DataFlash®-L | Page Erase Serial Flash

Code and Data Storage Solutions for the Connected World

Low-power, high-performance semiconductor technologies enabling designers to develop next generation solutions for consumer, communication, mobile and industrial applications

As modern electronics evolve, the need for new low density, low energy data and code storage memory devices has emerged to meet the needs of mobile, wearable, and industrial applications in a connected world.

System designers manage their total energy budget by selecting the most energy efficient semiconductor devices available and employ careful design in their software and hardware.

Adesto® offers a complete portfolio of code and data storage memory solutions that help designers extend the battery life of devices in many applications. Applications include wireless and wired protocols such as Bluetooth low energy products, DECT ULE (Ultra Low Energy), ZigBee RF4CE, Z-Wave and other Wi-Fi and Wi-Fi Direct platforms.

Applications:

Digital images, digital voice, text, data and program code in industrial, computer, communications, security, medical and consumer electronics

DataFlash-L is low pin count, wide voltage range Ultra Low Power, feature rich, Page Erase sequential access memory. DataFlash-L enables energy efficient, lower cost systems through its advanced command rich interface and granular architecture. Its ultra-low energy consumption and advanced features reduce the CPU/MCU overheads, reduce the power signature and extend battery life.

DataFlash-L: Features and Benefits

- **Ultra low power operation extends system battery life — ultra deep power down operates at <400 nA**
- **Wide VCC 1.7V to 3.6V operating range allows the system memory to operate over the entire battery voltage range**
- **Efficient byte-write and internal page program and page erase commands reduce CPU overhead by offloading memory management tasks**
- **Comprehensive security and unique ID features to protect the device and prevent outside tampering**

Density	Vcc Range	Speed (MHz)	Page Write	Erase Block	Ultra-Deep Power Down	Byte Write Capability	Low Power Read	Dual SRAM Buffers	Unique UID Number
2-Mbit	1.65-3.6V	85	256 Bytes	256B, 2KB, 64KB	✓	✓	✓		✓
4-Mbit	1.65-3.6V	85	256 Bytes	256B, 2KB, 64KB	✓	✓	✓	✓	✓
8-Mbit	1.70-3.6V	85	256 Bytes	256B, 2KB, 64KB	✓	✓	✓	✓	✓
16-Mbit	2.30-3.6V	85	512 Bytes	512B, 4KB, 64KB	✓	✓	✓	✓	✓

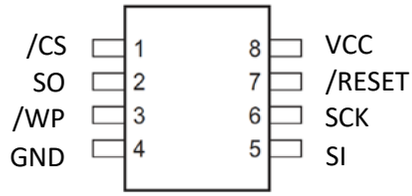
* See product datasheets for complete operating parameters.

AT25PExxx Family

- Micron M25PE Compatible
- Provides Page Erase
- Provides Read-Modify-Write
- Longevity Support
- DataFlash Based Architecture
- High Performance Low Power

Signal	AT25PE
Serial Data Input	SI
Serial Data Output	SO
Serial Clock	SCK
Reset	/RESET
Hold	Not Available
Chip Select	/CS
Write Protect	/WP
VCC	VCC
GND	GND

Pinout



SOIC 150Mil	Narrow SOIC
SOIC 208Mil	Wide SOIC
DFNx6mm	Leadless Array Package

Part Number	Density	Package	VCC Range	Page Size	Temp Range	Delivery Options
AT25PE20-SSHN-B/T	2Mbit	SOIC 150mil	1.7V-3.6V	256 Bytes	-40°C+85°C	-T (T&R) / -B (Tube)
AT25PE20-SHN-B/T		SOIC 208Mil				
AT25PE20-MHN-Y/T		DFN5x6mm				-T (T&R) / -Y (Tray)
AT25PE40-SSHN-B/T	4Mbit	SOIC 150mil	1.7V-3.6V	256 Bytes	-40°C+85°C	-T (T&R) / -B (Tube)
AT25PE40-SHN-B/T		SOIC 208Mil				
AT25PE40-MHN-Y/T		DFN5x6mm				-T (T&R) / -Y (Tray)
AT25PE80-SSHN-B/T	8Mbit	SOIC 150mil	1.7V-3.6V	256 Bytes	-40°C+85°C	-T (T&R) / -B (Tube)
AT25PE80-SHN-B/T		SOIC 208Mil				
AT25PE80-MHN-Y/T		DFN5x6mm				-T (T&R) / -Y (Tray)
AT25PE16-SSHF-B/T	16Mbit	SOIC 150mil	2.3V-3.6V	512 Bytes	-40°C+85°C	-T (T&R) / -B (Tube)
AT25PE16-SHF-B/T		SOIC 208Mil				
AT25PE16-MHF-Y/T		DFN5x6mm				-T (T&R) / -Y (Tray)

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