
	Document # DC-00004-DOC	Revision B	Revision Date Jun 3, 2011
Title: SSD Product Part Number Decoders		Author: James Rau	
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1. ZeusIOPS Solid State Drive Decoder

1	2	3	4	5	6	-	7	8	9	10	11	-	12	-	13
Z16	I	(I)	(D-F)	(FF)	(G)	-	xxx	/5xx	(C)	C	(X)	-	XXX	-	X

KEY

1	ZEUS PRODUCT FAMILY	
	Z16	16 Channels
2	IOPS	
	I	IOPS SSD
3	INTERFACE (I)	
	Z	SAS (Serial-Attached SCSI)
	F	FC (Fibre Channel)
4	INTERFACE BANDWIDTH (D-F)	
	D	3.0Gb
	E	4.0Gb
	F	6.0Gb
5	FORM FACTOR (FF)	
	1	1.8-inch
	2	2.5-inch
	3	3.5-inch
6	GENERATION (G)	
	A	1 st Generation
	B	2 nd Generation
	C	2 nd Generation w/Modification
	D	3 rd Generation
	E	4 th Generation
7	CAPACITY (xxx)	
	xxx	Gigabytes/Terabytes

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8	BLOCK SIZE (/5xx)	
	Blank	Default Byte Blocks/Sector
	/5xx	xx = 512, 520, 524, 528 or equivalent 5xx Byte Blocks/Sector
9	COMPLIANCE (C)	
	U	RoHS Compliant (Pb-free)
	G	Halogen Free, Pb-Free
10	TEMPERATURE RATING	
	C	Commercial: 0°C-60°C
11	NAND FLASH TYPE (X)	
	Blank	5x Samsung SLC
	M	5x Samsung MLC
	O	3x Samsung SLC
	P	3x Samsung MLC
	T	4x Toshiba SLC
	U	3x Toshiba SLC
	V	3x Toshiba MLC
	H	4x Hynix MLC
12	CUSTOMER SPECIFIC (XXX)	
	XXX	Internal use only.
13	OPTIONAL PRODUCT VARIATION (X)	
	X	Minor product variation.

1.1 Notes

1.1.1 Field 12 – Customer Specific Options


OPTION	DESCRIPTION	NOTES
Three characters (XXX)	Customer identifier.	

1.1.2 Field 13 – Optional Product Variations

OPTION	DESCRIPTION	NOTES
One character (-X)	Minor product variation.	

1.2 Additional Notes

- Field 12, Customer Specific Options, is an optional field and may or may not appear on the product label or in the decoder found in the product manual.
- Field 13, Optional Product Variations, is an optional field and may or may not appear on the product label or in the decoder found in the product manual.


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2. MACHx Solid State Drive Decoder

1	2	3	4	5	-	6	7	8	9	-	10	-	11
Mxx	(C/I/P)	(I)	(IB)	(FF)	-	xxx	(C)	(T)	(X)	-	XXX	-	X

KEY

1	MACH PRODUCT FAMILY	
	M8	MACH8 Solid State Drive (8 Channels)
	M16	MACH16 Solid State Drive (16 Channels)
2	STANDARD, IOPS, EMBEDDED OR CAPLESS	
	Blank	Non-IOPS, Standard SSD
	C	IOPS SSD (no hold-up or super capacitors; "CAPLESS")
	I	IOPS SSD
	P	Embedded Performance SSD; industrial temperature without cache protection.
3	INTERFACE (I)	
	S	SATA (Serial ATA)
	A	ATA (Parallel ATA)
4	INTERFACE BANDWIDTH (IB)	
	A	1.0Gb
	B	1.5Gb
	D	3.0Gb
5	FORM FACTOR (FF)	
	1	1.8-inch
	2	2.5-inch; 9.5mm case z-height
	27	2.5-inch; 7mm case z-height (Low Profile)
	2S	2.5-inch, Slim Lite SFF
6	CAPACITY (XXX)	
	xxx	Capacity (gigabytes/terabytes)
7	COMPLIANCE (C)	
	U	RoHS Compliant (Pb-free)
	G	Halogen Free, Pb-free

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8	TEMPERATURE RATING (T)	
	C	Commercial: 0°C-60°C
	I	Industrial: -40°C-85°C
9	NAND FLASH TYPE (X)	
	Blank	M8: Samsung, SLC, 5xnm, Async (Asynchronous); M16: SLC, Type Unspecified
	M	M8: Samsung, MLC, 5xnm, Async (Asynchronous); M16: MLC, Type Unspecified
	O	Samsung, SLC, 3xnm, Toggle (Toggle Mode)
	P	Samsung, MLC, 3xnm, Toggle (Toggle Mode)
	T	Toshiba, SLC, 4xnm, Async (Asynchronous)
	U	Toshiba, SLC, 3xnm, Toggle (Toggle Mode)
	V	Toshiba, MLC, 3xnm, Toggle (Toggle Mode)
10	CUSTOMER SPECIFIC (XXX)	
	XXX	Internal use only.
11	OPTIONAL PRODUCT VARIATION (X)	
	X	Minor product variation.

2.1 Notes

2.1.1 Field 10 – Customer Specific Options


OPTION	DESCRIPTION	NOTES
Three characters (XXX)	Customer identifier.	

2.1.2 Field 11 – Optional Product Variations

OPTION	DESCRIPTION	NOTES
One character (-X)	Minor product variation.	

2.2 Additional Notes

- MACH8 “P” or Embedded SSDs are considered GEN2 (2nd Generation) “Suntory” products. The product manuals start at “2.x” (-20x), rather than “1.x” (-10x)
- MACH16 products are considered GEN3 (3rd Generation) products. The product manuals start at “3.x” (-30x), rather than “2.x” (-20x) or “1.x” (-10x).
- Field 10, Customer Specific Options, is an optional field and may or may not appear on the product label or in the decoder found in the product manual.
- Field 11, Optional Product Variations, is an optional field and may or may not appear on the product label or in the decoder found in the product manual.


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3. Kronos PCIe Solid State Drive Decoder

1	2	3	4	5	6	-	7	8	9	10	-	11	-	12
(K/KT)	I	(0x)	(A/B)	(FF)	(G)	-	xxx	(C)	(T)	(X)	-	XXX	-	X

KEY

1	KRONOS PRODUCT FAMILY	
	K	Kronos PCIe
	KT	Kronos Turbo PCIe
	KB	Kronos Bi-Turbo PCIe
2	IOPS	
	I	IOPS SSD
3	BUS WIDTH	
	04	PCIe x4 Lane
	08	PCIe x8 Lane
	16	PCIe x16 Lane
	32	PCIe x32 Lane
4	INTERFACE BANDWIDTH	
	A	5.0Gb/second per lane
	B	8.0Gb/second per lane
5	FORM FACTOR (FF)	
	01	Full Length, Full Height
	02	Full Length, Half Height
	03	Half Length, Full Height
	04	Half Length, Half Height
6	GENERATION (G)	
	A	1 st Generation
	B	2 nd Generation
	C	2 nd Generation w/Modification
	D	3 rd Generation
	E	4 th Generation

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7	CAPACITY (XXX)	
	xxx	Gigabytes/Terabytes
8	COMPLIANCE (C)	
	U	RoHS Compliant (Pb-free)
	G	Halogen Free, Pb-Free
9	TEMPERATURE RATING (T)	
	C	Commercial: 0°C-60°C
	I	Industrial: -40°C-85°C
10	NAND FLASH TYPE (X)	
	O	3x Samsung SLC
	P	3x Samsung MLC
	U	3x Toshiba SLC
	V	3x Toshiba MLC
11	CUSTOMER SPECIFIC (XXX)	
	XXX	Internal use only.
12	OPTIONAL PRODUCT VARIATION (X)	
	X	Minor product variation.

3.1 Notes

3.1.1 Field 11 – Customer Specific Options


OPTION	DESCRIPTION	NOTES
Three characters (XXX)	Customer identifier	

3.1.2 Field 12 – Optional Product Variations

OPTION	DESCRIPTION	NOTES
One character (-X)	Minor product variation.	

3.2 Additional Notes

1. SEP (SUMO Evaluation Platform) SSDs are considered GEN1 (1st Generation) devices.
2. Field 11, Customer Specific Options, is an optional field and may or may not appear on the product label or in the decoder found in the product manual.
3. Field 12, Optional Product Variations, is an optional field and may or may not appear on the product label or in the decoder found in the product manual.


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4. ZeusRAM Solid State Drive Decoder

1	2	3	4	5	6	-	7	8	9	-	10	-	11
Z4	R	Z	F	(FF)	D	-	xx	(C)	(T)	-	XXX	-	X

KEY

1	ZEUSRAM PRODUCT FAMILY	
	Z4	ZeusRAM
2	RAM DRIVE	
	R	RAM Drive, High-IOPs, Low-Latency
3	INTERFACE	
	Z	SAS (Serial-Attached SCSI)
4	INTERFACE BANDWIDTH	
	F	6.0Gb
5	FORM FACTOR (FF)	
	2	2.5-inch; 15mm Case Z-Height
	3	3.5-inch; 20mm Case Z-Height
6	GENERATION (G)	
	D	3 rd Generation (GEN3)
	E	4 th Generation (GEN4)
7	CAPACITY (XX)	
	xx	Gigabytes
8	COMPLIANCE (C)	
	U	RoHS Compliant (Pb-free)
	G	Halogen Free, Pb-Free
9	TEMPERATURE RATING (T)	
	C	Commercial: 0°C-60°C
	I	Industrial: -40°C-85°C
10	CUSTOMER SPECIFIC (XXX)	
	XXX	Internal use only.

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11	OPTIONAL PRODUCT VARIATION (X)	
X	Minor product variation.	

4.1 Notes

4.1.1 Field 10 – Customer Specific Options

OPTION	DESCRIPTION	NOTES
Three characters (XXX)	Customer identifier	

4.1.2 Field 11 – Optional Product Variations

OPTION	DESCRIPTION	NOTES
One character (-X)	Minor product variation.	

4.2 Additional Notes

- Field 10, Customer Specific Options, is an optional field and may or may not appear on the product label or in the decoder found in the product manual.
- Field 11, Optional Product Variations, is an optional field and may or may not appear on the product label or in the decoder found in the product manual.

5. Product Design Notes

5.1 Temperature Rating (T)

- SSDs that implement a power backup circuit (usually an “IOPS” design) with super capacitors have an **operating commercial temperature** range of **-0°C to 60°C** (32°F-140°F), with an **industrial operating temperature** range of “N/A” or “Not Applicable” as notated throughout the product manuals. The **non-operating** commercial temperature range is **25°C to 85°C** (-13°F-185°F).
- TBD
- TBD