



# Hawke™

## **VME NTDS Serial Interfaces**

The Serial HAWKE™ family of VME NTDS boards, are powerful and versatile 32-bit interface between the VMEbus and MIL-STD-1397C Type D (NTDS Serial), E (Low Level Serial), or J (Fiber Optic Serial) input/output devices.

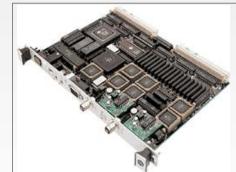
### **Features**

#### TYPES D, E & J

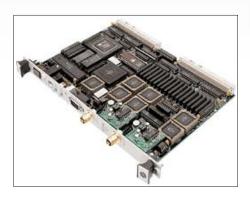
- ► MIL-STD-1397C Type D, E, or J compliant
- ► Full-duplex 32-bit serial NTDS transfers at 10Mbits/sec.
- ▶ User-programmable MC68020 CPU
- Standard VMEbus Interface Controller (VIC) for 100% VMEbus compatibility
- ► High-speed 32 bit Block Mode VME transfer
- ▶ 512KB RAM for NTDS I/O, CPU, and VMEbus access
- Dynamically allocate RAM for NTDS I/O or onboard programs
- ▶ User EPROM socket supports up to 1MB of user programs
- Parallel access to NTDS data and status words
- ► Independent word count registers and time-out counters for NTDS input and output
- Independent transmit and receive transaction cancel
- Maskable interrupts
- ▶ Built-in Test (BIT) with internal loopback capability
- ▶ Built-in menu-driven System Monitor program links Serial Hawke™ to PC or terminal via RS-232C port
- ▶ Built-in Assembler/Disassembler and Debugger
- Perform loopback and basic NTDS operations from a menu-driven interface without software
- ▶ Perform internal loopback without disconnecting cables
- Front panel LED's for Reset, Bus Error, User, Halt, Test and Watchdog timer
- ▶ Up to 16 Serial Hawke<sup>™</sup> boards may be used in a single VMEbus system

#### TYPES E & J

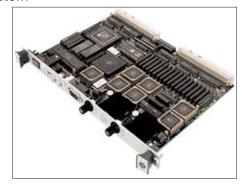
- ► Single word or burst mode NTDS transfers
- ► Fully configurable SIS/SOS control frames
- ► Ability to disable SIS/SOS for testing
- ▶ Programmable Sink and Source time-out counters
- ► Supports all MIL-STD-1397C System Integrity Features (SIF)
  - Parity error, framing error, illegal condition
  - SIS timeout (No SIS control frame or IF from source)
  - SOS or IF timeout (No SOS control frame response from Sink)
  - Sink NOT READY timeout (SIS not ready control frame response from Sink)



Serial Hawke™ Type D



Serial Hawke™ Type E



Serial Fiber Optic Hawke™ Type J





# Hawke™

### **VME NTDS Serial Interfaces**

#### **Software Drivers Available\***

- ► SNAPS™
- ▶ PowerIO™

(Operating Systems supported by PowerlO™ drivers) include- Windows NT®, VxWorks®, Solaris™, Linux<sup>®</sup>, HP-UX
\* Contact factory for new OS support

Specifications subject to change without notice (E & OE)

# **Specifications & Ordering Information**

	Hawke™ D	Hawke™ E	Hawke™ J
NTDS Interface:	MIL-STD-1397C Type D	MIL-STD-1397C Type E	MIL-STD-1397C Type J
VMEbus Interface:	VME Revision C.1 (IEEE P1014)	VME Revision C.1 (IEEE P1014)	VME Revision C.1 (IEEE P1014)
Processor:	MC68020, 32-bit CPU	MC68020, 32-bit CPU	MC68020, 32-bit CPU
RAM:	512 KB	512 KB	512 KB
NTDS I/O Connectors:	2 BNC isolated coaxial (Amphenol P/N 31-10-75)	2 tri-axial -isolated (Trompeter P/N BJ77TL)	2 XMTR (HFBR 1402/4) 2 RCVR (HFBR 2416)
RS-232C Connector:	DB9 Male	DB9 Male	DB9 Male
Form Factor:	Single-wide 6U Eurocard	Single-wide 6U Eurocard	Single-wide 6U Eurocard
Weight:	540g (1 lb. 3oz.)	540g (1 lb. 3oz.)	540g (1 lb. 2oz.)
Power Consumption:	+5Vdc @ 2.6A -12Vdc @ 60mA	+5Vdc @ 2.6A -12Vdc @ 60mA	+5Vdc @ 2.6A -12Vdc @ 60mA
Relative Humidity:	0% to 90% (Noncondensing)	0% to 90% (Noncondensing)	0% to 90% (Noncondensing)
User EPROM:	8KB to 1MB supported	8KB to 1MB supported	8KB to 1MB supported
Operation Temperature:	0°C to +55°C	0°C to +55°C	0°C to +55°C
Part Number:	HK-03101-00	HK-04101-00	HK-05101-00

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