

# PDP-11 Qbus Replacement System

Real-Time PDP-11 Replacement

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### Introducing the NuPDP 2200

Now you can upgrade your real-time application with a modern, easy-to-maintain system that allows you to preserve your investment in hardware and software while improving performance and lowering operating costs.

The NuPDP 2200 consists of a brand new Qbus chassis containing the NuPDP 1200 engine that replaces your PDP-11 CPU, memory, and mass storage devices.

Your current PDP-11 disk images can be transferred onto a NuPDP system to run your existing operating system and applications without modification.

You can move up to six of your specialized Qbus controllers into the NuPDP system or replace them with our new re-designed controllers. We offer state-of-the-art Qbus controllers for DRQ3B, DRV11-J, DRV11-WA and IEQ11 interface requirements.

### Eliminate

- Obsolete disks and tapes
- High maintenance costs
- Aging, unreliable CPU and memory

### Preserve

- Existing PDP-11 system and application software
- Standard and custom Qbus I/O interfaces
- Cabinets and cables

### Embedded Standard I/O

**NEW!** 

Reduces power and space and replaces these old devices:

- RLV11, RLV12, QDA50, RQDX3, RQZX1, RXV11, RX21 drives
- TK50 / 70 tape drive
- DLV11 serial console port
- DLV11 serial terminal / printer port

### Increase Performance

- Up to 25 times faster than a PDP-11
- Significantly reduced boot time
- High performance disk and memory

### PDP-11 Compatibility

- Real-time applications supported
- Software compatible with existing applications
- Supports both RSX-11 and RT11 OS
- Qbus 18/22 bit compatible
- XXDP diagnostic compatible

### **Qbus Support**

- Supports all Qbus devices
- Follows all Qbus rules and specifications
- Both Qbus PIO and DMA data transfers are supported as well as all four Qbus interrupts
- Qbus PIO and DMA transfers occur at maximum Qbus speeds; throughput is limited only by the Qbus device(s)



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## **Specifications**

Physical		
Dimensions	Standard quad-width board, 26.7 cm by 21.3 cm. Requires 3 quadwidth Qbus slots to install.	
PDP-11 Compatibili	ty	
Processors Supported	PDP-11/23, PDP-11/53, PDP- 11/73, PDP-11/83, PDP-11/93	
PDP-11 Memory	4MB	
Hard Drive	Solid state, 57GB usable space for all virtual disks and tapes.	
Disks Emulated	RLV11, RLV12, QDA50, RQDX3, RQZX1, RXV11, RX21	
Tape Drives Emulated	TU58, TK25, TQK50, TQK70	
Ethernet		
DELQA	Reserved	
Manager (MGR)	Reserved for system management	
RS232 Serial Ports		
Speeds	110, 150, 300, 600, 1200, 2400, 4800, 9600 baud	
Console	Console port	
Terminal	User terminal/serial printer	
Miscellaneous		
USB	4 ports, reserved for system management	
VGA	Reserved for system management	
Battery	User replaceable, 3V lithium; Battery life 5 years	
Audio Alarm	Power-on self-test error beep codes	
Front Panel LEDs		
ACT - Green	Software activity (reserved)	
NET - Red	Network activity	
	Observation in the second	
QBA - Green ERR - Red	Qbus activity	

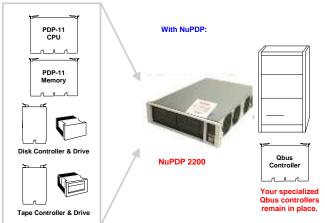
Power		
Power Supply	120VAC – 240VAC, 50/60 Hz	
+5V	35 amps	
+12V	5 amps	
-12V	5 amps	
Power Required by PI	DQ-1200 CPU	
+5.0 volts	2.8 amps	
+12 volts	Not required	
Qbus		
dc Loading	1 dc load	
ac Loading	1 ac load	
Drive Capability	19 additional dc loads	
Environment		
MTBF	80,000 hours	
Operating Conditions		
Temperature	10° to 50° C (50° to 120° F)	
Relative Humidity	20% to 80% non-condensing	
Storage Conditions		
Temperature	-40° to 60° C (-40° to 140° F)	
Relative Humidity	5% to 90% non-condensing	

Console Accessory Cables	
9-Pin Cable	18-inch DE9-S to DE9-P for DEC signal/connector compatibility
25-pin Cable	18-inch DE9-S to DB25-P for DEC connector compatibility

**Ordering Information** 

Part Number	Description
PDQ-2200-AA	Rack-mount NuVAX 2200 system with
	accessory cables and manual on CD
PLEASE NOTE: A spare system not offered.	

### Replace all of these:





**Open Backplane View** 

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