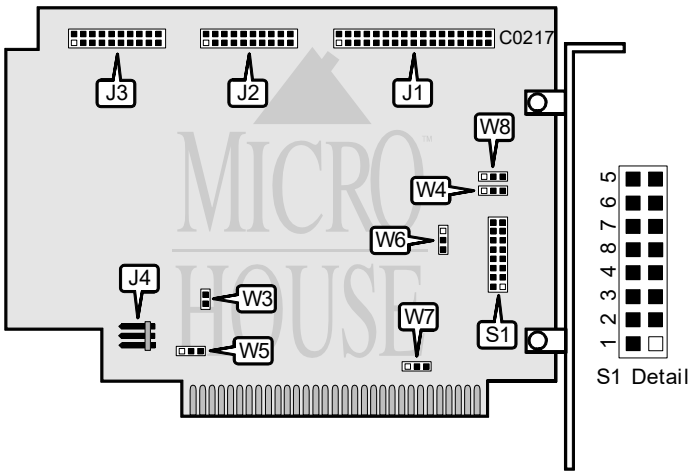# WESTERN DIGITAL CORPORATION
WD1002A-WX1
Replaced by the WD1004A-WX1

Q3/92

Data bus: 8-bit, PC/XT
Size: Full-length, full-height card
Hard drives supported: Two MFM ST506/412 drives
Floppy drives supported: None
Maximum heads/cyl.:   16 heads and 1024 cylinders

CONNECTIONS	
Function	Location
34-pin control cable connector-hard drive	J1
20-pin data cable connector-drive 0	J2
20-pin data cable connector-drive 1	J3
5-pin connector-DC power	J4

Continued on next page . . .

WESTERN DIGITAL CORPORATION
WD1002A-WX1
Replaced by the WD1004A-WX1

USER CONFIGURABLE SETTINGS		
Function	Location	Setting
í BIOS enabled	W3	closed
BIOS disabled	W3	open
í I/O port address 320h	W4	pins 2 & 3 closed
I/O port address 324h	W4	pins 1 & 2 closed
í BIOS ROM size 32K or 64K (hard-wired)	W5	pins 1 & 2 closed
BIOS ROM size 16K	W5	pins 2 & 3 closed
í 8 head hard drive with RWC supported	W6	pins 2 & 3 closed
16 head hard drive supported (head select 3)	W6	pins 1 & 2 closed
xí Hard Drive Interrupt is IRQ5 (hard-wired)	W7	pins 1 & 2 closed
Hard Drive Interrupt is IRQ2	W7	pins 2 & 3 closed
í Single controller setting, primary controller	W8	pins 2 & 3 closed
Dual controller setting, secondary controller	W8	pins 1 & 2 closed
í Not used	S1/jumper 5	open
í Not used	S1/jumper 6	open
í *Hard Drive Interrupt is IRQ5	S1/jumper 7	open
*Hard Drive Interrupt is IRQ2	S1/jumper 7	closed
*XT mode enabled	S1/jumper 8	open
*AT mode enabled	S1/jumper 8	closed
Note: * This controller can be purchased with several different BIOS revisions. These jumpers are not applicable when used with some BIOS revisions.		

BIOS REVISION "SUPER BIOS" DRIVE TYPE TABLE								
	Drive 0		Drive 1					
#	S1/1	S1/2	S1/3	S1/4	Cap.	Hds	Cyls.	WP	RWC
0	closed	closed	closed	closed	21MB	4	612	450	450
1	open	closed	open	closed	10MB	4	306	0	153
2	closed	open	closed	open	10MB	2	615	450	450
3	open	open	open	open	21MB	4	615	450	450

WESTERN DIGITAL CORPORATION
WD1002A-WX1
Replaced by the WD1004A-WX1

BIOS REVISION "G" DRIVE TYPE TABLE								
#	Drive 0		Drive 1					
#	S1/1	S1/2	S1/3	S1/4	Cap.	Hds.	Cyl.	WP	RWC
0	closed	closed	closed	closed	20MB	4	612	none	none
1	open	closed	open	closed	10MB	2	612	128	128
2	closed	open	closed	open	20MB	4	612	128	none
3	open	open	open	open	10MB	4	306	0	none

BIOS REVISION "H" DRIVE TYPE TABLE - S1 Jumpers 3, 4, & 8 configure Drive 0 Jumpers 1, 2 & 7 configure Drive 1							
#	S1/1 & 3	S1/2 & 4	S1/7 & 8	Cap.	Hds	Cyl.	WP	RWC
0	closed	closed	closed	42MB	5	977	none	none
1	open	closed	closed	31MB	5	733	300	none
2	closed	open	closed	33MB	6	640	none	none
3	open	open	closed	62MB	8	1024	1024	1024
4	closed	closed	open	42MB	6	820	none	none
5	open	closed	open	10MB	2	612	128	128
6	closed	open	open	20MB	4	612	128	none
7	open	open	open	10MB	4	306	0	none

MISCELLANEOUS TECHNICAL NOTES
The Super BIOS revision includes the following features not found in other revisions: ability to format bad tracks, dual controller operation, automatic configuration, virtual drive operation, and PC/AT compatibility. This controller has a built-in low-level format program. To enter the program run the DEBUG utility supplied with DOS and at the prompt enter: G=C800:5. Two additional jumpers may be present, W1 & W2, and are reserved for factory use and must not be changed.