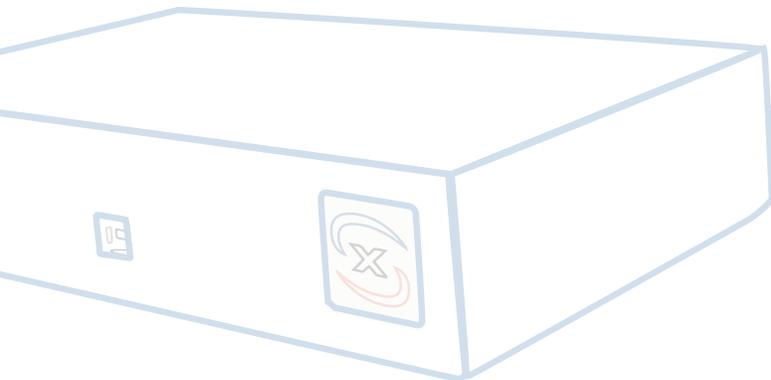# A NEW SOLUTION FOR SCSI CONNECTIVITY

## Executive Summary

Xitron's development of the USB-SCSI interface grants new life to thousands of expensive computer-to-plate devices being rendered obsolete because of outdated and unsupported technology. These devices image printing plates for the offset printing industry. They receive imaging data through Small Computer System Interface (SCSI) cards, which are no longer being manufactured or supported.

Xitron has solved this problem by routing the imaging data to the ubiquitous Universal Serial Bus, then communicating with the CTP device through a proprietary SCSI interface. The savings potential for each installation can be as high as $80,000 depending on the size of the current CTP device.

# SCSI **Background**

The Small Computer System Interface (SCSI) was originally developed as a set of standards for physically connecting and transferring data between computers and peripheral devices such as hard drives and scanners. It saw widespread acceptance from the mid 80's through the mid 90's. When the printing industry moved from proprietary systems to the open "desktop publishing" approach based on Macintosh and PC platforms, SCSI was often adopted as the connectivity choice for film imagesetters.

SCSI's popularity for output device connectivity continued through the early 2000's as prepress professionals moved to replace film imagesetters with computer-to-plate systems. Thousands of SCSI-based CTP devices were manufactured and sold up through 2010. However, PC and Macintosh platforms had begun to move toward the Universal Serial Bus for peripheral connectivity, beginning with Apple and its release of the iMac in 1998. As USB  standards solidified and transmission speeds increased, less emphasis was placed on development of SCSI-based interfaces.

"SCSI was often adopted as the connectivity choice for film imagesetters."

# Description of the **Problem**

There are several issues surrounding the future of SCSI cards used in conjunction with computer-to-plate devices. First, most of the card models chosen for use in the 2000-2007 time frame are no longer being manufactured and haven't been for some time. Second, modern computer platforms are increasingly devoid of PCI card slots due to enhanced mother board design and the proliferation of USB connectivity for peripherals. Third, since the cards are no longer being produced, the manufacturers are no longer providing driver support for modern operating systems.

The overall lack of availability and support puts many expensive CTP systems at risk with no upgrade path. As a practical example, consider a serviceable Creo or Heidelberg-branded Trendsetter with a Print Console configured on an XP operating system using an Adaptec 2944 card. Should the card fail, only used or refurbished cards are available for replacement. The XP operating system is no longer being updated or supported by Microsoft, which means it is a potential security risk. Should the platform fail, a new platform would require a PCI slot for the card, but the operating system may not recognize it because no drivers are available.

In short order, a well-built, productive, expensive piece of prepress hardware (the Trendsetter), has been rendered inoperable as a consequence. The owner is faced with the prospect of spending anywhere from $40,000 to over $100,000 to replace the CTP device when there is nothing wrong with it.

# The **Solution**

Xitron has developed a proprietary (patent pending) USB-SCSI interface that replaces the SCSI card. Housed in a separate enclosure, it connects to any current PC platform configured with a USB 3.0 slot. On one side of the enclosure is the USB connector. On the other side is a SCSI connector, to which any one of several standard SCSI cables can be attached. Once fitted with the appropriate cable, the interface can be attached to the CTP device.

All modern operating systems such as Windows 7, Windows 8.1, Server 2008r2, and Server 2012 are supported because the interface appears on the universal serial bus. Owners of older - yet serviceable - CTP devices can now upgrade their systems to current platform specifications instead of investing in new CTP devices, saving them thousands of dollars in capital investment.
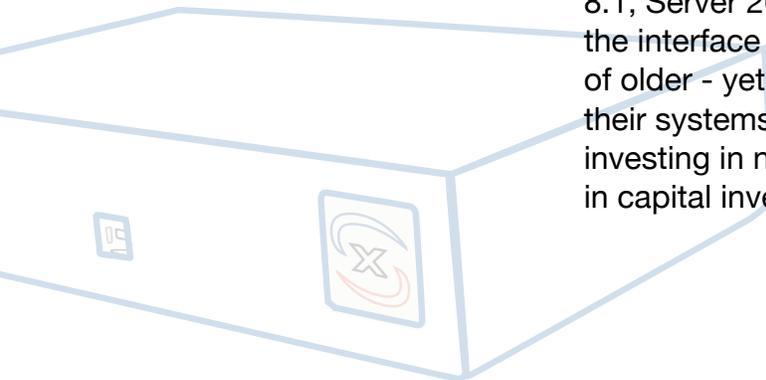
# Implementation

The USB-SCSI interface is not a SCSI card emulator. Therefore, it is not simply a replacement for existing cards. With device specific firmware and programming from Xitron, the interface is designed to work in conjunction with Xitron's Raster Blaster Tiff Catcher or Navigator RIP using "plug-in" modules. The first plug-in under development will drive the MPE series of Trendsetter CTP units originally distributed by Creo, Heidelberg, and Kodak. Models supported are the 3230, 3244, 400 Quantum, 4557, 5067, 5080, 5467, 5880 (S, F, and V), 800 Quantum, and Quantum VLF.

# Implementation

For customers who want to keep their existing workflow in place, Raster Blaster and the USB-SCSI interface are installed and the workflow is configured to send one-bit TIFF files to Raster Blaster. Customers who would like a new RIP to drive the Trendsetter have the option of deploying a Xitron Navigator RIP (which will connect directly to the Trendsetter through the USB-SCSI interface), or selecting a RIP/Workflow from their vendor of choice and (as with existing workflows) using a Raster Blaster for Trendsetter connectivity.

# Conclusion
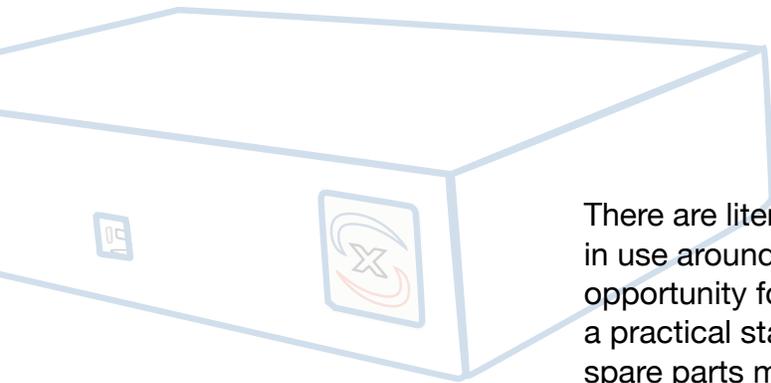
There are literally thousands of SCSI based CTP devices still in use around the world today. Each one of them represents an opportunity for upgrade to the Xitron USB-SCSI interface. From a practical standpoint, the age of the machine and availability of spare parts may influence the decision of the end user. However, from a vendor standpoint there is much to favor the Xitron approach.

Consider the fact that any time a new piece of equipment is proposed as a replacement for an obsolete unit, competition is invited into the mix. Once the competition is contacted, the entire account is at risk, meaning the possible loss of consumables revenue, on-going service revenue, and referrals. Upgrading a current customer with the USB-SCSI interface protects these revenue streams while saving the end user significant expense.

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