



## iSCSI Initiator for Mac OS® X

### Xtend SAN

ATTO's Xtend SAN enables Mac® users to remotely access iSCSI storage over an Ethernet network. Disk volumes show up on your desktop as if they were locally attached, even if your storage is located across the world.

#### Performance Engineered

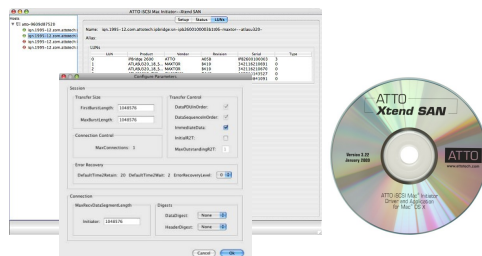
ATTO Technology's iSCSI Initiator for Mac OS X, Xtend SAN, allows Mac users to utilize and benefit from Internet SCSI (iSCSI), which is the fastest growing networking protocol. iSCSI allows users to take advantage of their existing Ethernet expertise and infrastructure while reaping the benefits of network attached storage, avoiding the cost and complexity associated with Fibre Channel. iSCSI is an important enabler for applications such as collaborative digital video/audio workflows, laptop connectivity to SANs, and remote backups.

#### Work where and when you want to

With iSCSI your workflow is not bound by location, allowing enhanced data protection by copying data to multiple remote sites to assist in disaster recovery efforts. Need to access daily video footage from New York even though your shoot is in Vancouver? Want to work from home when you don't feel like fighting traffic for the day? All of this can be done with the Mac you already own, Xtend SAN and iSCSI Ethernet connected storage. If you currently have storage, Xtend SAN, when used with an ATTO iPBridge™, adds iSCSI functionality to your direct attached storage extending its useful life.

#### Easy to Use

Mac users expect OS X compatible software to reflect the simplicity and elegance that OS X is renowned for. Xtend SAN is no exception, as management and configuration are simplified thanks to an intuitive graphical user interface (GUI), which also guides users through initial setup. An advanced CLI is also available to provide scripting capabilities which allow users to access the most frequently used features of the GUI.



#### Technical Highlights

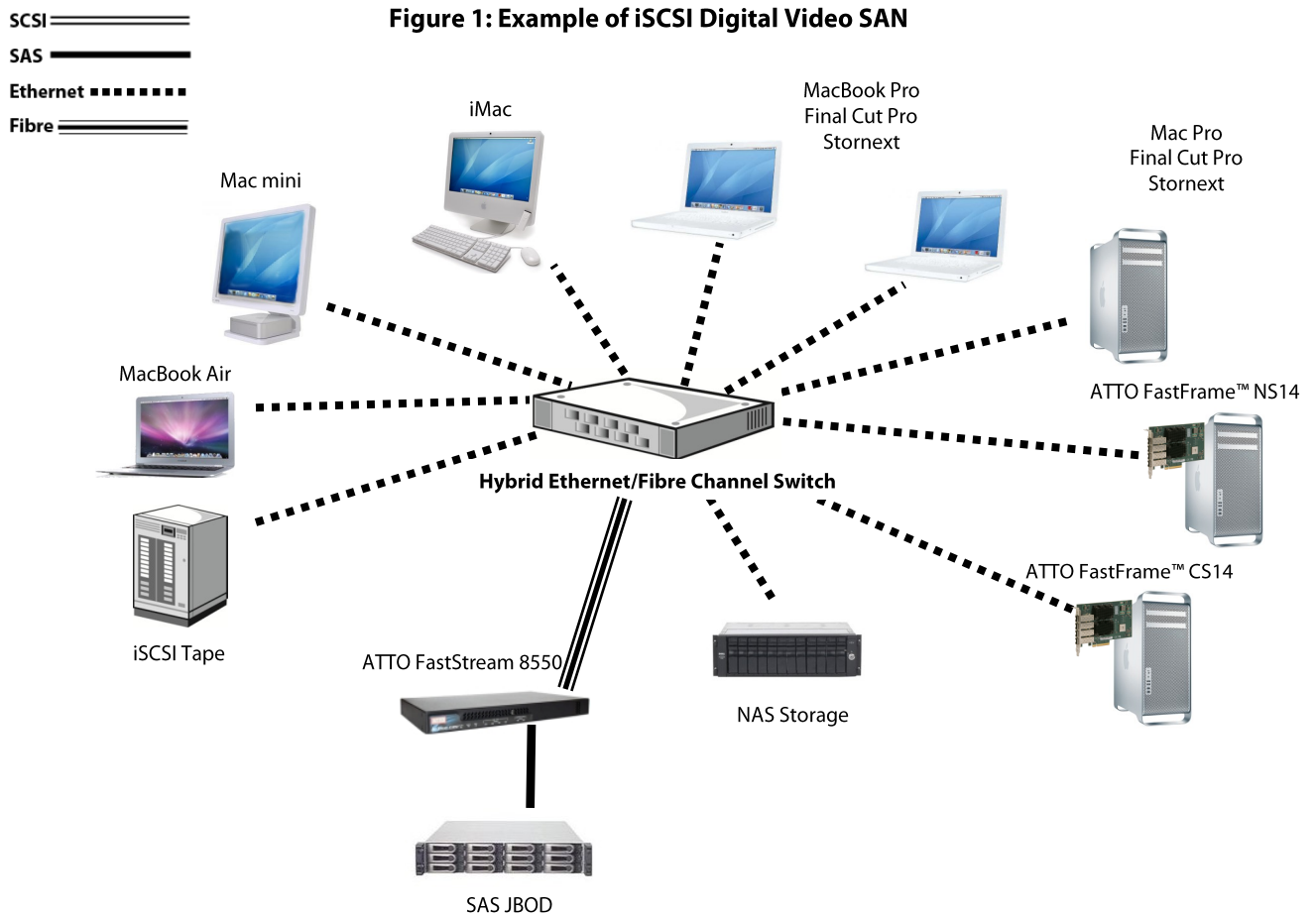
- High performance - capable of supporting multiple streams of audio and video
- Supports disk and tape targets
- Support for IPv4 and IPv6
- iSCSI error handling and recovery
- CHAP security support
- iSNS Client support
- Login Redirect functionality
- Header and data digest support with class 1 error recovery
- Easy-to-use intuitive GUI-based installation and management
- CLI interface for automation
- Compatible with 32 and 64 bit Mac OS® X 10.4.x and later
- Compatible with leading Ethernet switches, network interface cards and converged network adapters
- Compatible with leading ISV backup software solutions
- Compatible with market leading iSCSI storage products

## Technical Specifications

### Applications

#### An Example of an iSCSI Digital Video SAN (Figure 1)

In the illustration shown below, ATTO Xtend SAN is installed on MacBook Pros, MacBook Air, Mac mini, Mac Pros and iMacs. Xtend SAN allows Mac hosts to initiate I/O to an iSCSI target, such as an ATTO iPBridge or iSCSI-ready storage. In the example, two ATTO iPBridge™ 1550's are used to provide functionality to SCSI storage devices, such as autoloaders or disk arrays. The ATTO FastStream 8550 bridges SAS storage to the SAN and adds RAID functionality. The ATTO FastFrame is shown providing 10GbE connectivity to a Mac Pro. Mac users running Xtend SAN on their workstations are now able to communicate with iSCSI storage.



### Software Specifications

The ATTO Xtend SAN package for Mac OS X consists of an iSCSI device driver and a management interface:

- The iSCSI Device Driver is responsible for moving data from the storage stack over to the network stack, where it can be passed to and from the outside world using a standard Ethernet network.
- The management interface is designed to allow users the ability to configure specific protocol options and manage target devices through an easy-to-use graphical user interface