

W35T Series Octal NOR Flash

winbond
W35TxxNW

Octal NOR Flash

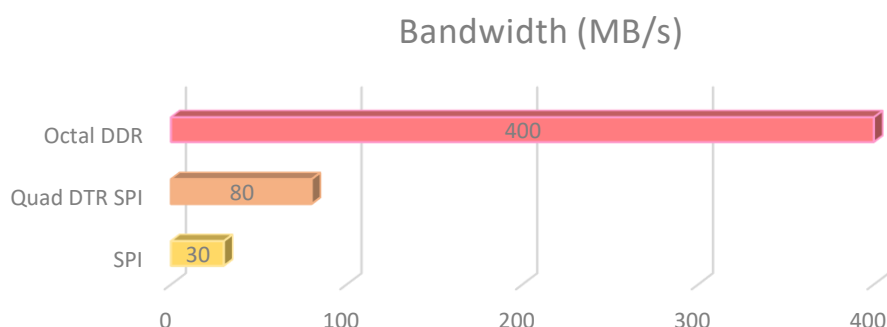
High bandwidth Octal interface 1.8V NOR Flash - from 64Mb to 2Gb

General Description

Winbond W35T Octal NOR Flash family with the JEDEC xSPI interface offers a combination of high bandwidth, advanced features, and exceptional reliability. Winbond's Octal NOR Flash delivers the highest synchronous byte-wide (8-bit) data bandwidth on code and data storage solutions for instant-on and XIP (eXecute-In-Place) embedded applications. This innovative Octal DDR interface ensures maximum performance, low signal count, and backward compatibility with legacy x1 SPI systems for seamless migration. This series offers greater flexibility and burst speed than the regular SPI interface NOR Flash.

The W35T family provides a maximum continuous read throughput of 400MB/s, five times faster than the standard high-performance W25Q SpiFlash® Flash family. The memory chip comes with On-chip ECC, CRC-at-Rest, and CRC-in-Transit support, ensuring the integrity of the data stored in the flash as well as the fidelity of the content transported through the Octal interface. With additional features including Security Registers, Hardware Write Protection, plus ISO26262 ASIL-D certification, which is the highest classification of automotive standards, Winbond W35T Octal NOR Flash family helps automotive manufacturers meet stringent requirements for functional safety.

The W35T-NW Octal NOR Flash family is manufactured using Winbond's new generation of 58nm process and offers 100,000 Program/Erase Cycles. Along with support for 20 years of data retention, this family is an ideal choice for mission-critical automotive and industrial applications that require high endurance and reliability.



Applications

Data Center & Cloud Service

- AI Accelerator
- AI Server
- FPGA

Automotive

- Instrument Cluster Application
- ADAS & DMS
- Gateway & Domain Controller
- eCockpit
- Infotainment

Consumer

- Wearable Device
- HMI
- Instant Boot
- Camera Applications

IoT

- Smart Lock
- Robot

Package Information

Voltage	Density	Part Number	Speed (MHz)	I/O	Package
1.8V	2Gb	W35T02NW	166 MHz (STR), 200 MHz (DTR)	x1/x8	BGA24
	1Gb	W35T01NW	166 MHz (STR), 200 MHz (DTR)	x1/x8	BGA24
	512Mb	W35T51NW	166 MHz (STR), 200 MHz (DTR)	x1/x8	BGA24
	256Mb	W35T25NW	166 MHz (STR), 200 MHz (DTR)	x1/x8	BGA24, SOP16
	128Mb	W35T12NW	166 MHz (STR), 200 MHz (DTR)	x1/x8	BGA24, SOP16
	64Mb	W35T64NW	166 MHz (STR), 200 MHz (DTR)	x1/x8	BGA24, SOP16

* 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 NOR & NAND Flash memory and DRAM. The in-house wafer fabrication provides customers with full commitment in capacity support as well as delivery flexibility.



Winbond Electronics Corporation
No. 8, Keya 1st Rd., Daya Dist., Taichung
City 428, Taiwan
Tel: 886-4-25218168
Email: mkt_online@winbond.com

Winbond Electronics Corporation America
2727 North First Street,
San Jose, CA 95134, U.S.A.
Tel: 1-408-943-6666



www.winbond.com