

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*

XPedite5470

Freescale Eight-Core P4080 Processor-Based Conduction- or Air-Cooled 3U VPX-REDI Module

- Freescale QorIQ P4080 processor with eight Power Architecture® e500mc cores at up to 1.5 GHz (alternate processors P3041, P4040, P5010, P5020)
- 3U VPX (VITA 46) module
- Ruggedized Enhanced Design Implementation (REDI)
- Conduction or air cooling
- Up to 8 GB (4 GB each) of DDR3-1333 ECC SDRAM in two channels
- Up to 512 MB of NOR flash (with redundancy)
- Up to 32 GB of NAND flash
- Hardware write protection for NVRAM
- XMC/PrPMC interface
- x4 PCI Express or Serial RapidIO Fat Pipe P1.A fabric interconnect
- x4 PCI Express or Serial RapidIO Fat Pipe P1.B fabric interconnect
- Two SerDes Gigabit Ethernet Thin Pipe P1 fabric interconnects
- Two 10/100/1000BASE-T Ethernet ports (optional)
- Two SATA ports to P16 or P2 (optional)
- Up to two RS-232/422/485 serial P2 ports
- Two USB 2.0 ports to P2 (one optionally can be routed to front panel via plugover module)
- Front I/O available via plugover module
- Linux BSP
- Wind River VxWorks BSP
- Green Hills INTEGRITY-178 tuMP BSP



XPedite5470

The XPedite5470 is a high performance 3U VPX-REDI single board computer supporting Freescale QorIQ P3, P4, and P5 processors. With a number of processor options to choose from, X-ES can provide a product to meet the specific power and performance requirements of today's embedded computing applications.

The P4080 processor brings the raw power of eight e500mc cores running at up to 1.5 GHz and dual-channel DDR3 memory, delivering unparalleled multi-core performance. For applications which are more power conscious, the P3041 processor offers four e500mc cores running at up to 1.5 GHz with a single channel of DDR3 memory, all within a significantly reduced power envelope. Applications requiring the performance of a true 64-bit processor are satisfied by the P5020 processor which offers dual e5500 cores running at up to 2 GHz and beyond with high performance Floating-Point Units and dual-channel DDR3 memory. Additional reduced function processors are available to meet any power and performance budget.

The XPedite5470 provides a ruggedized, high-performance, feature-rich solution to support the next generation of rugged embedded applications. Wind River VxWorks, Linux, and Green Hills INTEGRITY-178 tuMP Board Support Packages (BSPs) are available.

X-ES
Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions
3225 Deming Way, Suite 120 • Middleton, WI 53562
Phone: 608.833.1155 • Fax: 608.827.6171
sales@xes-inc.com • http://www.xes-inc.com

Processor

- Freescale QorIQ P4080 processor
- Eight Power Architecture® e500mc cores at up to 1.5 GHz
- 128 kB L2 cache per core
- 1 MB L3 cache per channel
- IEEE 754 Floating-Point Unit (FPU) support
- Alternate processor configurations offered, see below.

Alternate Processor Configurations

- P3041 processor with four Power Architecture® e500mc cores at up to 1.5 GHz
- P4040 processor with four Power Architecture® e500mc cores at up to 1.5 GHz
- P5010 processor with one 64-bit Power Architecture® e5500 core at up to 2 GHz
- P5020 processor with two 64-bit Power Architecture® e5500 cores at up to 2 GHz

Memory

- Up to 8 GB (4 GB each) of DDR3-1333 ECC SDRAM in two channels
- Up to 512 MB of NOR flash (with redundancy)
- Up to 32 GB of NAND flash

VPX (VITA 46) P1 I/O

- x4 PCI Express or Serial RapidIO Fat Pipe to P1.A
- x4 PCI Express or Serial RapidIO Fat Pipe to P1.B
- Two SerDes Gigabit Ethernet ports (or one 10/100/1000BASE-T port out P1 and one 10/100/1000BASE-T port out P2)
- X12d XMC P16 I/O

VPX (VITA 46) P2 I/O

- One 10/100/1000BASE-T port (when two SerDes Gigabit Ethernet P1 ports are not used)
- Up to two RS-232/422/485 serial ports
- Up to two USB 2.0 ports
- I²C port
- 3.3 V GPIO signals
- P64s PMC P14 I/O (optional)
- Two SATA ports capable of 3 Gb/s (optional)

XMC/PrPMC Site

- 32-bit, 66 MHz PCI bus (PMC interface)
- x4 PCIe port (XMC interface)
- P64s P14 I/O support (optional)
- X12d P16 I/O support
- Two SATA ports capable of 3 Gb/s to P16 (optional)

Front Panel I/O

- Front panel RJ-45 Ethernet, micro-DB-9 RS-232 serial ports, and USB available via optional plugover module

Software Support

- Linux BSP
- Wind River VxWorks BSP
- Green Hills INTEGRITY-178 tuMP BSP

Physical Characteristics

- 3U VPX-REDI conduction- or air-cooled form factor
- Dimensions: 100 mm x 160 mm
- 0.8 in. pitch without solder-side cover
- 0.85 and 1.0 in. pitch with solder-side cover

Environmental Requirements

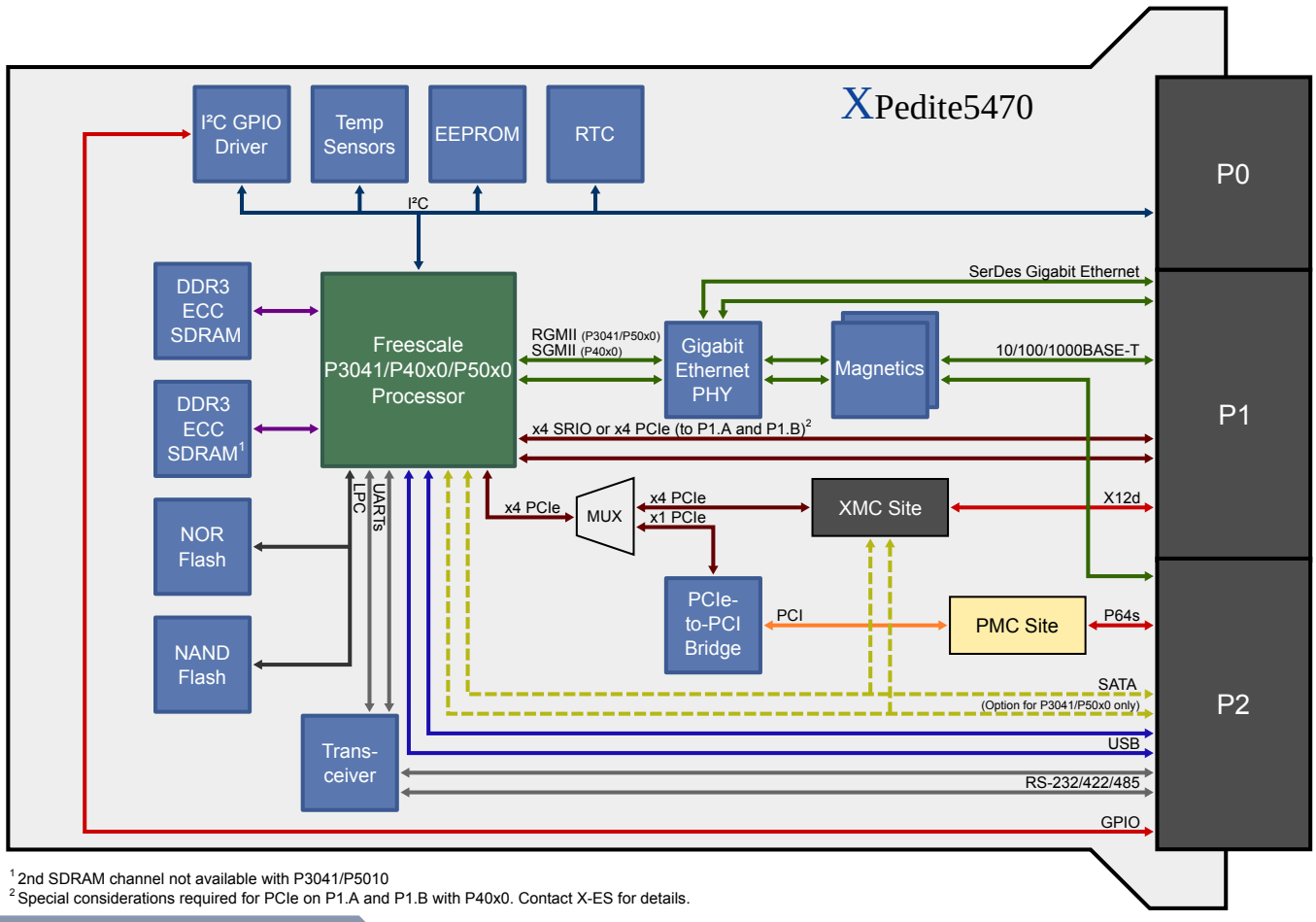
Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 1, 3, 5
- Conformal coating available as an ordering option

Power Requirements

- Power will vary based on configuration and usage. Please consult factory.

Ruggedization Level	Level 1	Level 3	Level 5
Cooling Method	Standard Air-Cooled	Rugged Air-Cooled	Conduction-Cooled
Operating Temperature	0 to +55°C ambient (300 LFM)	-40 to +70°C (600 LFM)	-40 to +85°C (board rail surface)
Storage Temperature	-40 to +85°C ambient	-55 to +105°C ambient	-55 to +105°C ambient
Vibration	0.002 g²/Hz, 5 to 2000 Hz	0.04 g²/Hz (maximum), 5 to 2000 Hz	0.1 g²/Hz (maximum), 5 to 2000 Hz
Shock	20 g, 11 ms sawtooth	30 g, 11 ms sawtooth	40 g, 11 ms sawtooth
Humidity	0% to 95% non-condensing	0% to 95% non-condensing	0% to 95% non-condensing



[1] 2nd SDRAM channel not available with P3041/P5010
[2] Special considerations required for PCIe on P1.A and P1.B with P40x0. Contact X-ES for details.

Copyright © 2015 Extreme Engineering Solutions, Inc. (X-ES). All rights reserved.
Specifications are subject to change without notice. All trademarks are property of their respective owners.

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