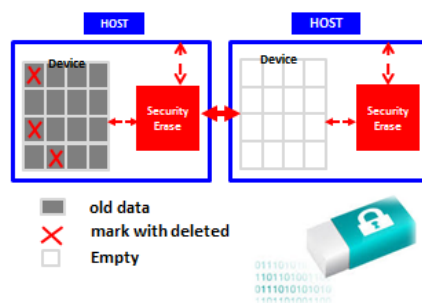


Industrial ATA Flash Module

Phison's AFM (ATA Flash Module) is a non-volatile, solid state data storage disk. Given the advantages of lower power consumption, greater ruggedness, higher MTBF and other attracting features, Solid State Drive (SSD) is gradually becoming a mainstream to replace a conventional Hard Disk Drive (HDD). Due to lack of any mechanical components, SSD provides a more robust and cost effective storage solution for any embedded application. Since AFM comes with a standard ATA interface which is fully compatible with traditional HDD, designers will find AFM as an easy solution for integration in PC-based systems.



Product Feature



- **Secure Erase**
- ⚙️ Secure Erase is a standard ATA CMD and will write all "0xFF" to fully wipe all the data on hard drives and SSDs.
- ⚙️ Phison have tool which can implement this function to erase its storage blocks and return to its factory default settings.



- **Reliable**
- ❑ High ECC bits to correct bit errors from flash memory.
- ❑ Over 3,500 power cycling test for data integrity as power loss.
- ❑ pSLC technology support.
- ❑ Self-Burn-In to screen out early bad blocks before shipment.

Main use	Common interfaces
Storage, Recording, Back up, Boot device, Database	Server, Industrial PC/machines, Military/Defense & Aero, Transportation System.

Specification

Solution	PS3016-P9	
Form Factor	40V	44H
Capacity	4G~128GB	
Compliance	Standard ATA/IDE Bus Interface	
Flash Memory	SLC/MLC/pSLC	
Performance*¹	Read: up to 80 MB/s Write: up to 90 MB/s	
Power Consumption*¹	Active mode: < 945 mW	
General Applications	Storage, Recording, Back up, Boot device, and Database in Server, Industrial PC/machines, Military/Defense & Aero, Transportation System, Telecommunication, and Digital Signage	
Operating Voltage	DC 3.3V and 5.0V	
Operating Temperature	0°C ~ 70°C (Silver) -40°C ~ 85°C (Diamond)	
Reliability*²	ATA serial specification, IEC, MIL-STD-810, ISTA 2 Series	
MTBF	More than 1,000,000 hours	
Quality	Products are tested with both operational and non-operational status to ensure the highest qualities.	

*¹ Performance and Power Consumption may differ according to flash type, flash configuration, and platform.

*² All reliability tests follow international standards

Features Support

○: Optional ◎: Default

Solution	1	2	3	4	5	6	7
PS3016-P9	◎	◎	◎	○	○	○	○

1. Error Correction Code (ECC)

2. Static/Dynamic Wear leveling

3. Bad Block Management

4. Secure Erase

5. Detect device info/ Health card tool

6. Write Protect

7. pSLC