

X-Wall FX



USB/SATA Bridge Chip

Real-time Full Disk Encryption with AES 256-bit Strength Host Password Authentication

The **X-Wall\*** FX family is the 8th generation of the patented **X-Wall\*** real-time full disk encryption technology. **X-Wall\*** FX, the USB/SATA cryptographic bridge processor, is capable of conducting real-time full disk encryption over the connected SATA disk drives. It equips with tightly integrated USB 2.0 and SATA interface controller that allows the connection of SATA disk drives to a host USB 2.0 interface controller, making it a perfect fit for modern USB interfaced external storage enclosure. Additionally, the FX offers NIST and CSE certified real-time hardware AES security up to 256-bit encryption strength to safeguard the entire content of the SATA disk drive.

Enova Technology

Protect Your Data;

Safeguard Your Privacy™

# Authentication

The **X-Wall\*FX** is authenticated by a password entry from your personal computer keyboard. At initialization, you get to select your pass phrase and the FX writes both encrypted pass phrase and AES secret key to the connected SATA disk drive. The loading of all authentication software is completely transparent to all users to ensure that there are no user interruptions.

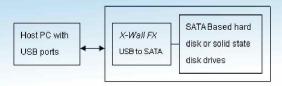




#### How does it work?

#### **USB Portable Drive**

The **X-Wall\* FX** real-time cryptographic processor along with its built-in password authentication software serve as a complete single chip solution for all USB 2.0 based external storage including SATA based disk drive and solid state disk.



Engineering design is simple and straight forward with the *X-Wall\* FX* as both standard USB 2.0 and SATA interface controllers are built-in to avoid design difficulties. Password based authentication software is also supported to allow fast to market. Without the enabling of the powerful real-time AES cryptographic capability, the FX simply serves as a standard USB 2.0 to SATA disk controller.

## **O**Key Benefits

- ✓ Enables USB portable drive design based on SATA and solid state disk drive
- ✓ Offers unprecedented 1.2Gbit/sec sustained hardware

  AES 256-bit cryptographic strength
- ✓ Real-time AES performance guarantees no performance degradation
- ✓ Password enabled AES operations
- ✓ Provides complete user friendly key management software

## Ordering Codes

Ordering Code (SKU)	AES Mode of Operation	Encryption Strength
X-Wall FX-128	ECB	128-bit
X-Wall FX-192	ECB	192-bit
X-Wall FX-256	ECB	256-bit
X-Wall FX-128C	CBC	128-bit
X-Wall FX-192C	CBC	192-bit
X-Wall FX-256C	CBC	256-bit

## O Features

- ✓ Complies with SATA 2.6 & USB2.0 specification
- ✓ Tightly integrated USB2.0 and SATA interface single chip controller
- ✓ Offers hardware real-time AES cryptographic capability
- ✓ to entire SATA disk drive up to 256-bit in both ECB and CBC modes
- ✓ Supports standard USB/SATA bridge function without AES cryptographic function
- ✓ Supports LBA 48-bit addressing
- ✓ Supports over than 2TB per X-Wall FX
- ✓ Low profile 64-pin QFP package

### System Requirement

- ✓ USB2.0 High Speed at 480Mbit/sec and Backward Compatible;
- ✓ Compatible With All SATA Disk Drives;
- ✓ Supports Windows Vista, XP, and Server 2003
- ✓ Supports Over Than 2TB Storage Tower
- ✓ Supports All Operating Systems Without Real-time Cryptographic

  AES Strength (Acting as a Standard USB/SATA Bridge Controller)
- ✓ Supports 64-bit Computing

Enova Technology, specializes in the design of advanced real-time cryptographic storage solutions. Enova's innovative encryption technology satisfies the needs of Corporations, Government Agencies, Consumers and security-conscious users worldwide who demand absolute privacy and confidentiality of stored data and network credentials.





Enova Technology Corporation

1st Floor, #11, Research & Development 2<sup>nd</sup> Road, Science

-based Industrial Park, Hsin-Chu City Taiwan 300, Republic of China

■ TEL: +886 (3) 577-2767 ■ FAX: +886 (3) 577-2770 ■ www.enovatech.com

Authorized Distributor:	