

Winbond Unveils New 1.8V 512Mb SPI NOR Flash for 5G and Other High-End Server Applications

- *Industry pin-to-pin compatibility enables customers to grow their code storage Flash capacity from 16Mbits up to 2Gbits without having to change footprint across different hardware platforms*
- *Already proven and in small-batch production with leading global customers in different industries, the new single die 512Mb NOR flash is expected to be in mass production in 2H of 2021*
- *Leverages Winbond's in-house design and manufacturing capabilities to ensure volume supply and ongoing support to customers globally*

TAICHUNG, Taiwan– 2021-06-17 – Winbond Electronics Corporation, a leading global supplier of semiconductor memory solutions, today announced it is expanding its total solution of SPI NOR Flash with the introduction of the new single die monolithic 1.8V 512Mb SPI NOR flash that can support up to 166 MHz standard/dual/quad SPI clocks. Apart from the existing 3V 512Mb W25Q512JV, the new 1.8V W25Q512NW SPI NOR Flash also features pin-to-pin compatibility, enabling customers to easily upgrade to higher flash storage capacities without having to change the footprint of their designs. This enables them to extend the life of their products, speed time to market, and save development time and effort by having one single flash platform that can be used across their future product roadmap.

“Emerging 5G applications require both high-quality and high-density SPI NOR flash,” said Winbond. “Our W25Q512NW SPI NOR Flash delivers on all these requirements, while also providing the best solution in the industry and ensuring the reliable supply capacity that is backwards and forwards compatible to the lowest to the highest flash densities available.”

W25Q512NW Benefits & Target Application:

W25Q512NW can support up to 166 MHz SDR and 80MHz DDR in high read-speed, it can achieve high performance on XIP (eXecute In Place) and Instant-on with QPI. The new W25Q512NW can also be stacked to 1Gb and 2Gb, which gives designers more flexibility to extend the density up to 2Gb and better performance on Read-While-Write. For example, the two-die device will support Read While Write operation for OTA updating without suspension of read operations and with no risk of losing the existing firmware image in the event of an unexpected power interruption, providing fast and stable live OTA (Over-The-Air) system firmware update.

This compatibility is a game-changer for customers designing applications such as 5G modem, 5G edge computing, cloud server, fiber optic modems, and smart IoT segments where they typically increase code-storage flash density 2X every 2 years. This also helps the OEM software

teams to develop application-code well-suited for new code releases with multiple new feature-set without compromising on Code Storage Flash Memory density limitations.

About Winbond

Winbond Electronics Corporation is a leading global supplier of semiconductor memory solutions. The Company provides customer-driven memory solutions backed by the expert capabilities of product design, R&D, manufacturing, and sales services. Winbond's product portfolio, consisting of Specialty DRAM, Mobile DRAM, Code Storage Flash, and TrustME® Secure Flash, is widely used by tier-1 customers in communication, consumer electronics, automotive and industrial, and computer peripheral markets. Winbond is headquartered in Central Taiwan Science Park (CTSP), and it has subsidiaries in the USA, Japan, Israel, China, Hong Kong, and Germany. Based on Taichung and new Kaohsiung 12-inch fabs in Taiwan, Winbond keeps pace to develop in-house technologies to provide high-quality memory IC products.

More information, welcome to visit www.winbond.com.