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MHT2xxxBH Mobile Hard Disk Drives

- Available in 40 GB, 60 GB and 80 GB
- SATA 1.0a / SATA II 1.0 interface
- Native command queuing
- 9.5 mm high
- 5,400 rpm
- Advanced GMR head



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THE POSSIBILITIES ARE INFINITE



The **MHT2xxxBH** SATA series from Fujitsu are amongst the world's smallest, fastest and most efficient hard disk drives available today.

With the MHT-BH drives, Fujitsu delivers the power of the integrated Serial ATA SOC in a 2.5" form factor, it also features Native Command Queuing (NCQ), a feature that intelligently and simultaneously co-ordinates up to 32 instructions to be queued and reordered by the hard disk controller, thereby contributing to a significant improvement in overall hard disk drive performance.

The MHT-BH Series comes in capacities of 40, 60 and 80 GB in a 9.5 mm profile and with a rotational speed of 5,400 rpm. The drives employ new GDT (Glass Direct Texture) Media enabling a high areal density of up to 69.3 Gb/sq.in.

These drives operate through a SATA 1.0a/SATA II 1.0 interface, offer a host interface transfer rate of 150 MB/s, low track to track seek times of 1.5 ms and a low operating power consumption of 2.3 W.

The MHT-BH series utilises Fujitsu's latest generation of FDB (Fluid Dynamic Bearing) motor and Head Load/Unload mechanism with Inertia Latch technology. This, along with Silent HDD technologies, makes these drives ideal for intensive mobile computing applications and rugged environments.

Functional Specifications

Model	MHT2040BH	MHT2060BH	MHT2080BH
Storage capacity (formatted) *1	40 GB	60 GB	80 GB
Areal density	up to 69.3 Gb/sq.in.		
Bytes/sectors	512		
Seek time	Track to track	1.5 ms (typ.)	
	Average	12 ms (typ.)	
	Maximum	22 ms (typ.)	
Average latency time	5.56 ms		
Rotational speed	5,400 rpm		
Data transfer rate	to/from host 100 MB/s		
Recording code	MEEPRML		
Interface	SATA 1.0a / SATA II 1.0		
Head positioning method	ROTARY VCM (Embedded Servo)		
Start time *2	4 sec (typ.)		
Buffer size	8 MB		

Physical Specifications

Power requirements	Voltage	5 V ±5%	
	Ripple / Spin-up	100 mV P-P / 1.0 A (max.)	
	Seek / Read / Write / Idle	2.50 W (typ.) / 2.30 W (typ.) / 2.30 W (typ.) / 0.85 W (typ.)	
	Standby / Sleep	0.25 W (typ.) / 0.10 W (typ.)	
Dimensions (H x W x D)	9.5 mm x 70 mm x 100 mm		
Weight	≤99 g		
Ambient temperature *3	Op. / Non-op. / Gradient	5°C to 55°C / -40°C to 65°C / 20°C/h	
Relative humidity	Op. / Non-op. / Max. wet bulb	8% to 90% RH (non-condensing) / 5% to 95% RH (non-condensing) / 29°C (operating)/40°C (non-operating)	
Vibration	Op. / Non-op.	9.8 m/s ² (1.0G) (5 to 500 Hz) / 49 m/s ² (5.0G) (5 to 500 Hz)	
Shock	Op. / Non-op.	2,205 m/s ² (225G) 2 ms / 8,820 m/s ² (900G) 1 ms, 1,176 m/s ² (120G) 11 ms	
Altitude	Op. / Non-op.	-300 to 3,000 m / -300 to 12,000 m	
Acoustic noise *4		34 dBA at 30 cm (typ.) 2.8 bels (typ.)	

Reliability Specifications

Mean time between failures	More than 300,000 power on hours	
Mean time to repair	Less than 30 min	
Component life	5 years or 20,000 power on hours	
Error rates	Unrecoverable errors / Seek errors	1 per 10 ¹³ bits read / 1 per 10 ⁶ seeks
Load/Unload cycles	300,000 cycles	
Emergency Unload cycles	20,000 cycles	

Notes:

*1. Not including alternates, and typical sparing at 512 bytes per sector

*2. Start time indicates the time from power-on or start direction by command to HDD READY

*3. Op. = Operating
Non-op. = Non-operating

*4. HDD READY

Specifications are subject to change without notice. For the latest information, contact your local Fujitsu representative.

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