

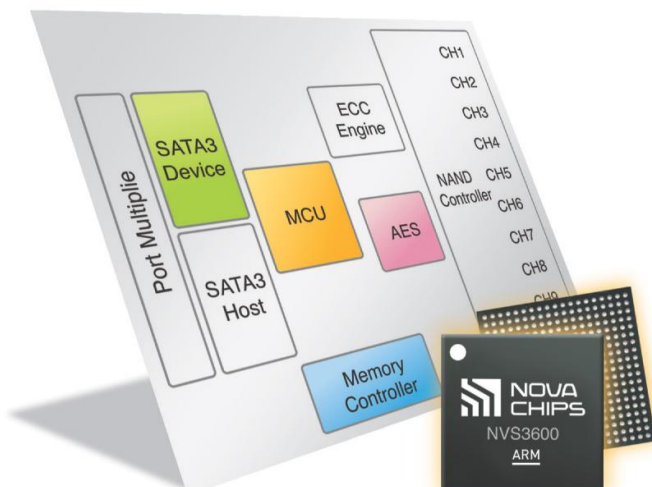
NOVA CHIPS

To be a World Leading SoC Company...



Technology Pioneer, Break Through in SoC Design

SATA 6Gbps SSD Controller



NVS3600 Overview

SSD Technology is one of the most spotlighted storage technologies today and yet due to its relative high price, its adaption rate is quite low. NVS3600 can overcome this chasm by combining the best of both worlds in a single chip design. NVS3600 itself is a top class SSD performer. At the same time, it integrates another SATA device through its 6Gbps SATA host port and utilizes its high performance SSD as a cache or OS drive. Now OEMs can take advantage of this unique feature to deliver the best price per performance solution to the customers.



NVS3600

Key Feature

Capacity

Up to 640GB

Interface

Native SATA 6Gbps

Compliant with SATA 3.0/ATA-8 ACS2

Trim / NCQ32 support

Port multiplier function

1 Device port and 1 host port

(FIS based switching)

NAND Support

Up to 10 channels 8 ways

2x/3x/4x/5xnm SLC/MLC

2KB/4KB/8KB page size

ONFI 2.x /Toggle 1.0 interface

Hybrid NAND support

(Up to 4 other kinds of NAND)

Reliability

Enhanced BCH ECC (Up to 64bits)

2-Dimension data randomization

Sudden power-off recovery

Read refresh by bit error monitoring

Dynamic and static wear-leveling

2-level bad block management

Power

3.3V IO supply, 1.8V DDR, 1.2V core

Peak power management for mobile application

High Speed Encrypt. Engine

AES 128bit / 256bit

ECB/CBC/CTR Mode

Full disk encryption (FDE)

SDRAM

mSDR, mDDR

1Gbit to 2Gbit

Operating Temperature

-40°C ~ 125°C

Package

508 CABGA, 17x17, 0.65 ball pitch

RoHS and Halogen free



“World Top Class SSD Performance”



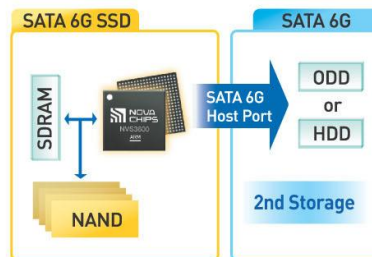
* CrystalDiskMark 3.0 / 128GB / Incompressible Data

NVS3600's architecture design has multi HW Accelerators and advanced firmware algorithm to boost the performance of SSD at its roof top speed. Supporting of high speed NAND and reconstructed SATA digital interface also adds to its performance booster, resulting 'Top Class' speed as shown above.

Special Features

Port Multiplier

NVS3600 can accommodate a second SATA device through its SATA host port



Hybrid NAND

Discover the benefit of NAND remix

- SLC like speed at MLC like price
- Synch like speed at Asynch like price
- Mixed vender NANDs for flexible sourcing



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