



➔ **Atmel® Serial Interface Memories** 11 Years of Consecutive Leadership

World’s Best-In-Class Serial EEPROMs and Serial Flash... Nurturing Your Advanced Electronic Needs Across the Board

With 16 years of proven performance, Atmel **Serial EEPROM** and **Serial Flash** portfolios offer best-in-class solutions for your advanced electronic applications in automotive, consumer, communications, computation, industrial and medical. Atmel has been leading the Serial Memory market with continuous innovation in technology and design. We offer premier quality and delivery standards mandated by our international customer base through rigorous Quality & Reliability systems, along with an efficient supply chain and prompt customer support.

Serial EEPROM Features

- Broad Product Portfolio
 - 1-Kbit to 1-Mbit Densities
 - 2-wire, SPI and 3-wire Protocols
 - Industrial & Automotive Temperature Offering
 - Available in Wafer, Die and Packaged Units
- Best-in-Class Operational Specs to Enhance Applications Performance
 - Lowest Active and Standby Current
 - Fastest Clock Frequency
- Industry’s Smallest Footprint Packaging
 - Includes Chipscale dBGAs, Leadless DFN (MAP/SAP) and XDFN Packages
 - All Other Standard Packages: SOT-23, TSSOP, PDIP and SOIC

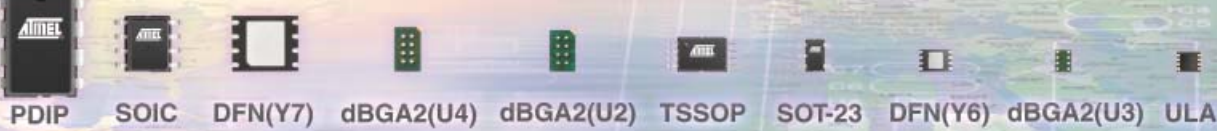
Serial Flash Features

- Broad Product Portfolio
 - 512-Kbit to 64-Mbit Densities
 - SPI Compatible Interface
 - Up to 70 MHz Performance
- Flexible Architecture to Optimize Cost and Performance
 - 4-Kbyte Minimum Erase Blocks
 - Byte, Partial Page or Full Page Programming
- Advanced Protection
 - Independent Sector Protection
 - Any Sector Can Be Protected Individually
 - Ideal for Bottom Boot or Golden Boot Areas
 - Devices Power Up in Protected State
 - More Secure than Other Architectures
 - Global Protect/Unprotect Feature

Customer Support Resources

- Atmel has been voted best technical support provider by the majority of our customers. The Serial Interface Memory family offers a wide range of customer support resources such as application notes, software/drivers, IBIS and Verilog® models, process change notifications, cross-reference and product selector guide. For more information, visit our website at www.atmel.com/products/memory/ or send an email to memory@atmel.com.





Atmel Product Line at a Glance: Serial EEPROM & Serial Flash

Serial EEPROM	Density (Kbit)	Vcc (V)	Max Speed (MHz)	Package	Write Protect	Features
2-wire Interface						
AT24C01B	1	1.8	1	P, S, T, Y, U, TS, D3*, D	Full Array	Cascade up to 8 devices
AT24C02B	2	1.8	1	P, S, T, Y, U, TS, D3*, D	Full Array	Cascade up to 8 devices
AT24HC02B	2	1.8	1	P, S, T, D	1/2 Array	Cascade up to 8 devices
AT34C02C	2	1.7	0.4	P, S, T, Y, U, D	Reversible Software Prot.	Cascade up to 8 devices
AT24C04B	4	1.8	0.4	P, S, T, Y, U, TS, D3*, D	Full Array	Cascade up to 4 devices
AT24HC04B	4	1.8	1	P, S, T, D	1/2 Array	Cascade up to 4 devices
AT24C08B	8	1.8	1	P, S, T, Y, U, TS, D3*, D	Full Array	Cascade up to 2 devices
AT24C16B	16	1.8	1	P, S, T, Y, U, TS, D3*, D	Full Array	Non-Cascadable
AT24C32C	32	1.8	1	P, S, T, Y, U, D3*, D	Full Array	Cascade up to 8 devices
AT24C64B	64	1.8, 2.7	0.4	P, S, T, D	1/4 Array	Cascade up to 8 devices
AT24C64C	64	1.8	1	P, S, T, Y, U, D3*, D	Full Array	Cascade up to 8 devices
AT24C128B	128	1.8	1	P, S, T, Y, U, D3*, D	Full Array	Cascade up to 8 devices
AT24C256B	256	1.8	1	P, S, T, Y, U, D	Full Array	Cascade up to 8 devices
AT24C512B	512	1.8, 2.5	1	P, S, T, Y, U, D	Full Array	Cascade up to 8 devices
AT24C1024B	1-Mbit	1.8, 2.5	1	P, S, T, Y, U, D	Full Array	Cascade up to 4 devices

Serial EEPROM	Density (Kbit)	Vcc (V)	Max Speed (MHz)	Package	Write Protect	Features
SPI Interface						
AT25010A	1	1.8, 2.7	20	P, S, T, Y, U, D3*, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25020A	2	1.8, 2.7	20	P, S, T, Y, U, D3*, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25080B	8	1.8	20	P, S, T, Y, U, D3*, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25160B	16	1.8	20	P, S, T, Y, U, D3, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25320A	32	1.8, 2.7	20	P, S, T, Y, U, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25320B**	32	1.8	20	P, S, T, Y, U, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25640A	64	1.8, 2.7	20	P, S, T, Y, U, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25640B**	64	1.8	20	P, S, T, Y, U, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25128A	128	1.8, 2.7	20	P, S, T, Y, U, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25128B**	128	1.8	20	P, S, T, Y, U, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25256A	256	1.8, 2.7	20	P, S, T, Y, U, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25256B**	256	1.8	20	P, S, T, Y, U, D	1/4, 1/2, Full Array	SPI Mode 0 and 3
AT25512	512	1.8	20	S, T, Y, U, D	1/4, 1/2, Full Array	SPI Mode 0 and 3

Serial EEPROM	Density (Kbit)	Vcc (V)	Max Speed (MHz)	Package	Write Protect	Features
3-wire Interface						
AT93C46D	1	1.8	2	P, S, T, Y, U, D3*, D	None	x8 or x16 Organization
AT93C46E	1	1.8	2	P, S, T	None	x16 Organization
AT93C56A	2	1.8, 2.7	2	P, S, T, Y, U, D	None	x8 or x16 Organization with Sequential Read
AT93C56B**	2	1.8	2	P, S, T, Y, U, D3*, D	None	x8 or x16 Organization with Sequential Read
AT93C66A	4	1.8, 2.7	2	P, S, T, Y, U, D	None	x8 or x16 Organization with Sequential Read
AT93C66B**	4	1.8	2	P, S, T, Y, U, D3*, D	None	x8 or x16 Organization with Sequential Read
AT93C86A	16	1.8, 2.7	2	P, S, T, Y, D	None	x8 or x16 Organization with Sequential Read

Serial Flash	Density (Mbit)	Vcc (V)	Max Speed (MHz)	Package	Protection	Features
AT25F512A	0.5	2.7	33	S, Y, D	1/4, 1/2, Full Array	Byte Writable
AT25FS010	1	2.7	50	S, Y, D	1/32, 1/16, 1/8, 1/4, 1/2, Full Array	4-Kbyte Uniform Block Erase
AT25DF021**	2	2.7	66	S, Y, D	Individual Sector	4-Kbyte Uniform Block Erase
AT25DF041A**	4	2.7/2.3	70	S, M	Individual Sector	4-Kbyte Uniform Block Erase
AT26DF081A	8	2.7	70	S	Individual Sector	4-Kbyte Uniform Block Erase
AT25DF081	8	1.8	66	S, Y	Individual Sector	4-Kbyte Uniform Block Erase
AT26DF161	16	2.7	66	S, M	Individual Sector	4-Kbyte Uniform Block Erase
AT25DF161**	16	2.7	70	S, M	Individual Sector	4-Kbyte Uniform Block Erase
AT25DF321	32	2.7	66	S, S3	Individual Sector	4-Kbyte Uniform Block Erase
AT25DF641**	64	2.7	70	MW, S3	Individual Sector	4-Kbyte Uniform Block Erase

Notes: Package Designator: **P** = 8-lead PDIP; **Y** = DFN (MAP/SAP); **S** = 8-lead SOIC; **U** = dBGA2; **T** = 8-lead TSSOP; **TS** = 5-lead SOT23; **D** = Wafer/Die; **D3** = XDFN; **S3** = 16-lead SOIC; **M** = 8-pad MLF; **MW** = 8-pad MLF (Wide)
 **Available on Request
 **Contact Marketing for Availability

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Headquarters

Atmel Corporation
 2325 Orchard Parkway
 San Jose, CA 95131
USA
 Tel: (1) 408 441-0311
 Fax: (1) 408 487-2600

International

Atmel Asia
 Room 1219
 Chinachem Golden Plaza
 77 Mody Road, Tsimshatsui
 East Kowloon
Hong Kong
 Tel: (852) 2721-9778
 Fax: (852) 2722-1369

Atmel Europe
 Le Krebs
 8, Rue Jean-Pierre Timbaud
 BP 309
 78054 St Quentin-en-
 Yvelines Cedex
France
 Tel: (33) 1-30-60-70-00
 Fax: (33) 1-30-60-71-11

Atmel Japan
 9F, Tonetsu Shinkawa Bldg.
 1-24-8 Shinkawa
 Chuo-ku, Tokyo 104-0033
Japan
 Tel: (81) 3-3523-3551
 Fax: (81) 3-3523-7581

Product Contact

Product Line
 memory@atmel.com

Literature Requests
 www.atmel.com/literature

Web Site
 www.atmel.com

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