ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Abaco Systems / SBS / Greenspring IP-UNIDIG-I-D* at our website: *Click HERE*

SBS Technologies, Inc.

www.sbs.com

IP-Unidig-T-D

IndustryPack Module With Four 16-bit Timers with Differential I/O Lines

Application Information

The IP-Unidig-T-D, a timer IndustryPack, provides four general purpose 16-bit count-down timers with differential drivers and receivers. These meet EIA-422 and EIA-485 specifications (formerly RS422 and RS485) with an extended common mode range of +12 V to –7 V. Two sets of timers may be cascaded to provide two 32-bit timers. The timers have two modes of operation, one-time (count down and stop) and continuous (reload on zero and continue counting). A programmable interrupt may be generated upon reaching zero in either mode.

Each timer's clock source is either a 1 MHz internal clock or up to a 10 MHz external clock (5 MHz in 32-bit mode). The internal clock provides one microsecond resolution while the external clock provides up to 100 nanosecond resolution.

Two signals control each timer's operation, providing simple yet versatile programming options. An enable bit in the control register enables and disables each timer's counting. Strobing a gate input starts the timers. The source for each timer's gate may be either internal or external. The external gate has programmable polarity for maximum flexibility. Each timer's count may be read reliably at any time without affecting the timer's operation by the use of a dedicated read register.

A divide-by-two option may be programmed to generate either a square wave if the timer is in continuous mode, or an alternating high and low if the timer is in one-time mode.

Reset stops and resets the timers and clears any interrupt for a consistent software interface.

A subroutine library and Windows NT drivers are available.

Features

- Fout 16-bit timers with differential digital I/O on a single-wide IndustryPack
- Compatible with EIA-422 and EIA-485 specifications
- Trigger, clock and output lines for each timer
- Timers cascadable in pairs for 32-bit operation
- Intenal or external clocks

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Specifications

Form Factor	Single-wide Type I IndustryPack
IndustryPack Interface	Complies with ANSI/VITA-4
Interface Speed	8 MHz
Wait States	None
Number of Timers	Four
Timer Resolution	16 bits May be cascaded in pairs for 32-bit operation
Timer Inputs	Clock and trigger
Timer Outputs	Zero count May be used in fixed or divide by two modes
Clocking	Internal 1 MHz Extenal up to 10 MHz (5 MHz if 32-bit countes used)
Input Drivers	Differential EIA-422/485 compatible with common mode range –7 V to +12 V with 70 mV hysteresis
Output Drivers	Differential EIA-422/485 compatible with 3 V common mode output and short circuit protection. Tristateable.
ESD Protection	None
Interrupts	On counter = zero
Dimensions	1.8 inches x 3.9 inches
Weight	0.06 kg (0.1 lb)
Power Requirements (no load)	+5 VDC, 60 mA typ
Environmental	Operating temperature: -0 to +70°C Humidity: 5 to 95% non-condensing Storage: –40 to +85°C

SBS Technologies, Inc.
8371C Central Avenue, Newark, CA 94560
(510) 742-2500 • sales.mio@sbs.com • www.sbs.com

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Ordering Information

IP-UNIDIG-T	IndustryPack with four 16-bit timers
IP-UNIDIG-T-ET	IndustryPack with four 16-bit timers, extended temperature
EKIP50-UNIDIG09	Engineering kit for IP-Unidig-T if mounted on a carrier with 50-pin ribbon cable header front panel I/O connectors. Contains: Six foot 50 conductor ribbon cable (C-IP50F-IP50F-6) Fifty screw terminal block with ribbon header (IP-TERM) *(More items as below)*
EKHD50-UNIDIG09	Engineering kit for IP-Unidig-T if mounted on a carrier with HD50 front panel I/O connectors. Contains: Six foot cable HD50 male to HD50 male (C-HD50M-HD50M) Fifty screw terminal block with HD50 female (IP-TERM-HD50) *(More items as below)*
EKCM50-UNIDIG09	Engineering kit for IP-Unidig-T if mounted on a carrier with Champ50 front panel I/O connectors. Contains: Six foot Champ50 male to HD50 male cable (C-HD50M-CM50M) Fifty screw terminal block with HD50 female (IP-TERM-HD50) *(More items as below)*
All IP-UNIDIG-T engineering kits include:	Printed hardware user manual Bill of materials Board schematics Assembly diagram Motorola: MMPQ2369 data sheet AMD: AM26LS33SC data sheet
QP-UNIDIG-TIM	QuickPack subroutine library for IP-Unidig-T. Contains: Printed software user manual Floppy Disk containing: C source code Release notes
ND-SDPACK	Windows NT 4.0 SDpacK IndustryPack driver CDROM

Associated Products

IP-UNIDIG-T-D	IndustryPack with four 16-bit timers with differentail I/O
C-IP50M-IP50M-3	Three foot 50 conductor ribbon cable
C-IP50M-IP50M-6	Six foot 50 conductor ribbon cable
C-CM50M-IP50M	Three foot Champ50 male to ribbon cable
C-HD50M-HD50M	Six foot HD50 male to HD50 male cable
C-HD50M-CM50M	Six foot Champ50 male to HD50 male cable
IP-TERM	50 screw terminal block with ribbon cable connector
IP-TERM-HD50	50 screw terminal block with HD50 female connector

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP