



your NTPB specialist

SABTECH INDUSTRIES



OWL™

IRIG-B PCI Module

Introduction

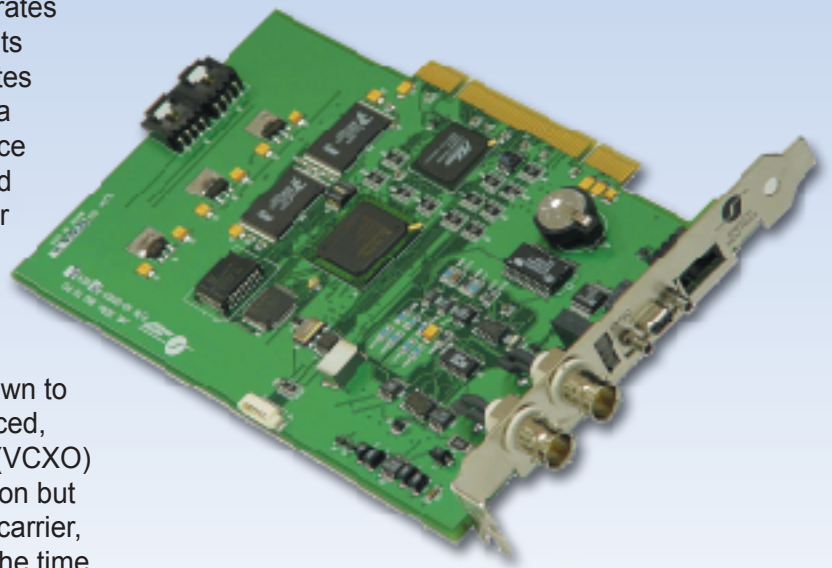
For IRIG-B applications, nothing rivals the performance, reliability, and flexibility of Sabtech's Owl IRIG-B PCI module. This feature-rich module from the premier provider of NTDS technologies reads and generates IRIG-B time signals with remarkable precision. Its sophisticated crystal oscillator not only contributes to the device's accuracy, but also can serve as a backup, providing time even when no time source is available. Its powerful field-programmable and on-site test capabilities make the Owl™ ideal for high-mobility applications. And, all of its features are designed into an industry-standard PCI card that weighs only 3 ounces.

Sabtech's highly-accurate Owl provides time down to 62.5 ns resolution in UNIX format. Its time-sourced, disciplined, voltage-controlled crystal oscillator (VCXO) not only allows it to provide sub-second resolution but also to "flywheel" during the absence or loss of carrier, enabling the Owl™ to provide time even when the time source is not present. The module has a status LED that indicates when the internal time is synchronized with the input time code.

The Owl provides a programmable offset on its internal time from the input time source. The Owl-generated IRIG-B output can be configured to be synchronous to the input time source

This advanced module from Sabtech offers remarkable reliability and flexibility in the field, as well. Connecting the Owl's input and output channels enables it to perform "loop-back" tests. Also, an internal loop-back path makes it possible to test the Owl™ without disconnecting cables. Field upgrades are easy, too. By running utilities, the user can update the onboard Field Programmable Gate Array (FPGA) configuration, or update the firmware.

The Owl includes a driver for any one of the supported operating systems, a loop-back cable for testing, an excellent documentation package, and sample C language code that can be freely used in application software. For custom configurations, contact the Sabtech factory at 714-692-3800. For precision, reliability and flexibility, the Owl is unmatched.





OWL™

IRIG-B PCI Module

Features

Time Codes

- IRIG Serial Time Code Format B Reader/Generator

IRIG-B Reader

- 0.35-7V(rms) sine wave, amplitude modulated, 1 kHz carrier detect
- 3:1 to 6:1 mark-to-space ratio
- 10 millisecond maximum carrier failure detect time
- 10 kOhm input impedance
- 62.5 nanosecond timing accuracy

IRIG-B Generator

- Sine wave, amplitude modulated, 1 kHz carrier
- 3:1 mark-to-space, 2.1 V(rms) mark, 0.707 V(rms) space
- 50 ohm output impedance

Features

PCibus Features

- PCI 2.2 compliant (supports Plug & Play)
- 32-bit, 33 MHz or 66 MHz frequency
- +5V or +3.3V signaling (Universal card)

Other Features

- Field Programmable Gate Array (FPGA) technology
- External/Internal loop-back test
- Flywheel operation
- Alarm Clock
- Programmable reference source for generator
- Programmable Interrupts

Software Support

- Windows® 2000/XP
- Linux®
- Solaris™
- *LynxOS®

*Check with factory for availability

Specifications

Time Code Interface <input type="checkbox"/>	IRIG Serial Time Code Format B (IRIG STANDARD 200-98)
PCibus Interface <input type="checkbox"/>	PCI 2.2 Compliant Universal (+3.3V or +5V I/O) 32-bit
Time Code Connector <input type="checkbox"/>	Two coaxial RF (Amphenol P/N 31-10-75)
Form Factor <input type="checkbox"/>	Single wide, non-extended PMC (Per IEEE P1386.1, draft 2.0)
Weight <input type="checkbox"/>	3.0 oz.
Relative Humidity <input type="checkbox"/>	0% to +55%
Operating Temperature <input type="checkbox"/>	0 degrees to +55 degrees Centigrade
Power Consumption <input type="checkbox"/>	+5V @ 0.51A
<input type="checkbox"/>	-12V @ -54mA
<input type="checkbox"/>	VIO@7mA

Ordering Information

Product/Description <input type="checkbox"/>	Part Number
OWL™ IRIG-B PCI Module w/Timecode Reader/Generator <input type="checkbox"/>	TW-RB001-00 <input type="checkbox"/>



23231 La Palma Ave. Yorba Linda, CA 92887-4768

www.sabtech.com
 sales@sabtech.com
 Phone: 714.692.3800
 Fax: 714.692.3838