

■ **UltraDrive DX Series**
Secure SATA-II SSD

SATA Solid State Drive



The UltraDrive DX extreme performance SATA-II SSD, based on Toshiba technology, includes advanced security features that make it a superb storage solution for mobile computers that process sensitive confidential data. Password protection with an encrypted password blocks malicious hackers from accessing your critical data in the event your laptop is lost or stolen. For an added level of data security the DX also uses new hardware data randomization technology. Data randomization happens automatically with every write to the drive to prevent unauthorized copying of blocks of data. Both encrypted password protection and data randomization are standard features that do not affect performance.

The UltraDrive DX is also packed with all the latest performance and reliability features. ECC, wear leveling and bad bit management algorithms improve reliability and extend the life of the drive. The DX is available in capacities up to 512GB.

Physical Specifications

Form Factor	2.5"
Capacity*	64GB - 512GB
DRAM Cache	128MB
Dimension	100 x 69.85 x 9.5 mm
Interface	SATA-II 3Gb/s
NAND Flash	MLC
Power Supply	5Vcc +/-5%
Package	Complete metal housing

Security Features

Password protection with encrypted password
Hardware Data Randomization

Environmental Specifications

Operating Shock	1500G (0.5 msec half sine wave)
Operating Vibration	16G (7-800 Hz RND)
Operating Temperature	0C to +70C (Gradient 30C/hr max)

Performance Specifications

Seq. Read	230 MB/sec (max)
Seq. Write	180 MB/sec (max)
Access Time	1ms

Reliability Specifications

MTTF	1,000,000 hours
Data Reliability	Built-in EDC/ECC function
Product Life	Approximately 5 years or 20,000 power on hours
Wear Leveling Algor.	Patent Pending
Bad bit management built-in	

Ordering Information

64GB	FTM64DX25T
128GB	FTM28DX25T
256GB	FTM56DX25T
512GB	FTM12DX25T

■ UltraDrive DX Series

SATA Solid State Drive

SATA Flash Drive Pin Assignment

	Pin	Signal Name	Description
Signal segment key			
Signal segment	S1	GND	2nd mate
	S2	A+	Differential Signal Pair A (Device Rx)
	S3	A-	
	S4	GND	
	S5	B-	Differential Signal Pair B (Device Tx)
	S6	B+	
	S7	GND	2nd mate
Signal segment "L"			
Central connector polarizer			
Power segment "L"			
Power segment	P1	V33	3.3V power (Unused)
	P2	V33	3.3V power (Unused)
	P3	V33	3.3V power pre-charge 2nd mate (Unused)
	P4	GND	
	P5	GND	
	P6	GND	
	P7	V5	5V power pre-charge 2nd mate
	P8	V5	5V power
	P9	V5	5V power
	P10	GND	
	P11	DAS/ DSS	Not used for this drive
	P12	GND	1st mate
	P13	V12	12V power pre-charge 2nd mate (Unused)
	P14	V12	12V power (Unused)
	P15	V12	12V power (Unused)
Power segment key			

Revision History

September 7, 2009 Rev-A Preliminary Product Specification Released

