⚡TDK

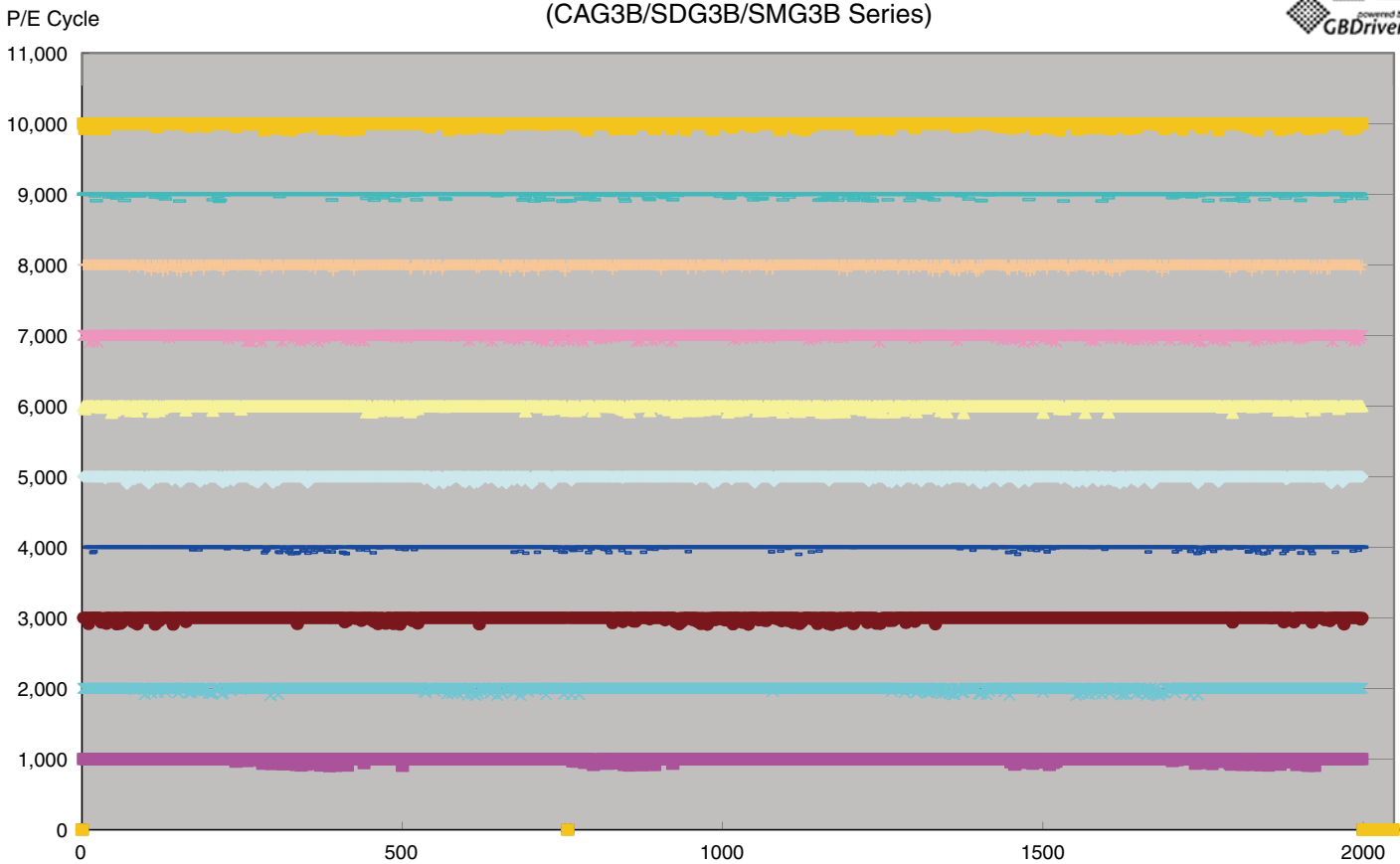# Testing GBDriver RS3 Global Static Wear Levelling Effectiveness

RELATED PRODUCTS	GBDRIVER RS3 (SATA SSD Controller)
	CAG3B Series (1.0" SATA 3Gbps CFastTM SSD), SDG3B Series (2.5" SATA 3Gbps SSD)
	SMG3B Series (SATA 3Gbps mSATA Flash Module)

TESTED DATE	2011/12/1 16:00 ～ 2012/1/24 11:30

TESTED BY	TDK Corp, Flash Memory Applied Business, ESS BU [K. TAKUBO]

TEST PROCEDURE	(1) Loaded DOS in [16] Gbit Flash to occupy [90%] of all memory blocks.
	(2) Executed repeated data writes to the REST [10%] blocks; data size:[128KByte].
	(3) Logged S.M.A.R.T. data peridically.

SAMPLES

[5] Samples [NAND: ☑] CONTROLLER: TDK GBDRIVER RS3   ☑]
(WEEKLY   (WEEKLY CODE: 1011W3BHH)

[5] Samples [NAND: ☑] CONTROLLER: TDK GBDRIVER RS3   ☑]
(WEEKLY   (WEEKLY CODE: 1030LU602)

[   ] Samples [NAND: ☐] CONTROLLER: ☐]
(WEEKLY CODE: (WEEKLY CODE:)

RESULTS — PASS / ~~FAIL~~

Erased Times	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
Minimum	963	1,984	3,107	3,995	4,882	5,882	6,886	7,927	8,997	9,887
Maximum	1,028	2,131	3,275	4,067	5,115	5,993	7,070	8,183	9,157	10,032
%	6.50%	7.35%	5.60%	1.80%	4.66%	1.85%	2.63%	3.20%	1.78%	1.45%
	ⓄKNG[/]	ⓄKNG[/]	ⓄKNG[/]	ⓄKNG[/]	ⓄKNG[/]	ⓄKNG[/]	ⓄKNG[/]	ⓄKNG[/]	ⓄKNG[/]	ⓄKNG[/]

TDK "Smart Swap" Global Static Wear Levelling
(CAG3B/SDG3B/SMG3B Series)

GBDriver powered by

P/E Cycle

Block No; Total [2048] Blocks of 16Gbit 8KB/Page SLC Flash Memory

TESTED & REPORTED：	DATE：2011.2.1
[ASIC Design Section/FW Team]	Kenichi TAKUBO

APPROVED & SUBMITTED：	DATE：2011.2.2
[FAE Section]	Rikiya KAWATA

For Reference | WITHOUT RS3 Global Static Wear Levelling

WITHOUT Global Static Wear Levelling（**WITHOUT** TDK SMART SWAP）

Block No; Total [2048] Blocks of 16Gbit 8KB/Page SLC Flash Memory

RESULTS	PASS / FAIL									
Erased Times	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
Minimum	1	1	1	1	1	1	1	1	1	1
Maximum	1,000	1,999	2,999	3,999	5,000	5,999	7,000	7,999	9,000	10,500
%	99.90%	99.90%	99.93%	99.95%	99.98%	99.97%	99.99%	99.98%	99.99%	104.99%
	OK/NG[/]	OK/NG[/]	OK/NG[/]	OK/NG[/]	OK/NG[/]	OK/NG[/]	OK/NG[/]	OK/NG[/]	OK/NG[/]	OK/NG[/]