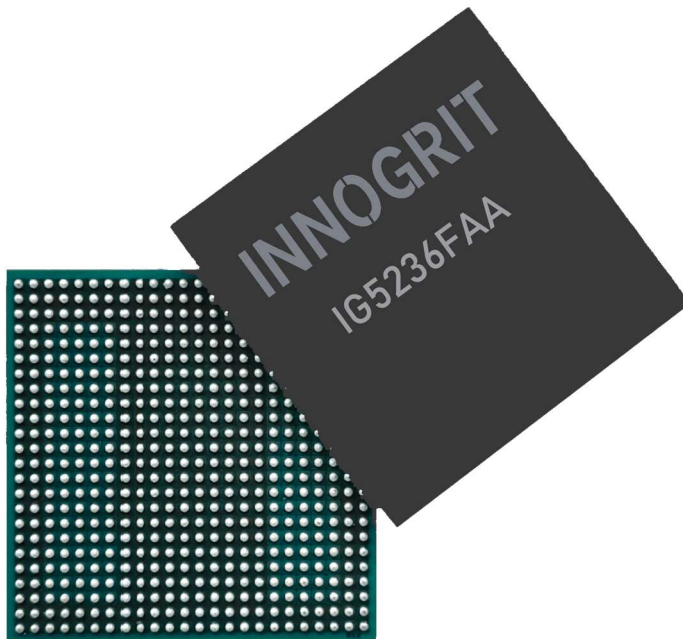


RainierPC (IG5236)



Rainier family includes two members targeting different applications: IG5236 for high-end client solutions, and IG5636 for data centers and enterprise applications.

Rainier IG5236, implemented in 12nm FinFET CMOS process, is an industry-leading PCIe Gen4 x4, NVMe 1.4 SSD controller with capacity size up to 8TB.

The IG5236 supports DDR SDRAM with (32+8)-bit or 32-bit wide data bus. It has eight NAND channels, supporting SLC, MLC, TLC and QLC NAND flash with either ONFI 4.1 or Toggle 2.0/3.0/4.0.

The IG5236 is built with the highest-level security with multiple data encryption and protection schemes including SM2/3/4 of SCA, AES, SHA, RSA, ECC, CRC, RAID, and end-to-end data protection.

Leveraging InnoGrit's proprietary ECC technology, data endurance and retention are largely enhanced to deliver better reliability and ultra-high performance for SSD solutions.

FEATURES

Proprietary 4K LDPC ECC	DDR3L/4, LPDDR3/4, up to 8GB
4 Namespaces	ECC Protection for TCM/Cache/SRAM/DDR
NAND Interface upto1200MT/s	SM 2/3/4, AES 128/256, SHA3-256, RSA1024/2048/3072/4096

SPECIFICATIONS

INTERFACE	PCIe Gen4 x4	
PACKAGE	575-ball FCBGA (15mm x 15mm)	528-ball FCCSP (14mm x 14mm)
MAX PERFORMANCE	Sequential Read: 7.4 GB/s Random Read: 1000K IOPs	Sequential Write: 6.4 GB/s Random Write: 800K IOPS
POWER CONSUMPTION	Peak PS3 PS4	3W 50mW < 2mW