X-PHY®

Be Empowered Be Secured

FLEXON®

Flexxon Pte Ltd | www.flexxon.com

FLEXXON™

Flexxon designs, manufactures and markets Industrial NAND Flash Storage solutions and products, serving specifically the following verticals.

- **CYBERSECURITY**
- **INDUSTRIAL,**
- **MEDICAL &**
- **AUTOMOTIVE (CIMA)**

X-PHY®

We innovate and provide

Leading-edge world-first X-PHY total security system

enhanced with **Flexxon's** core expertise in NAND storage technology at silicon level.

Extensive Global Sales and Marketing Network

18 Local Distributors

30 Technical Sales Reps

2 Global Distributors

	Technical Sales Rep	Local Distributor
America	16	4
Europe	14	9
Asia		4
Pacific Region		1
	30	**18**

accenture Fell for LockBit

- ✓ Governance and Compliance
- ✓ Risk Management Policy
- ✓ Response Management
- ✓ Cyber Hygiene
- ✓ Security Architecture

Hacker Demanded
$50M RANSOM

Risk in Global Cyber Security Market

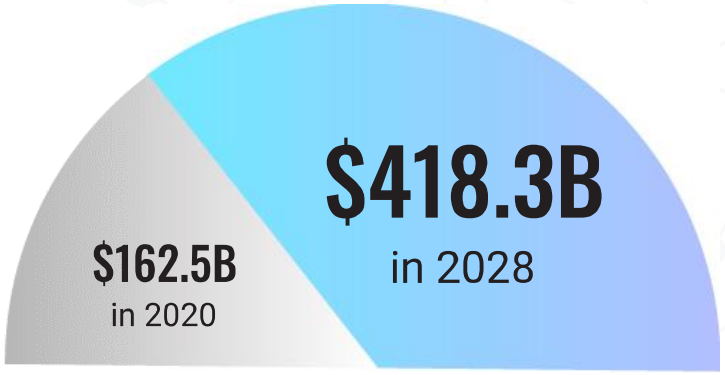
95% of the breaches are due to Human Error [1]

There is a new victim of ransomware **every 11 seconds!** [2]

Cost of cybercrimes [3]

- 2015 — **$3 trillion**
- 2025 — **$10.5 trillion**

Global Cybersecurity Market [4]



Award-winning Cybersecurity Solution

X-PHY® SSD Innovation

- World's first SSD with **embedded AI** for real-time protection against cyber-attacks
- X-PHY can stop unknown **cyber threats** that antivirus can't detect
- Recipient of the Cybersecurity Call **for Innovation 2019 by CSA** Singapore
- 4 Patents Filed, **3 Granted**

X-PHY® ∞ Lenovo Collaboration

World's First AI Cybersecurity Laptops

- Collaborative masterpiece of **award-winning X-PHY® SSD** and **Lenovo's world-class laptop solutions**
- **3 laptop series** cater to different usage preferences
- Exemplify **"Zero Trust"** security framework
- **24/7** Real-time protection to the data stored within the drive

In collaboration with Lenovo

ZEPTO SERIES

For those who demand the Best

ACE SERIES

All in one for discerning professionals

CYBERPAD SERIES

For those who always on the go

Awards and Recognition

2018/2019

Call for Innovation 2018/2019 by Cyber Security Agency (CSA) of Singapore

2020

The Cybersecurity Awards 2020

2021

Top 10 Women in Cybersecurity Awards

2021

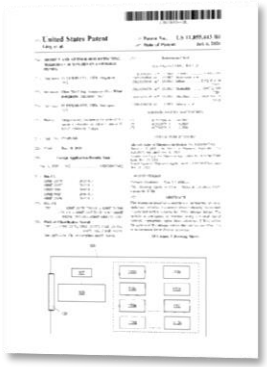
Black Unicorn Awards 2021

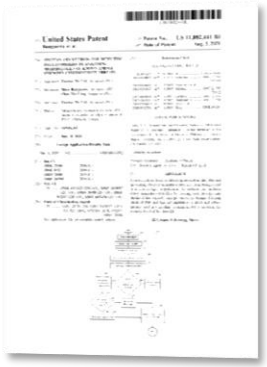
2021

Top 10 Women in Cybersecurity Awards

4 Patents Filed

3 Granted within 6 months





Where Are We?

X-PHY®

Last Line of Defense

Software Defenses

Operating System

FIREEYE

avast

AVG

Norton LifeLock

Machine Level

Ransomware

Cloud and Network Level

Hacking

Phishing

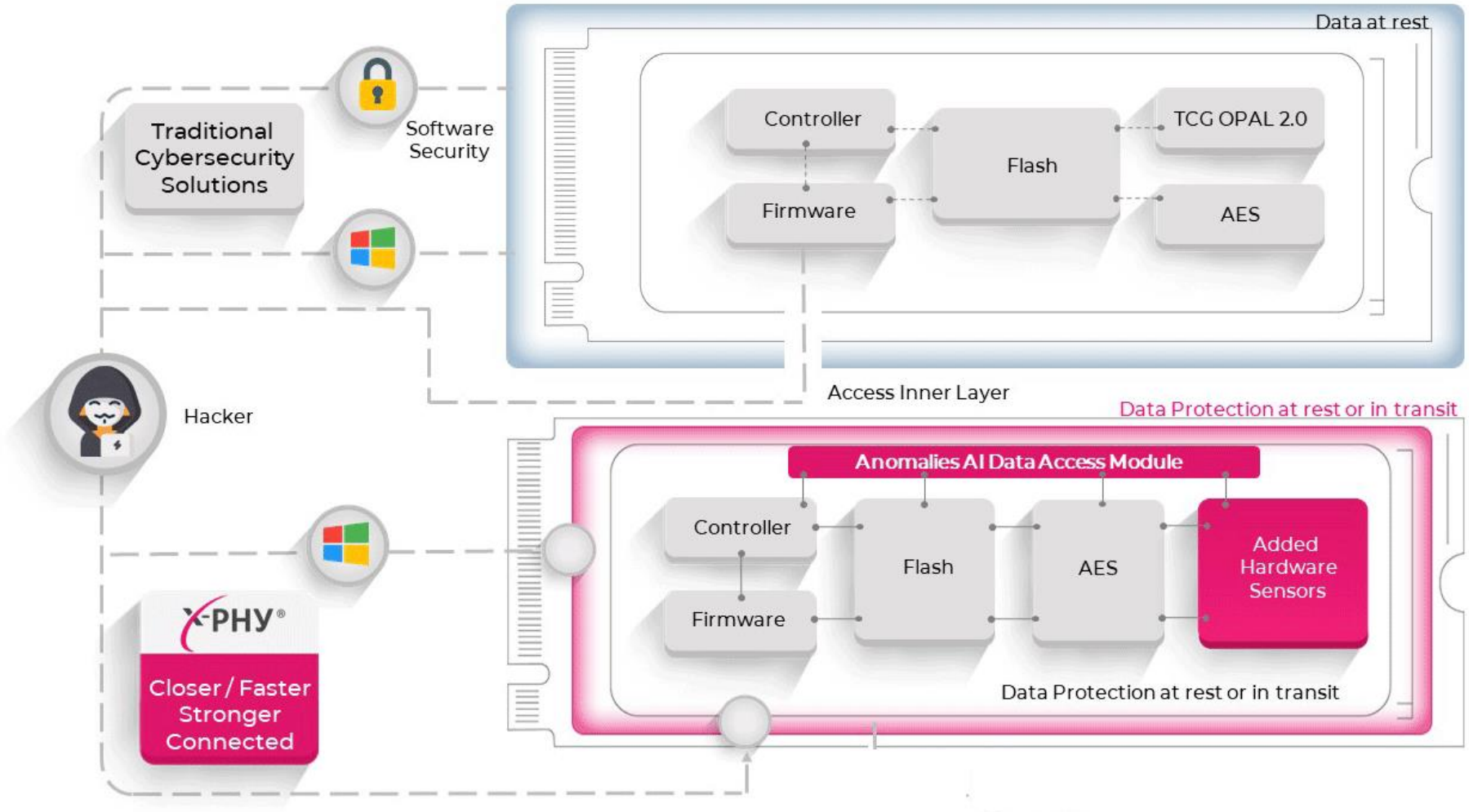
Data leakage

Insider Threat

X-PHY®

Physical Layer	Data Layer	Network Layer	Transport Layer	Session Layer	Presentation Layer	Application Layer

Traditional Solution vs. X-PHY SSD

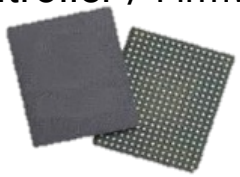


Software Based Protection vs X-PHY®

		X-PHY®	Software – Signature Based	Software – Behavioral Based
Detection approach	Method	**Data Access Pattern (Read / Write)**	Signature Library	Behavioral Patterns
	Perimeter	**Internal Protocol**	External Environment	
Human Intervention		**None**	High	Middle
Zero-day Protection Coverage		**100%**	Low (Known threats only)	Medium (Defined variable and threshold)
False Positive		**Low**	High	Medium
Physical Protection		**Yes**	No	No

Today’s Challenges – Storage Data Level

Controller / Firmware



Flash

inbound & outbound data stream

Data Objects

Hardware Sensors

Secure RTC

Unplug Sensor

Secure Authenticator

Power Management

Thermal Sensor

Current Sensor

Firmware

Controller

Bit Stream Engine

Pattern Engine

Dynamic Protection Engine

AI ONE Core System

File Analyser & Detector (Entropy)

AI Validation (Threshold)

Model Generator (Spectrum)

AI Search & Database

Flash

Flash

Flash

Flash

Bank Security Analogy with X-PHY SSD

Security on the Outside System Level

- Protects the exterior of the Bank
- Captures threats based on Updated Criminals Records Database

System Level

Criminals Records Database

Security on the Inside X-PHY SSD

- Safeguards based on access pattern regardless of the user
- Provides security closest to your most valuable property

Internal Storage

Security Vault

Last Line of Defense with X-PHY SSD

FASTEST REACTION TIME

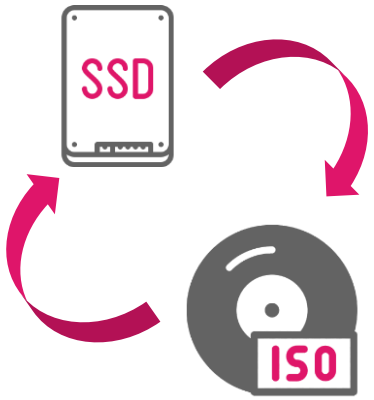
CONSTANT PROTECTION

ADDITIONAL LAYER OF PROTECTION

X-PHY implements the closest proximity security to user data and acts as your **last line of defense** when every other layer of security measure fails or gets compromised.

X-PHY Live Demo

Unknown Threats Detection



Unknown Ransomware

Data Cloning

Physical Protection

Motion Lock
Rapid Purge