

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**

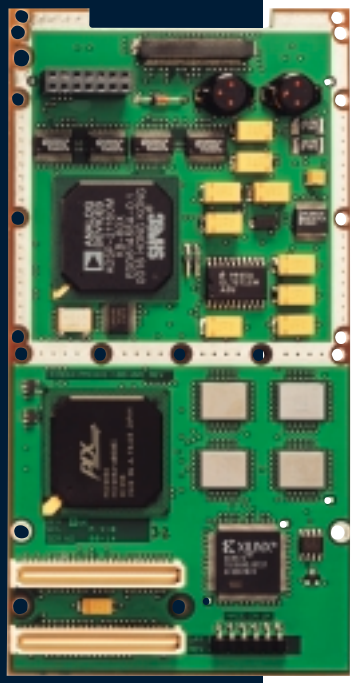
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

**Visit our website - *Click HERE***

# PMC HH1

## 600 MFLOPS DSP Gateway

RADSTONE MEZZANINE



- 1x ADSP 21160 SHARC® DSP @ 100MHz - 600 MFLOPS
- 4 Mbytes Boot FLASH PROM for boot code and/or application
- 6 External link ports at front panel.
- One SHARC serial port at front panel.
- PLX 9054 PMC-SHARC interface
- Front panel JTAG port for Emulator/debugger
- Two front panel mounted LED for diagnostics
- Board Support Firmware (BSF) and Built-In-Test (BIT)
- IEEE P1386 Draft 2.0 Draft Standard compliant
- VITA 20-199x Draft 1.6 Draft Standard compliant
- 5 Ruggedization levels - Air and Conduction-cooled

## Product Overview

The PMC HH1 from Radstone Technology is a fully compliant IEEE P1386.1 draft 2 and VITA 20 -199x draft 1.6 PMC module designed as a gateway to or from, a network of Analog Devices SHARC DSPs. The PMC HH1 provides an Analog Devices ADSP-21160 operating at 100MHz to provide 600MFLOPs peak DSP performance.

The PMC HH1 can be situated on any host card that has a fully IEEE P1386.1/VITA 20-199x PMC site. It provides six 100Mbytes/sec, 8 bit wide, bi-directional SHARC link ports at the front panel for data transfers and a 32bit/33MHz PCI bridge for the SHARC-to-PMC interface. Also provided on the PMC HH1 is 4 Mbytes of FLASH of which can be configured as boot or user FLASH.

The PMC HH1 provides full software support including Radstone's BSF for board configuration and initialisation, Built-In-Test software, VxWorks driver support, LynxOS and Analog Devices development tools (VisualDSP and White Mountain Emulator). There is also Third party support from Eonic Systems Virtuoso RTOS.

### HOST-SHARC Gateway

The PMC HH1 can be used as a Gateway to the network of SHARC DSPs on Radstone's VANTEGRA-1 and VANTEGRA-2 DSP boards from any host card with a PCI PMC site. The PCI data from the host card interfaces with the ADSP-21160 on the PMC HH1 via the 32bit/33MHZ PCI-SHARC bridge (PLX 9054). The data can then be pre-processed (if desired) by the ADSP-21160 and transferred into the VANTEGRA or VANTEGRA-2 via the PMC HH1's six 100Mbytes/sec link ports at the front panel. The ADSP-21160 link ports on the PMC HH1 can also be configured as 40 Mbytes/sec, 4 bit wide ADSP-2106x link ports, so as to interface with the ADSP-21060 SHARCs on the VANTEGRA-1 Series.

RADSTONE TECHNOLOGY

*Why settle for less*

## SHARC-HOST Gateway

The PMC HH1 can also be used as a gateway to any VME host card with a PCI PMC site from a VANTEGRA/VANTEGRA-2. The SHARC data is transferred to the PMC HH1 via the six 100Mbytes/sec link ports at the front panel, where the ADSP-21160 on the PMC HH1 can then pre-process the data (if desired). The data is then transferred to the host VME board via the SHARC-to-PCI bridge. The ADSP-21160 link ports on the PMC HH1 can also be configured as 40Mbytes/sec, 4 bit wide ADSP-2106x link ports, so as to interface from an ADSP-2106x system such as a VANTEGRA-1.

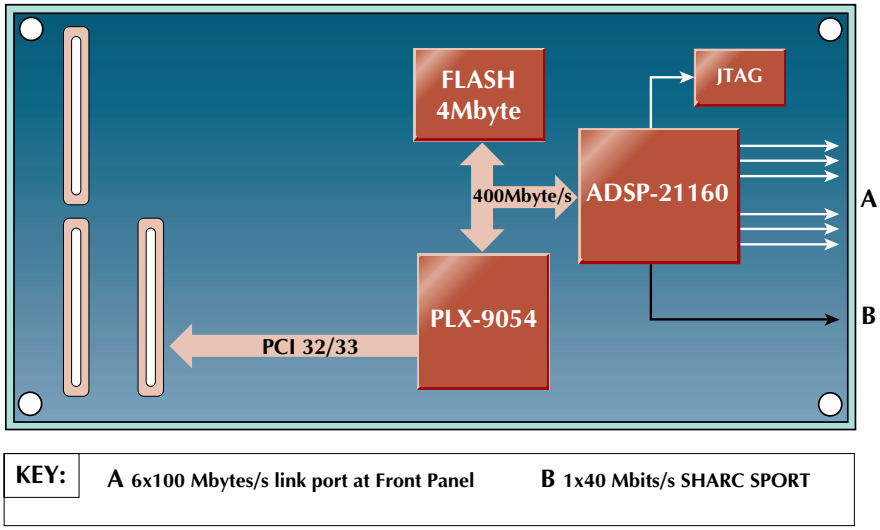



**Figure 1: PMC HH1 Functional Block Diagram**

## Technical Specification

| | |
|---|---|
| **Form Factor** | PMC: IEEE P1386 Draft 2.0 / VITA 20-199x Draft 1.6 |
| **Processors** | 1 Analog Devices ADSP-21160 SHARC DSP @ 100MHz.<br>Total peak performance 600 MFLOPS |
| **On-board Memory** | Memory resources available to the ADSP-21160 and PCI interface<br>FLASH – 4 Mbytes |
| **Link Ports** | The ADSP-21160 provides 6x 100 Mbytes/sec x 8bits wide bi-directional link ports at the front panel |
| **Shared Bus** | 400 Mbytes/sec ADSP-21160 shared bus for ADSP-21160, FLASH and PCI |
| **JTAG Interface** | IEEE 1149.1 compatible front panel JTAG interface, available for development and de-bug. Supports Analog Devices' EZ-ICE system |
| **PCI Interfaces** | PLX 9054 PCI32/33MHz PCI-ADSP-21160 interface |
| **Power** | 2 Watts typical |
| **Weight** | 67g |
| **Operating Environment** | PMC HH1 is available in 5 ruggedization levels, enabling it to operate in industrial or extended temperature, humidity, shock and vibration environments in either air-blown or conduction-cooled (to IEEE 1101.2 – 1992) formats. Operating temperature ranges from 0°C to + 55°C, to –40°C to +85°C |

## Ordering Information

Please contact you local Radstone sales office or distributor for details.


**UK**
Radstone Technology
Water Lane
Towcester
Northants NN12 6JN
Telephone: +44 (0) 1327 359444
Facsimile: +44 (0) 1327 359662
E-mail: sales@radstone.co.uk
Videoconferencing: +44 (0) 1327 359495
(by arrangement)

**USA**
Radstone Technology Corporation
50 Craig Road
Montvale NJ 07645-1709
Telephone: +1 800 368-2738
Facsimile: +1 (201) 391-2899
E-mail: sales@radstone.com

North Eastern Region: +1 (201) 391-2700
South Eastern Region: +1 (703) 383-3150
Central Region: +1 (816) 584-8560
Western Region: +1 (909) 974-1141

**FRANCE**
Radstone SARL
10 Av. du Québec
BP 116
91 944 Courtaboeuf Cedex
Telephone: +33 (0) 1 64 46 04 03
Facsimile: +33 (0) 1 69 28 03 40
E-mail: radstonefr@radstone.com


RADSTONE
TECHNOLOGY

Meet us on the Web at www.radstone.com


RADSTONE and the Radstone symbol are registered trademarks of Radstone Technology PLC.
All other trademarks are the property of their respective owners.

© Radstone Technology PLC 2000


Printed in UK Publication RT224 5K08/2000


This publication is issued to provide outline information only which (unless agreed by the company in writing) may not be used, applied or reproduced for any purpose or form part of any order or contract or be regarded as a representation relating to products or services concerned. The company reserve the right to alter without notice the specification, design, price or conditions of supply of any product or service.

**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