Micropolis 3243WAV (Wide, Single-Ended) Disk Drive
Configuration/Specification Data Sheet

Formatted Capacity

Per Drive	4,294 MB
Bytes per Sector	512
Sectors per Track	Variable
Cylinders	3,956

AV Data Rate Specifications

Max. Sustained	7.2 MB/sec
Min. Sustained	4.0 MB/sec

Performance Specifications

Avg. Seek Time (includes read settling time)	8.9 msec
Avg. Rotational Latency	4.17 msec
Rotational Speed	7,200 rpm ± .05%
Data Transfer Rate at Interface	
Synchronous	20 MB/sec
Asynchronous	10 MB/sec
Internal Data Rate	46 - 80 Mbits/sec
MTBF (power-on hours)	650,000 (Office Environment)
Positioner	Fully balanced rotary voice coil
Parking	Automatic park and lock

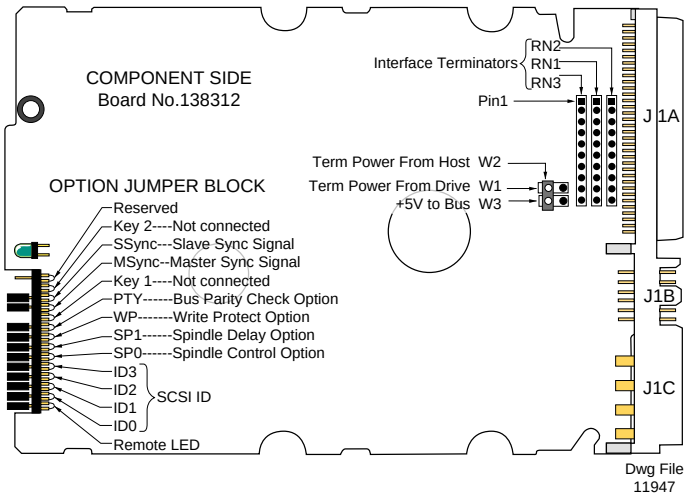
General Functional Specifications

Interface	Fast SCSI-2
Supports Full Common Command Set	Yes
Drivers/Receivers	Wide, Single-Ended

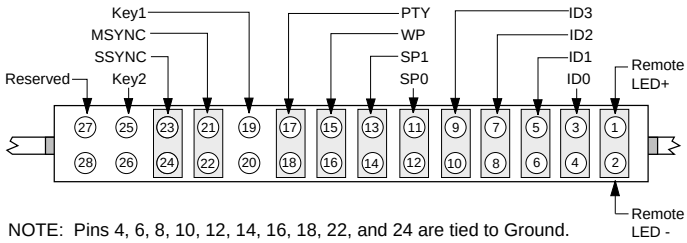
Power Requirements

+12V ±5% (average)	0.9 A
+12V ±5% (max during start-up)	1.66 A
+5V ±5% (average)	0.7 A
Power Dissipation, typical, idling	14 Watts (47.8 Btu/hr)
Power Dissipation, typical, seeking	16 Watts (54.6 Btu/hr)

Configuration Option Selection



OPTION JUMPER BLOCK
(Front view of drive, board up)



NOTE: Pins 4, 6, 8, 10, 12, 14, 16, 18, 22, and 24 are tied to Ground.

SCSI ID

Up to sixteen devices (the host and fifteen targets) can be attached to the SCSI bus. These are selected with jumpers on the Option Jumper Block or on Auxiliary Connector J1B (use either but not both); see Note in next column for J1B usage. In multiple-device systems, each device must have its own unique ID. SCSI ID 0 is Default.

SCSI ID	ID3	ID2	ID1	ID0	SCSI ID	ID3	ID2	ID1	ID0
0	–	–	–	–	8	✓	–	–	–
1	–	–	–	✓	9	✓	–	–	✓
2	–	–	✓	–	10	✓	–	✓	–
3	–	–	✓	✓	11	✓	–	✓	✓
4	–	✓	–	–	12	✓	✓	–	–
5	–	✓	–	✓	13	✓	✓	–	✓
6	–	✓	✓	–	14	✓	✓	✓	–
7	–	✓	✓	✓	15	✓	✓	✓	✓

✓ = jumper installed

Interface Termination (RN1, RN2, and RN3)

Terminators installed at RN1, RN2, and RN3 (Default) - drive is terminated.
If terminators omitted - drive is not terminated.

Terminator Power (W1, W2, W3)

Jumper installed at W1 (Default) - drive provides term power.
Jumper installed at W2 - host provides term power.
Jumper installed at W3 - drive provides term power to the BUS.

Remote LED

Open-collector output - Used to drive a user-supplied LED to indicate the drive is active.

Spindle Control (SP0)

Jumper installed at SP0, jumper omitted at SP1 - Spindle motor starts when SCSI 'START UNIT' command is received.
Jumpers omitted at SP0 (Default) and at SP1 - Spindle motor starts at power-on.

Spindle Delay (SP1)

Jumper installed at SP1, jumper omitted at SP0 - Spindle motor start-up delayed based on SCSI ID (12 seconds per SCSI ID).
Jumpers omitted at SP1 (Default) and at SP0 - Spindle motor starts at power-on.

Write Protect (WP)

Jumper installed at WP - Drive is write protected.
Jumper omitted at WP (Default) - Drive is not write protected.

BUS Parity Check (PTY)

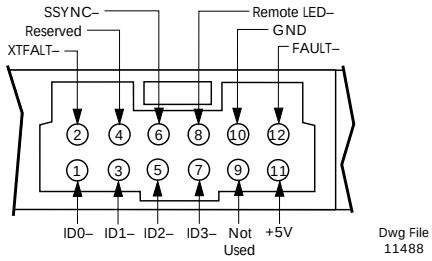
Jumper installed at PTY - Drive neither generates nor detects parity.
Jumper omitted at PTY (Default) - Drive generates parity and has parity detection enabled.

Spindle Synchronization (MSYNC and SSYNC)

Use of the MSYNC and SSYNC signals is optional. These signals are used as spindle synchronization reference.

Auxiliary Connector J1B:

(Rear view of the drive, board up)



J1B is sampled at initialization for jumpers on pins 7-8, 5-6, 3-4, and 1-2 for SCSI ID3, ID2, ID1, and ID0 respectively; these connections (if not jumpered) are then released for use.

Drive Fault (XTFALT–)

Output signal negated (Default); indicates no drive fault.
Output signal asserted; indicates a drive fault condition.

Slave Sync (SSYNC–)

Use is optional; used as spindle synchronization reference.

Remote LED–

Open-collector output; used to drive a user-supplied LED to indicate the drive is active.

Ground (GND)

Logic ground; provides signal ground.

+5 Volts (+5V)

5 VDC (1A max); used to drive external LEDs.

Write Protect (FAULT–)

Input signal negated (Default); drive is *not* write protected.
Input signal asserted; drive is write protected.

A dash character (–) at the end of a signal name indicates it is asserted at the low level (active low) and negated at the high level.