
V743/64 VXI Embedded Controller HP E1497A

Technical Specifications

- Direct VXI Access with PA-RISC technology
- Compatibility with Series 700 workstations/controllers
- C-SCPI and HP VEE support
- Includes SICL and VISA with special enhancements
- VXI *plug&play*-compatible with HP-UX



Description

The HP V743/64 and V743/100 embedded controllers are **C-size, 1-slot, VXI modules**. These high-performance message-based controllers use HP's PA-RISC technology to deliver extraordinary performance and direct VXI access at a very competitive price.

Developed specifically as an embedded HP-UX (UNIX) controller for VXI, the V743 controller provides the high I/O performance of direct VXI backplane support, the space savings of an embedded controller, and the high power and speed of HP PA-RISC-All in an HP-UX environment! The V743 supports all VXI addressing modes (A16, A24, and A32), programmable interrupt handler, single channel DMA for VXI extended memory devices, and a 1-MB dual-ported memory buffer for high-speed data acquisition. Note: You may use only one embedded controller in a system.

The V743/100, with its high speed- 100 MHz 7100LC PA-RISC processor, is ideal for development of run-time applications. The V743/64, with its 64 MHz, 7100LC PA-RISC processor, provides the performance you need for run-time applications at a lower cost than the V743/100.

Both models are completely compatible with other HP 9000 Series 700 workstations and controllers. However, both require HP-UX releases 9.05 and later. With HP-UX, you can set up industry-standard networking, windowing systems, and languages. Databases and a full range of VXI-related software are available for automated test applications.

Refer to the HP Website for instrument driver availability and downloading instructions.

Software Support

- SICL and VISA are included when you order the V743.
- C-SCPI is supported on HP-UX with C language.
- HP VEE is supported, including special enhancements for direct VXIbus support.
- HP-UX *VXIplug&play* Framework.

Operating System

HP-UX 9.05 and later

Note: You may use only one embedded controller in a system.

Specifications

| | |
|---------------------|---------------|
| Processor: | PA 7100LC |
| Clock speed: | 64 or 100 MHz |

Performance

| | |
|-----------------------------------|--|
| MIPS: | 77.7/121.6 |
| MFLOPS: | 24.3/37.8 |
| SPECmark 89: | — |
| SPEC int92: | 66.6/100.1 |
| SPEC fp92: | 96.5/137.0 |
| X11 Xmark 93: | 6.55/8.63 |
| SPECrate int92: | 1497.8/1237.3 |
| SPECrate fp92: | 281.4/3225.9 |
| Main memory: | 16-64 MB (64 MHz), 32-128 MB (100 MHz) |
| Built-in interfaces: | HP-IB, 2 RS-232, 1 SCSI-II, LAN, AUI |
| Additional interfaces: | SE Keyboard and Mouse Speaker Out Trigger I/O, Clock I/O |
| Optional interfaces: | none |
| Available slots: | none |
| Supported expanders: | none |
| Display resolution: | Color 1024x768 1280x1024 |
| Internal mass storage: | Optional External: 600 MB CD-ROM 2 GB DDS Tape 4-8 GB DDS w/ comp |
| O.S. (earliest supported): | HP-UX 9.05 |

VXI Characteristics

| | |
|------------------------------|------------------------------------|
| VXI device type: | Message-based Controller |
| Size: | C |
| Slots: | 1 |
| Connectors: | P1/2 |
| Shared memory: | n/a |
| VXI busses: | TTL Trigger Bus ECL Trigger Bus |
| C-size compatibility: | Yes |

Instrument Drivers

See the HP Website (http://www.hp.com/go/inst_drivers) for driver availability and downloading.

| | |
|---|-----|
| Command module firmware: | n/a |
| Command module firmware rev: | n/a |
| I-SCPI Win 3.1: | n/a |
| I-SCPI Series 700: | n/a |
| C-SCPI LynxOS: | n/a |
| C-SCPI Series 700: | n/a |
| HP VEE Drivers: | n/a |
| VXIplug&play Win Framework: | n/a |
| VXIplug&play Win95/NT Framework: | n/a |
| VXIplug&play HP-UX Framework: | Yes |

Module Current

| | I _{PM} | I _{DM} |
|---------|-----------------|-----------------|
| +5 V: | 10 | 0.1 |
| +12 V: | 0.25 | 0 |
| -12 V: | 0.08 | 0.6 |
| +24 V: | 0.04 | 0 |
| -24 V: | 0 | 0 |
| -5.2 V: | 0.56 | 0 |
| -2 V: | 0.48 | 0 |

Cooling/Slot

| | |
|------------------------------|-------|
| Watts/slot: | 59.00 |
| ΔP mm H₂O: | 0.30 |
| Air Flow liter/s: | 4.70 |

Ordering Information

| Description | Product No. |
|---|---------------|
| V743/64 VXI embedded controller module | HP E1497A |
| Delete converter cable set | HP E1497A 001 |
| Delete SICL media and manuals | HP E1497A 002 |
| 32 MB total RAM | HP E1497A ANC |
| 64 MB total RAM | HP E1497A ANE |
| 3 yr. retn. to HP to 1 yr. OnSite warr. | HP E1497A W01 |

Data Subject to Change
Copyright © June 1997
Hewlett Packard Co.
HP Publication No.: 5965-5509E