



Product Brief



Capacities

Quad SPI NOR Flash: 64Mb, 128Mb, 256Mb xSPI NOR Flash: 256Mb, 512Mb

Advanced Features

- 8K-byte security OTP with OTP lock
- 128-bit Unique ID for each device
- Serial Flash Discoverable Parameters (SFDP)
- JEDEC electronic identification
- Volatile and non-volatile status register bits
- Top/bottom block protection
- Flexible architecture

Fast, Reliable, Error-free Processing

When you need error-free computing from the system boot to shut down, the Lexar Enterprise SPI / xSPI NOR Flash provides fast, reliable memory for a wide variety of devices. Built to maintain lasting performance, the SPI / xSPI NOR Flash is rated for 100K program / erase cycles and is designed for 20-year data retention for years to come.

Key Benefits

Standard, Dual and Quad SPI Speeds

Standard/Dual transfer clock frequency is 166MHz and Quad SPI is 200MHz. DTR Quad IO data transfer up to 200MB/s with DQS.

Standard and Octal xSPI NOR Speeds

SPI mode transfer clock frequency is 166MHz and OPI mode is 200MHz. DTR OPI IO data transfer up to 400MB/s with DQS.

Data Integrity Check

Error correction code (ECC) helps make sure the SPI / xSPI NOR Flash can correct itself, while cyclic redundancy check (CRC) detects accidental changes internally.

Lasting Data Retention

A minimum of 100,000 program / erase cycles and 20-year data retention helps ensure data is always safely stored and ready to access for decades.

Applications



PC Motherboard



Wearables



Smart Speakers



Industrial Internet Protocol Cameras (IPC)



Video Surveillance



Specifications—SPI NOR Flash

Part Number	Capacity	I/O Type	Operating Voltage	Chip Package	Operating Temperature	Size	Packaging
F25UQD256M-OWT	256GB	x1 x2 x4	1.65V ~ 2V	SOP16	-40°C to +85°C	10.3mm x 10.3mm	Tray
F25UQD256M-OWR	256GB	x1 x2 x4	1.65V ~ 2V	SOP16	-40°C to +85°C	10.3mm x 10.3mm	Tape & Reel
F25UQD256M-OWE	256GB	x1 x2 x4	1.65V ~ 2V	SOP16	-40°C to +85°C	10.3mm x 10.3mm	Tube
F25UQD256M-OAT	256GB	x1 x2 x4	1.65V ~ 2V	SOP16	-40°C to +105°C	10.3mm x 10.3mm	Tray
F25UQD256M-OAR	256GB	x1 x2 x4	1.65V ~ 2V	SOP16	-40°C to +105°C	10.3mm x 10.3mm	Tape & Reel
F25UQD256M-OAE	256GB	x1 x2 x4	1.65V ~ 2V	SOP16	-40°C to +105°C	10.3mm x 10.3mm	Tube
F25UQD256M-VWT	256GB	x1 x2 x4	1.65V ~ 2V	8-WSON	-40°C to +85°C	6mm x 5mm	Tray
F25UQD256M-VWR	256GB	x1 x2 x4	1.65V ~ 2V	8-WSON	-40°C to +85°C	6mm x 5mm	Tape & Reel
F25UQD256M-VAT	256GB	x1 x2 x4	1.65V ~ 2V	8-WSON	-40°C to +105°C	6mm x 5mm	Tray
F25UQD256M-VAR	256GB	x1 x2 x4	1.65V ~ 2V	8-WSON	-40°C to +105°C	6mm x 5mm	Tape & Reel
F25UQD256M-WWT	256GB	x1 x2 x4	1.65V ~ 2V	8-WSON	-40°C to +85°C	6mm x 5mm	Tray
F25UQD256M-WWR	256GB	x1 x2 x4	1.65V ~ 2V	8-WSON	-40°C to +85°C	6mm x 5mm	Tape & Reel
F25UQD256M-WAT	256GB	x1 x2 x4	1.65V ~ 2V	8-WSON	-40°C to +105°C	6mm x 5mm	Tray
F25UQD256M-WAR	256GB	x1 x2 x4	1.65V ~ 2V	8-WSON	-40°C to +105°C	6mm x 5mm	Tape & Reel
F25UQD256M-CWT	256GB	x1 x2 x4	1.65V ~ 2V	BGA24	-40°C to +85°C	6mm x 5mm	Tray
F25UQD256M-CAT	256GB	x1 x2 x4	1.65V ~ 2V	BGA24	-40°C to +105°C	6mm x 5mm	Tape & Reel

Specifications—xSPI NOR Flash

Part Number	Capacity	I/O Type	Operating Voltage	Chip Package	Operating Temperature	Size	Packaging
F25UXD256M-OWT	256GB	x1 x8	1.65V ~ 2V	SOP16	-40°C to +85°C	10.3mm x 10.3mm	Tray
F25UXD256M-OWR	256GB	x1 x8	1.65V ~ 2V	SOP16	-40°C to +85°C	10.3mm x 10.3mm	Tape & Reel
F25UXD256M-OWE	256GB	x1 x8	1.65V ~ 2V	SOP16	-40°C to +85°C	10.3mm x 10.3mm	Tube
F25UXD256M-OAT	256GB	x1 x8	1.65V ~ 2V	SOP16	-40°C to +105°C	10.3mm x 10.3mm	Tray
F25UXD256M-OAR	256GB	x1 x8	1.65V ~ 2V	SOP16	-40°C to +105°C	10.3mm x 10.3mm	Tape & Reel
F25UXD256M-OAE	256GB	x1 x8	1.65V ~ 2V	SOP16	-40°C to +105°C	10.3mm x 10.3mm	Tube
F25UXD256M-CWT	256GB	x1 x8	1.65V ~ 2V	BGA24	-40°C to +85°C	8mm x 6mm	Tray
F25UXD256M-CWR	256GB	x1 x8	1.65V ~ 2V	BGA24	-40°C to +85°C	8mm x 6mm	Tape & Reel
F25UXD256M-CAT	256GB	x1 x8	1.65V ~ 2V	BGA24	-40°C to +105°C	8mm x 6mm	Tray
F25UXD256M-CAR	256GB	x1 x8	1.65V ~ 2V	BGA24	-40°C to +105°C	8mm x 6mm	Tape & Reel

^{*}Data based on internal testing. Actual performance may vary due to equipment differences.