

New Software Version 1.03

For FFD 2.5" Serial ATA

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Guy Freikorn (guy.freikorn@m-systems.com)

Description

A new software version 1.03 has been released for the FFD 2.5" Serial ATA, which replaces the current software version 1.02. The new software version supports higher-density flash components.

CHS parameters

The FFD 2.5" Serial ATA CHS parameters have been changed, as described in the table below.

Density (MB)	LBA		Cylinders		Heads		Sectors	
	1.02	1.03	1.02	1.03	1.02	1.03	1.02	1.03
1024	1980498	1982464	1966	1966	16	16	63	63
2048	3993764	3995648	3963	3963	16	16	63	63
4096	8020296	7991296	7958	7927	16	16	63	63
8192	16073359	16044032	15947	15916	16	16	63	63
12288	24126423	24096768	16383	16383	16	16	63	63
16384	32179487	32149504	16383	16383	16	16	63	63
24576	48285614	48254976	16383	16383	16	16	63	63
32768	64391741	64360448	16383	16383	16	16	63	63
40960	80497869	80465920	16383	16383	16	16	63	63
49152	96603996	96571392	16383	16383	16	16	63	63
57344	112710124	112680960	16383	16383	16	16	63	63
65536	128816251	128786432	16383	16383	16	16	63	63
73728	144922378	144891904	16383	16383	16	16	63	63
81920	161028506	160997376	16383	16383	16	16	63	63
90112	177134633	177102848	16383	16383	16	16	63	63
98304	193240760	193208320	16383	16383	16	16	63	63
106496	209346888	209317888	16383	16383	16	16	63	63
114688	225453015	225423360	16383	16383	16	16	63	63
122880	241559142	241528832	16383	16383	16	16	63	63
131072	257665270	257634304	16383	16383	16	16	63	63

Power Consumption

The FFD 2.5” Serial ATA power consumption has been improved, as described in the table below.

Unformatted Disk Density	Idle Mode		Read/Write Mode	
	GB	mA	Watts	mA
1 - 8	350	1.8	435	2.2
16	364	1.8	457	2.3
64	401	2.0	527	2.6
128	437	2.2	570	2.9

Physical Characteristics

Higher densities can be fit in each case height, due to the support of higher-density flash components.

The FFD 2.5” Serial ATA physical characteristics have been updated, as described in the table below.

	Inches	Millimeters	Max. Density	Max. Unit Weight (kg)
H:				
A	0.374	9.5	1GB to 8GB, 16GB	0.10
B	0.571	14.5	12GB, 24GB to 64GB	0.14
C	0.728	18.5	72GB to 112GB	0.18
D	0.886	22.5	120GB, 128GB	0.22
W:	2.75	69.85	-	-
L:	3.945	100.2	-	-

Please note that case “F” (30.5mm) will no longer be offered.

Mean Time Between Failures (MTBF)

The FFD 2.5” Serial ATA Mean Time Between Failures (MTBF) has been improved, as described in the table below.

Density	MTBF (Hours)	FIT (Failure Rate per Million Hours)
1GB – 8GB, 16GB	1,180,777	0.8469
32GB	1,000,600	0.9993
48GB	825,150	1.2119
64GB	613,986	1.6287
80GB	561,419	1.7812
128GB	390,167	2.563

Ordering Information

The following ordering information has been modified:

Product	Density (GB)	Ordering Information
FFD 2.5" Serial ATA	1, 2, 4, 8, 16	FFD-25-SATA-CCC-T-A-P
	12, 24, 32, 40, 48, 56, 64	FFD-25-SATA-CCC-T-B-P
	72, 80, 88, 96, 104, 112	FFD-25-SATA-CCC-T-C-P
	120, 128	FFD-25-SATA-CCC-T-D-P

The product ordering information indicates:

CCC: Disk density	A, B, C, D: Case height (in mm)
T: Operating temperature range	A: 9.5
Blank: Commercial: 0°C to +70°C	B: 14.5
N: Enhanced: -25°C to +75°C	C: 18.5
X: Extended: -40°C to +85°C	D: 22.5
P: RoHS compatibility	
Blank: Non-ROHS version	
P: RoHS-complaint version	

Reason for Change

Using higher-density flash components enables doubling the disk density in the same case height. In addition, as higher-density flash components become more commonly available, lower density flash components are being phased out of the market, and are subject to lower availability.

Availability

The FFD 2.5" Serial ATA will be shipped with software version 1.03 from March 2006. Customers that prefer to keep the previous software version 1.02 for new ordered units must notify M-Systems. Special ordering information will be provided to indicate that the FFD 2.5" Serial ATA has been shipped with the requested older software version.

How to Contact Us

Please contact your M-Systems representative or visit the FFD web page on the M-Systems website (www.m-systems.com) for any further information or assistance.

Guy Freikorn (guy.freikorn@m-systems.com)
 Rugged Product Manager
 Embedded Division