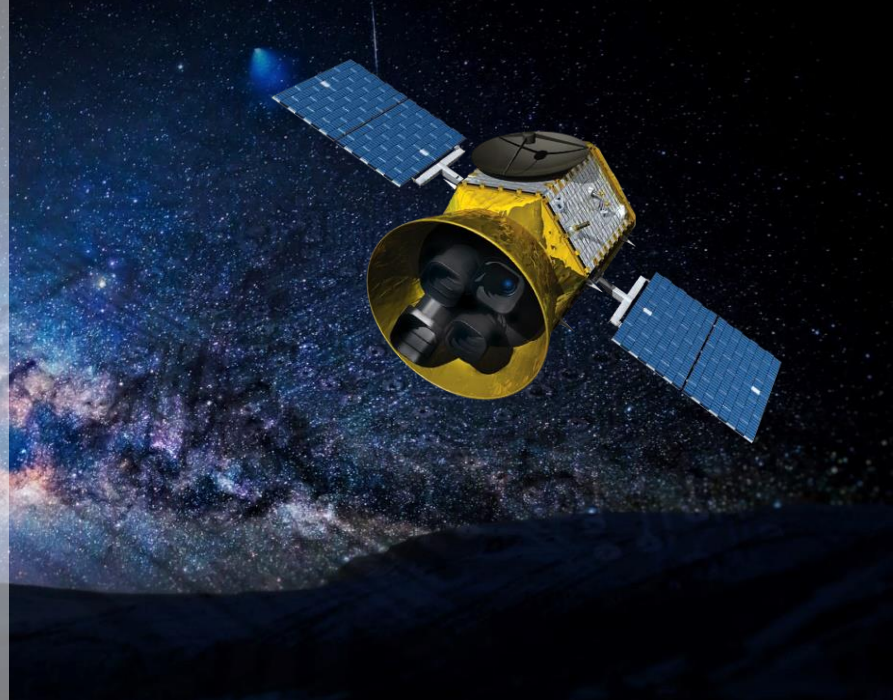
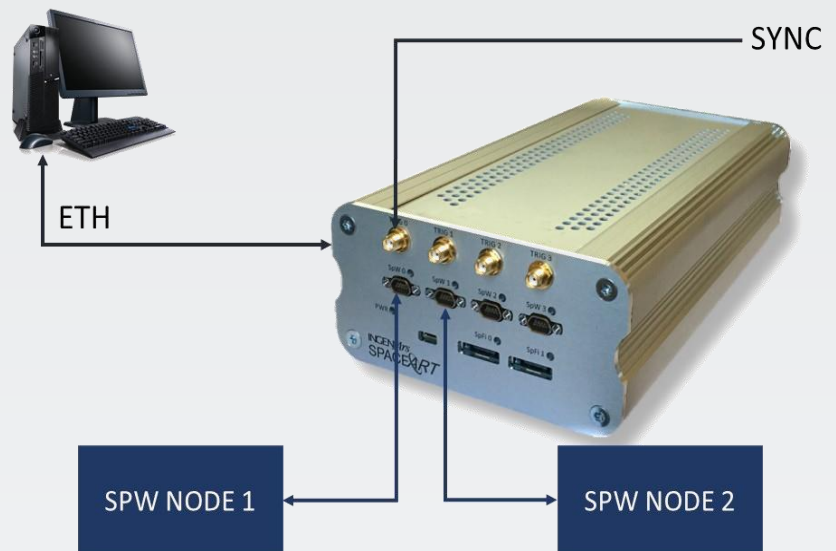


SpaceART® SpaceWire Sniffer



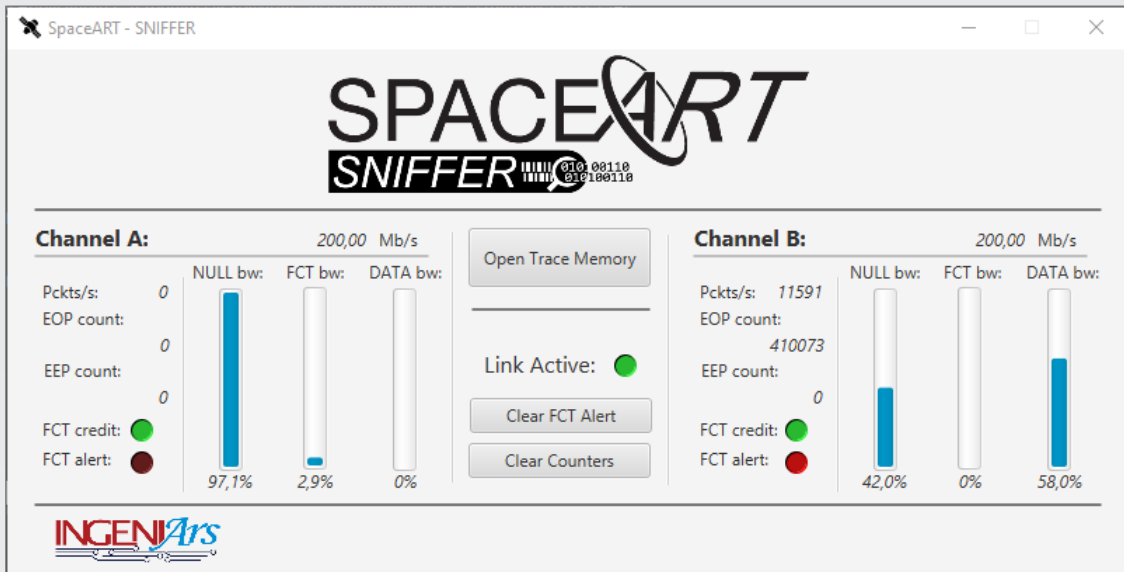
The SpaceART® SpaceWire Sniffer unit allows the analysis of **SpaceWire communication between two nodes at character level**, with no interaction with the communication. SpaceART® SpaceWire Sniffer is specifically designed for those applications which require long SpaceWire acquisitions and advanced trigger conditions to facilitate the acquisition of the portion of interest. It can be used as an effective tool for analyzing SpaceWire communication between two nodes in order to troubleshoot the most hidden flaws, thanks to the high recording capability and advanced trigger conditions.



Key Features

- Unobtrusive SpW link monitoring
- SpW traffic speeds up to 200 Mbps
- Gigabit-Ethernet interface for host PC communication
- Built-in advanced SpW traffic visualization features with customizable XML parser to easily analyze custom-defined SpW protocols
- Complex trigger conditions to start the acquisition
- External Synchronization via SMA connector
- Acquisition available in Human readable and binary files
- 256 MB memory for traffic snapshot
- Disconnect error injection - asynchronous or synchronous - to external SYNC signal

Simple yet powerful Graphical User Interface



Trigger and acquisition setting

This window is used for configuring the analyser's trace memory and acquisition settings. It includes sections for 'Rolling Memory setting' (Num Blocks: 1024, Trigger Offset: 512, LOBT Resolution: 5 ns), 'SYNC settings' (Enable SYNC Match, Posedge/Negedge), 'Programmed Disconnections' (SYNC Num, Offset, Duration), and 'Channel A/B' settings (Save Channel Data, FCT bypass, NULL Bypass, Name, Character Match, Packet Match).

Advanced SpaceWire traffic visualization

The Analyser Viewer displays captured traffic from SpaceArt_EGSE and SpaceWire_DUT. It features a search filter, table alignment options, and a list of packets with their time, data, and size. Navigation buttons like 'Go to Trigger', 'First Time', 'Lock Time', 'Second Time', 'Compute Diff', and 'Difference' are available. The bottom shows the database name 'test_database.db' and options to load or export the database.

Pckt	Time [ns]	Data	Pckt	Time [ns]	Data
1	31699880	HDR: 0xD0	2	40714160	HDR: 0xEE
-	-	SIZE: 76	-	-	SIZE: 141
-	31707400	EOP	-	40728200	EOP
2	41696520	HDR: 0xD0	3	50712280	HDR: 0xEE
-	-	SIZE: 76	-	-	SIZE: 141
-	41704040	EOP	-	50726320	EOP
3	51696520	HDR: 0xD0	4	60712240	HDR: 0xEE
-	-	SIZE: 76	-	-	SIZE: 141
-	51704080	EOP	-	60726280	EOP
4	61695960	HDR: 0xD0	5	70712280	HDR: 0xEE
-	-	SIZE: 76	-	-	SIZE: 141
-	61703520	EOP	-	70726320	EOP
5	71699040	HDR: 0xD0	6	80711960	HDR: 0xEE
-	-	SIZE: 76	-	-	SIZE: 141
-	71706600	EOP	-	80726000	EOP
6	81696120	HDR: 0xD0	7	90712160	HDR: 0xEE
-	-	SIZE: 76	-	-	SIZE: 141
-	81703640	EOP	-	90726200	EOP
7	91696520	HDR: 0xD0	8	100711640	HDR: 0xEE