

# W35N Series

- Higher Density
- 120MB/s and up to 240MB/s



## OctalNAND Flash

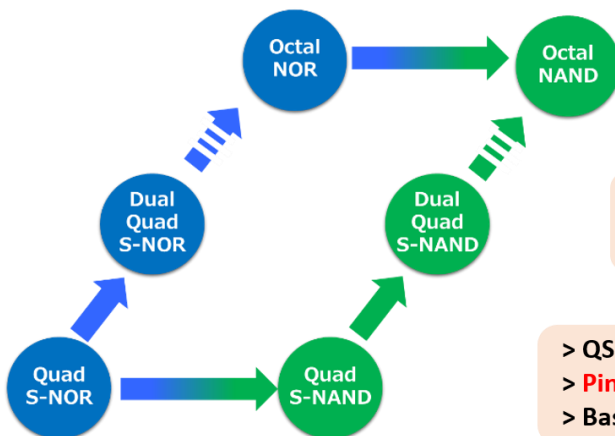
*fast, low-cost alternative to Octal NOR Flash in densities of 1Gbit and higher*

### General Description

The world's first x8 Octal interface for NAND Flash, Winbond's OctalNAND Flash enables automotive and industrial manufacturers to provide code storage in high density without having to pay a premium for NOR Flash, a fast memory technology which scales poorly at densities above 512Mbits.

The first Winbond product to include the new interface, the 1Gbit W35N01JW, offers a maximum continuous Read throughput of 240MB/s, three times faster than the earlier high-performance W25N-JW Quad Serial NAND Flash family. The single-die W35N01JW is also 50% faster than Winbond's W72N-JW family of Dual Quad Serial NAND devices, which have dual dies in a single package, and a more complex x2/x4/x8 I/O architecture.

Manufactured in Winbond's proven 46nm Single Level Cell (SLC) NAND fabrication process, the W35N-JW OctalNAND Flash offers excellent data integrity and more than ten years' data retention. It is specified to perform more than 100,000 Program/Erase cycles, providing the high level of endurance and reliability required in mission-critical automotive and industrial applications.



- > Some control signal and IO is compatible with Dual Quad
- > Instruction set is independent in each suppliers

- > 2 die stack of QSPI or Serial NAND
- > IO is double for x4 to achieve higher thru-rate

- > QSPI with NAND architecture
- > Pin compatible with QSPI NOR
- > Basic instruction set is compatible

# Applications

## Automotive

- Instrument Cluster Applications
- Fast Booting

## Consumer

- Fast Booting

## Package Information

Voltage	Density	Part Number	Speed (MHz)	I/O	Package
1.8V	1Gb	W35N01JW	166 MHz (STR) 120 MHz (DTR)	x1/x8	BGA24
	2Gb	W35N02JW			
	4Gb	W35N04JW			

\* See data sheet for further technical information. This is subject to change without notice.

## Own Logic and Memory Technology

Winbond Electronics Corp. is an Integrated IC Company engaged in IC design, manufacturing and sales services. From product design, research and development, wafer fabrication to marketing of brand name product, Winbond endeavors to provide its global clientele top quality of low to medium density memory solutions.

## Own 12-inch Fab

Winbond specializes in the design of high-performance, low-power memory, and riding on the strength of having a 12-inch fab, offers a whole series of SLC code storage NAND flash memory and Mobile DRAM. The in house wafer fabrication provides customers with full commitment in capacity support as well as delivery flexibility.



# winbond

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