ADwin-X
Digital Signal Processor

FRACTURE TECHNOLOGY

Bulletin 200-02

The ADwin-X digital signal processor (DSP) is the next-generation ADwin system for real-time test control and data acquisition.

Powerful Real-Time Digital Signal Processor

The ADwin-X is a powerful real-time digital signal processor (DSP) for data acquisition and control. Released in 2020, it offers a number of key advantages over the ADwin Gold, with a faster overall processor, more memory, faster PC connectivity, and fully synchronous data channels.

The impressive 1GB on-board memory is completely available to the CPU versus only 64MB of memory that is partitioned to local and external memory on the Gold. The parallel A/D converter design allows for synchronous acquisition of all 8 analog input channels without any phase-shift at a speed of 1 µs or less versus 2 synchronous channels on the Gold. It has an upgraded 18-bit analog input resolution and 64-bit double precision floating point computing capability.

It includes a Dual-Core ARM CPU operating at 666 MHz versus 40 MHz for the Gold, which drastically reduces the workload on the processor. The ADwin-X also has an upgraded 1GB ethernet interface for faster PC connectivity.

As like the ADwin Gold, the ADwin-X uses the ADbasic programming language to perform all tasks in the on-board DSP on a priority basis independent of the PC workload. If the PC crashes, the ADwin system will continue to run, maintaining control and collecting data.

±10V analog inputs and outputs are provided via a shielded breakout box with standard BNC connectors. The ADwin-X provides the same digital input and output channels for detecting the Run-Stop state of the test controller and for controlling the current reversal of the FTA DCPD System, and includes an additional auxiliary interlock.

ADwin systems are distributed and supported in North America by CAS Dataloggers and are sold exclusively for FTA systems by LTI. The ADwin-X is manufactured by Jäger in Großostheim, Germany and have been the trusted real-time system for FTA systems since 2001.

Find Out More

Contact FTA at FTASales@labtesting.com to find out more.

Feature	Gold	ADwin-X
Release Date	2001	2020
Processor	ADSP 21062	ARM Cortex A-9
Processor Clock	40 MHz	666 MHz
Floating Point	32-bit	64-bit
Memory	512kB (Internal) 64MB (External)	1GB (Internal)
Analog Input Resolution	16-bit	18-bit
Analog Output Resolution	16-bit	16-bit
No. Analog Inputs	16	8
No. Synchronous Inputs	2	8
No. of Analog Outputs	2	2
No. Digital I/O	32	8
Interface	USB	Ethernet
PGA Gain	x8	x2

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