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 *Curtiss-Wright / DY-4 SVME-210* at our website: *Click HERE*

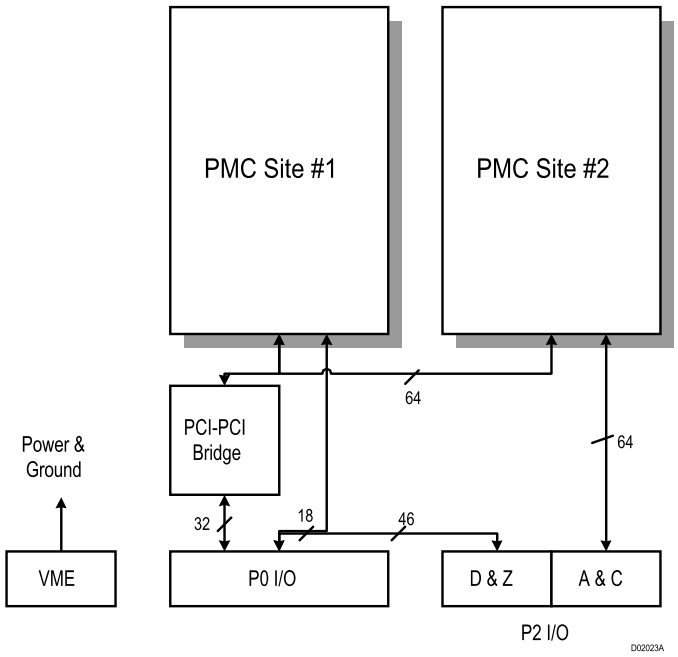


Figure 2: SVME/DMV-210 Carrier Card Block Diagram

Features

- Based on industry-standard Intel 21154 transparent PCI-to-PCI bridge device
- Supports two single width PMC modules or one dual-width module
- Supports 32-bit P0-side PCI bus at up to 33 MHz (132 Mbytes/sec peak data rate)
- 64-bit internal PCI bus, at up to 33 MHz
- Concurrent, independent bus operations on internal PCI bus and P0-side PCI
- P0-side PCI uses only 64 I/O pins on P0
- +5V-only operation
- Optional onboard regulator to provide 3.3 V to PMC modules requiring 3.3 V
- PCI signaling is 3.3V signaling, 5 V tolerant
- Available in three ruggedization grades, level 0 air-cooled, level 200 air-cooled, and level 200 conduction-cooled

PCI-to-PCI Bridge

The ‘210 incorporates the Intel 21145 device which provides the functions of a standard transparent PCI-to-PCI bridge in accordance with the PCI-to-PCI Bridge Architecture specification.

The P0-side PCI bus of the ‘210 is a PCI Rev 2.1-compliant bus supporting speeds up to 33 MHz with a bus width of 32 bits. I/O signaling is 3.3V, 5V tolerant. The on-card PCI bus is a 64-bit PCI Rev 2.1-compliant bus operating synchronously to the P0-side bus.

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

The PCI bus on the ‘210 can operate concurrently to the P0-side PCI bus, i.e., one PMC module could initiate a transfer to another PMC on the same carrier card at data rates of up to 256 MBytes/sec without impacting the P0-side PCI bus. In addition, a PMC module on one ‘210 can communicate over the P0-side PCI to a PMC module on another ‘210 carrier card without affecting the internal PCI bus of the host processor.

Interrupts

The ‘210 supports a single interrupt, INTA#, from each PMC site and combines the two into a single wire-or’d interrupt to the P0-side PCI bus. Via the PMC-605 module a single interrupt is generated to the host processor for all PMCs on all ‘210 cards controlled from one processor card. When an interrupt is generated the operating system interrupt handler will call the I/O driver for each PMC module in turn. As per PCI guidelines, each driver must check the interrupt status bit of its PMC as its first step and simply return if the interrupt is not for it.

PCI Signaling

The 21154 PCI-to-PCI bridge device used on the ‘210 is a 5 V tolerant device that uses 3.3 V signaling. Since it can accept PMCs that use 5 V signaling, the ‘210 is keyed as a 5 V signaling host to prevent the inadvertent installation of a 5 V signaling PMC and 3.3 V-only PMC at the same time.

I/O Routing

The 64 PMC I/O signals from PMC site #2 (nearest P2 connector) are routed to the A and C rows of the P2 connector in accordance with IEEE P1386, Table 6.2. For PMC site #1, 48 of the 64 I/O signals are routed to the D and Z rows of P2 in accordance with IEEE P1386, Table 6.3, with the other 18 of the 64 I/O signals being routed to the P0 connector.

For support of high-bandwidth signals such as Fibre Channel, 8 of the 64 I/O lines for PMC site #2 are implemented as 4 pairs of 150 ohm (nominal) differential impedance traces matching the PMC-642A1 pin-out.

Power Routing Options

The SVME/DMV-210 itself only uses +5 V, which is used to power the bridge device through a 3.3v regulator. Backplane +5 V, +/-12 V, and, optionally, +3.3 V power connections are routed to the PMC sites. PMC modules that require 3.3 V can optionally be provided with 3.3 V from an onboard regulator, up to a maximum of 4 A total.

Mechanical Format

The SVME/DMV-210 is a standard 6U format VME card. The only electrical connection to the VME bus is for power and ground. Air-cooled modules provide appropriate front-panel openings for PMC bezels.

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

Conduction-cooled modules conform to the IEEE 1101.2 standard for a conduction-cooled VME card. The thermal interface details of the PMC sites are in accordance with VITA 20-200x, Conduction-Cooled PCI Mezzanine Card Draft Standard. The cooling surfaces provided are the Primary Thermal Interface Regions and the side 1 Secondary Thermal Interface Regions.

Ruggedization Levels

Functionally identical versions of the PMC-605 are available in DY 4 ruggedization level 0 air-cooled, and air-cooled and conduction-cooled level 200. Level 200 in the case of the SVME/DMV-210 refers to card-edge temperatures from -40 to +85C.

Outreach Backplanes

DY 4's Outreach sub-backplanes (BPL-605-002/003) provide a fast and efficient interconnect method for systems using Outreach components such as the PMC-605 PCI-P0 bridge and the SVME/DMV-210 PMC carrier card. These sub-backplanes push directly onto the P0 connector of standard VME64x backplanes and span either two or three slots.

Features

- Standard units span two and three slots, contact DY 4 for custom requirements
- No interference with adjacent slots, or above or below P0 area
- Extended tails on non-PCI signals allow cable connection for I/O signals
- Four configuration jumpers to set PCI-P0 options provided for each slot
- Intended for use in standard development chassis

Firmware & BSP Components

See individual processor card data sheet for details on their support for the Outreach PCI/PMC Expansion System.

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

Table 1: Outreach Specifications

RUGGEDIZATION LEVELS (Refer to *Ruggedization Guidelines* data sheet for more details)	
Air-cooled modules	Available in levels 0 and 200*
Conduction-cooled modules	Available in levels 200*
Level 200 in the case of the SVME/DMV-210 refers to card-edge temperatures from -40 to +85C.	

POWER REQUIREMENTS SPMC/DPMC-605 BRIDGE MODULE		
+5 V +12 V -12 V	1.0 A (maximum) 0 A 0 A	0.8 A (typical) 0 A 0 A
3.3 V	Only routed to the PMC sites, not used by the base card.	

DIMENSIONS SPMC/DPMC-605 BRIDGE MODULE		
	Size	**Weight**
Air-cooled module (SPMC)	per ANSI/VITA 1-1994 IEEE P 1386/P1386.1	<300 g
Conduction-cooled modules (DPMC)	per IEEE 1101.2 VITA 20-200X	<300 g

POWER REQUIREMENTS SVME/DMV-210 CARRIER CARD (Does not include PMC modules)		
+5 V +12 V -12 V	1.0 A (maximum) 0 A 0 A	0.8 A (typical) 0 A 0 A

DIMENSIONS SVME/DMV-210 CARRIER CARD		
	Size	**Weight**
Air-cooled module (SVME)	per ANSI/VITA 1-1994	<500 g
Conduction-cooled modules (DPMC)	per IEEE 1101.2	<600 g

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

The information in this document is subject to change without notice and should not be construed as a commitment by DY 4 Systems Inc. While reasonable precautions have been taken, DY 4 Systems Inc. assumes no responsibility for any errors that may appear in this document.

References to other documents of the exact issue, or if not shown, the issue in effect at the time of publication form a part of this specification to the extent referenced herein. In the event of a conflict, this specification will be considered a superseding requirement.

All products shown or mentioned are trademarks or registered trademarks of their respective owners.

© Printed in Canada, 2000

DY 4 Systems Ltd.
741-D1 Miller Drive
Leesburg, VA
20175 USA

Virginia
Tel: (703) 737-3660
Fax: (703) 737-3661

New Jersey
Tel: (201) 251-2630
Fax: (201) 251-2640

Alabama
Tel: (256) 830-0149
Fax: (256) 830-4295

Texas
Tel: (972) 907-1110
Fax: (972) 907-1151

California
Tel: (760) 751-3007
Fax: (760) 751-3008

DY 4 Europe
15 Lambourne Crescent
Cardiff Business Park
Llanishen
Cardiff, CF4 5GG
Tel: +44 29 20 747-927
Fax: +44 29 20 762-060

DY 4 Asia Pacific
Level 15, Corporate Centre One
Cdr Bundall Rd. & Slatyer Ave.
Gold Coast QLD 4217
Australia
Tel: +61 7 5591 9546
Fax: +61 7 5591 9547

DY 4 Canada
333 Palladium Dr. M/S 252
Kanata, Ontario
Canada
K2V 1A6
Tel: (613) 599-9191
Fax: (613) 599-7777

Sales Support

Email: sales@dy4.com

Customer Support

USA, Asia & Rest of World:
Email: support@dy4.com
Tel: (613) 599-9199 ext. 418

Europe:
Email: uksupport@dy4.com
Tel: +44 (0)1908 521189 ext 223

World Wide Web

http://www.dy4.com

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