

DataFlash®/Fusion/Standard Serial Flash AT45DB/AT25DF/AT25XE/AT25SF-Series

High Temperature Memory Solutions

High Temperature-High Reliability: Adesto offers a complete line of small to moderate density data storage products that are designed for 125°C applications.

Equipment Applications

Industrial control and measurement Motor control Transportation Advanced lighting applications

As Control Overhead Expands...

Over-The-Air updates to state tables and operating systems for connectivity, end-to-end communication and IP-based lighting applications will out-grow the embedded memory available on the current controller. Storage of the previous, target and factory reset images will be required.

Flexibility & Footprint

Adesto's broad line of SPI Flash solutions include true byte, block or page write features and a suite of commands to lower system overhead.

Adesto DataFlash, Fusion and standard Serial Flash products include SRAM buffers that can be accessed by the microcontroller (MCU), read-while-write operation, and OTP protected sectors that can reduce I/O requirements while maintaining the smallest physical footprint on the board.

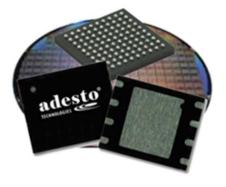
Adesto Serial Memory Features

- ✓ Densities from 1 Mbit to 32 Mbit
- ✓ High temperature reliability
- ✓ Flexible erase and programming architectures
- ✓ SRAM buffers that can lower MCU overhead
- ✓ Secure data, Dual I/O, Read-while-Write
- ✓ Chip-scale packaging & bare die
- ✓ Form factor: small outline, low z dimensions

Memory Storage Expands with OTA Updates



Protocol Conversion & Address Translation



High Temperature Products Selection

Density	Product	Class	Family	Operating				
				Temp	TSSOP	SOIC	UDFN (Leadless)	WAFER/KGD
1Mb	AT25DF011	Flex Erase			✓	✓	✓	✓
2Mb	AT25DF021A	Small Page	AT25DF Series	125°C	✓	✓	✓	✓
4Mb	AT25DF041B	Byte Write	301163		✓	✓	✓	✓
4Mb	AT25XE041B	Low Energy	AT25XE Series	125°C		✓	✓	
4Mb	AT25SF041	Std. Flash Dual I/O	AT25SF Series	125°C		✓		
4Mb	AT45DB041E	Feature		125°C		✓		
16Mb	AT45DB161E	Rich, Low	AT45 Series	105°C		✓		
32Mb	AT45DB321E	Pin Count	231163	105°C		✓		

Flexibility and Features: Reducing System Cost

Density	Product	Erase Architecture: Page, Block, Chip	Page Size: Byte	Byte and Page Write	Suspend Resume	OTP Security Register	Sector Protect	SPI: Dual I/O	SRAM Buffers
1Mb	AT25DF011	ALL	256	✓		✓	✓	✓	✓
2Mb	AT25DF021A	ALL	256	✓		✓	✓	\checkmark	✓
4Mb	AT25DF041B	ALL	256	✓		✓	✓	✓	✓
	AT45DB041E	ALL	256	✓	✓	✓	✓	\checkmark	✓
	AT25SF041A	Block, Chip	256	✓		✓	✓	\checkmark	
	AT25XE041B	ALL	256	✓		✓	✓	\checkmark	✓
16Mb	AT45DB161E	ALL	256	✓	✓	✓	✓	✓	✓
32Mb	AT45DB321E	ALL	256	✓	✓	✓	✓	✓	✓





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