Micropolis 3243 Disk Drive
Configuration/Specification Data Sheet

Formatted Capacity

Per Drive	4,295 MB
Bytes per Sector	512
Sectors per Track	Variable
Cylinders	3,956

Performance Specifications

Avg. Seek Time (including settling time)	8.9 msec
Avg. Rotational Latency	4.17 msec
Rotational Speed	7,200 rpm ± 0.5%
Data Transfer Rate at Interface	
Synchronous	up to 10 MB/sec
Asynchronous	up to 5 MB/sec
Internal Data Rate	46 to 80 Mbits/sec
MTBF (power-on hours)	650,000 (Office Environment)
Positioner	Fully balanced rotary voice coil
Parking	Automatic park and lock

General Functional Specifications

Interface	Fast SCSI-2
Supports Full Common Command Set	Yes
Drivers/Receivers	Single-ended

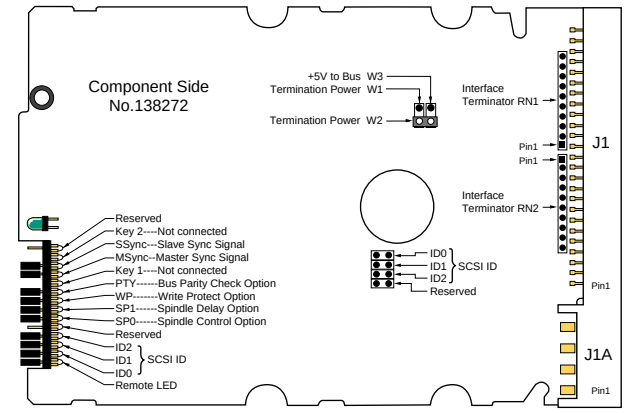
Power Requirements

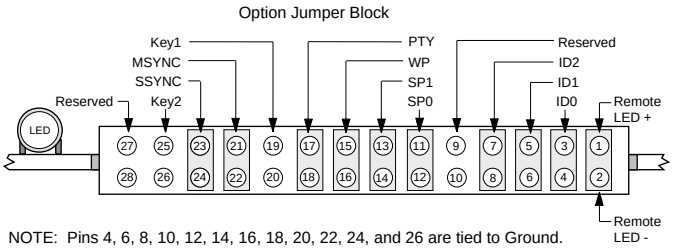
+12V ±5% (average)	0.8 A
+12V ±5% (max during start-up)	2.52 A
+5V ±5% (average)	1.0 A
Power Dissipation, typical, idling	14 Watts
Power Dissipation, typical, seeking	16 Watts

PC Setup

When installing a Micropolis SCSI drive in a PC, the most common method is to run your SETUP program and define *No Drives Present*. The SCSI host adapter will automatically self-configure on power-up. To install the drive, follow the computer or host adapter manufacturer's instructions to use the on-board BIOS routine or software that was supplied with the host adapter. Note that the drive is shipped with the SCSI Address jumpered for ID0. If your system requires that the drive be set to a different SCSI Address, see the other side of this sheet for instructions. Three jumpers are provided in a poly bag for this purpose.

Board Layout Drawing





Dwg File
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Configuration/Options

(Pin numbers refer to the Option Jumper Block.)

• **SCSI Address.** Jumpers at ID0, ID1, and ID2 select the SCSI address. Each SCSI device on one Host Adapter must have a unique address.

SCSI ID	ID2	ID1	ID0	SCSI ID	ID2	ID1	ID0
0	out	out	out	4	in	out	out
1	out	out	in	5	in	out	in
2	out	in	out	6	in	in	out
3	out	in	in	7	in	in	in

(SCSI ID 0 is Default)

There are two identical groups of address jumpers on the board; one group is near the LED, and the other group is near the center of the board. Use either group for address selection but not both at the same time.

• **Interface Termination.** If terminators are installed at RN1 and RN2 (default), the drive provides termination for the SCSI interface. If the terminators are not installed, the drive does not provide interface termination.

SCSI terminators are installed only in the end devices on the SCSI cable; remove the terminators from each of the other devices. The SCSI Host Adapter card and the last drive in the chain should have terminators.

• **Terminator Power.** W1 and W2 select the source of terminator power (+5V) for interface terminators RN1 and RN2; W3 controls the drive supplying +5V to the bus.

W1	W2	W3	
Y	N	–	Drive provides terminator power. (Default)
N	Y	–	Host provides terminator pwr via J1 pin 26 to RN1 and RN2.
–	–	Y	Drive supplies +5V to the bus via J1 pin 26. (Default)

• **Remote LED.** A user-supplied LED may be connected to Remote LED on the Option Jumper Block.

• **Spindle Options.** Jumpers at SP0 (pins 11 and 12) and SP1 (pins 13 and 14) control the spindle options.

SP0	SP1	
N	N	The drive starts the spindle motor at power-on. (Default)
Y	N	The drive waits for a Start Unit SCSI command to start the spindle motor.
N	Y	Spindle start-up is delayed based on SCSI ID address (12 seconds per ID)

• **Write Protect.** A jumper at WP (pins 15 and 16) selects the write protect option.

Jumper	The drive is write protected.
No Jumper	The drive is not write protected. (Default)

• **Parity.** A jumper at PTY (pins 17 and 18) selects the bus parity check option. The drive always **generates** parity regardless of this option.

Jumper	SCSI interface parity checking disabled.
No Jumper	SCSI interface parity checking on. (Default)

• **Spindle Sync Signals.** SSYNC (Pin 23) is the spindle sync *output* signal pin when the drive is mode selected to be the master drive. Pin 23 is the spindle sync *input* when the drive is mode selected to slave mode. MSYNC (Pin 21) is the spindle sync *output* when the drive is mode selected to master control mode.

The even-numbered pins opposite SSYNC and MSYNC are ground return lines for the corresponding sugnals.configuration; i.e., Master Mode or Master Controller Mode.