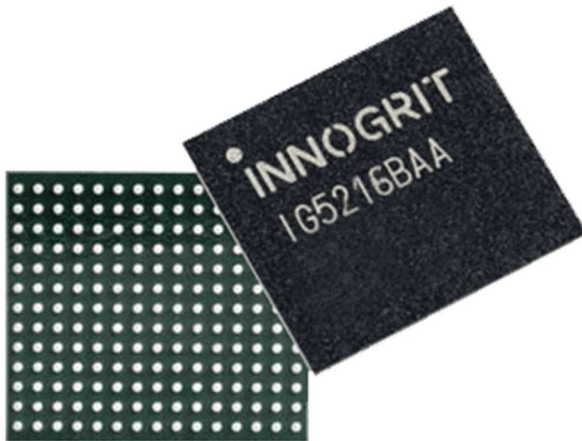


Shasta+(IG5216)



Shasta+ (IG5216) is a PCIe Gen3 x4, NVMe 1.4 SSD Controller with capacity up to 2TB. Featuring an enhanced DRAM-less architecture with full support of the HMB function, Shasta+ breaks the existing boundaries to get optimized performance and lower latency, and thus delivers industry-leading performance at low cost.

Shasta+ is designed to speed up SSD sequential transfer, and its advanced Intelligent Power Management Unit enables ultra-low power consumption in both active and idle modes. Shasta+ has four NAND channels, supporting SLC, MLC, TLC and QLC NAND flash with either ONFI 4.1 or Toggle 4.0 interface.

Additionally, Shasta+ supports advanced features including multiple data encryption and protection schemes, Smart Cache, integrated Power-On Reset (POR), multi-level power management, NAND boot partition, enhanced QLC performance, simplified PCB design, etc.

Shasta+ has flexible packaging support for BGA and M.2 SSD form factors. It targets a wide range of applications that require ultra-thin form factor, ultra-light weight, ultra-long battery lifespan, and excellent performance, such as: client computing, industrial control, IoT, server boot drives, external storage, embedded systems, etc.

FEATURES

Programmable RAID

NVM Open Channel

Proprietary 4K LDPC ECC

HMB Data Integrity Protection

ECC Protection for TCM/Cache/SRAM

AES 128/256, SM 2/3/4, SHA3-256

SPECIFICATIONS

INTERFACE	PCIe Gen3 x4	
PACKAGE	198-ball TFBGA	256-ball TFBGA
	(7mm x 11mm)	(10mm x 10mm)
MAX PERFORMANCE	Sequential Read: 3400 MB/s	Sequential Write: 3000 MB/s
	Random Read: 500K IOPs	Random Write: 350K IOPs
POWER CONSUMPTION	PEAK	1.35W
	PS3	50mW
	PS4	<1mW