



GigaDevice Launches New Generation of High-Speed Quad and xSPI Compliant Octal SPI NOR Flash

GD25LT and GD25LX series significantly improved data throughput, offering ideal solution for high-performance applications

Beijing, China (Jun13, 2019) — GigaDevice, a leading provider of Non-Volatile Memory and 32-bit microcontroller solutions, today announced the first products in its new generation of High-Speed Quad and xSPI-compliant Octal SPI NOR Flash—GD25LT256E and GD25LX256E. The GD25LT series is the first high-speed Quad NOR Flash solution in the industry which is highly compatible with existing products. GD25LX series is the high performance Octal NOR Flash solution developed for applications like automotive, AI and IoT that require fast read/write of massive code and timely response after system power-on, the new products provide higher performance by significantly improving data throughput.

High density and performance NOR Flash is used to store system code and application data. It enables random access, high reliability, fast R/W rate and code execution. With the continuous upgrading of drive and interface technologies for autonomous driving, 5G and AI, NOR Flash is considered to be the first choice for code storage applications in IoT devices.

Automotive applications require loading dashboard and screen information in the shortest amount of time. Artificial Intelligence (AI) applications require quick system response speed to call the stored algorithm in time to perform calculations, while ensuring zero failures, and IoT applications need to perform Execute-In-Place (XIP) to complete the reading of code data in the shortest time. These all require high reliability



and high data throughput. The existing SPI interface is limited to the number of I/Os and the clock frequency which has become a bottleneck for system performance improvement.

GD25LX256E is a high-speed Octal SPI NOR Flash product with a maximum clock frequency of 200MHz and a data throughput rate of up to 400MB/s. Its Octal SPI protocol and package specification are fully compliant with latest JEDEC JESD251 standard. Built-in ECC algorithm and CRC check function extend product life while improving reliability. Its DQS and DLP capabilities provide protection for high speed system design. The GD25LX256E will be widely applied in automotive, AI and IoT applications where high performance is critical.

The GD25LT256E is a high-performance Quad SPI NOR Flash product that increases data read frequency to 200MHz, throughput up to 200MB/s, and is compatible with the specifications and operation of existing SPI interfaces. Users do not need to wait for the SoC interface and firmware to match the new generation of Octal SPI products, which can process the upgrade of flash in the shortest time and greatly improve system performance.

Product Highlights

GD25LT256E

- 1.8V 256M-bit
- Quad DTR SPI interface, compatible with single channel and Quad SPI instruction set
- Industry highest performance Quad product, with data throughput up to 200MB/s
- Support XIP (Execute-In-Place)
- Support DQS and DLP for ease of high-speed system design optimization



- Support ECC and CRC for higher product reliability and high-speed I/O signal accuracy
- Standard TFBGA24, SOP16 package

GD25LX256E

- 1.8V 256M-bit
- Octal DTR SPI interface, compatible with single channel and Octal SPI instruction set
- Fully compliant with JEDEC xSPI (JESD251) standard
- Extremely high read performance, with data throughput up to 400MB/s
- Support XIP (Execute-In-Place)
- Support DQS and DLP for ease of high-speed system design optimization
- Support ECC and CRC for higher product reliability and high-speed I/O signal integrity
- Standard TFBGA24, SOP16 package

About GigaDevice

GigaDevice Semiconductor (Beijing) Inc., founded in Beijing in 2005, is a leading fabless semiconductor company engaged in advanced memory technology and IC solutions. GigaDevice provides a wide range of high performance Flash Memory and 32-bit general-purpose MCU products. It is among the companies that pioneered SPI NOR Flash Memory and have powered up more than 10 Billion electronic devices in the world since 2010. The company is publicly traded on the Shanghai Stock Exchange since August 2016. For more information, please visit: www.gigadevice.com.