Xerox Engineering Systems.
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Ikon Model 10117 PCI-Bus Device Driver Release Notes.

Installation with Solaris 2.6.

This describes use of the 10117 card for XES applications.

Introduction.

Xerox wide format digital printers or plotters have a VPI port. The Sun
Ultra-10 accepts up to 4 interface cards on its PCI-bus. Ikon's 10117
Interface Card installs on the PCI-bus and drives the VPI port, using a
Software Driver modified by XES from Ikon's original.

When installation is complete plots can be created with a Unix command such
as

cat plot-file >/dev/lp0

The names lp0, lp1, etc have been chosen for the ports for compatibility
with
the ServeWare system.

Board Preparation.

The board is electrostatic sensitive. The board electronics should not be
touched unless both board and user are grounded.

Physical settings on the board.
The Versatec Differential Interface mode must be selected. The ribbon cable
must connect the sockets labelled I/O and V_DIFF. Normally as delivered by
Ikon the cable will connect the I/O and Centronics sockets, which is not
suitable for our application.
Jumper JP1 connects pins 1 and 2 as the board is supplied from the factory.
Pin 1 is the jumper pin closest to the top of the board, and to the serial
number stamped on it. This setting causes the 10117 to default to plot mode
on power up.
Connecting pins 2 and 3 instead sets the default to print mode. However, upon
installation the driver will read an overriding value from the lp.conf file,
so the JP1 setting is unimportant. However Ikon states that the jumper MUST
be installed, one way or the other.
Termination Resistor Network 4116 R 003 (220/330 ohms network) will normally
be present, socketted, on the board as it is supplied from the factory. This
is the correct termination for our application. The alternative Resistor
Network chip 4116 R 002, supplied separately, is not needed.

Install the board, or as many as are needed, in the lowest numbered free
PCI-bus slots in the chassis of the Ultra-10.

Driver Delivery.

The driver is deliverable on a floppy disk. Alternatively a copy of the floppy disk can be obtained from the XES Web site.

Driver Installation.

To install the driver you must logon as root, or execute the 'su root' command. The latter is preferable.
Insert the floppy disk in the drive in the Ultra-10. Perform the following commands:

```
volcheck
cd /floppy/floppy0
./setup
cd ~
eject floppy
```

If no error messages are produced by the scripts, there should finally be a list of devices of the form /dev/lp*, one device for each board you installed. Normally these will be numbered sequentially from lp0. However if a device number has been used for a related board type in the past, that number may be skipped.

If errors are reported, correct them and rerun the setup script.