rx, tx,

GOEBEL

The Goebel Company
Leavenworth, WA
206.601.6010

Phoenix Manufacturing
1745 W. Deer Valley Road
Suite 114
Phoenix, AZ 85027
623.328.9020

Doc: 1811021