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MCU SUPPORTS WI-FI 6 AND BLUETOOTH LE 5.2 WIRELESS CONNECTIVITY.

The GD32VW553 series MCU supports Wi-Fi 6 and Bluetooth LE 5.2 wireless connectivity. To fulfill the requirements of real-time processing and efficient communication, the GD32VW553 series MCU incorporates a new open-source instruction set architecture with a RISC-V processor core, boasting a maximum clock frequency of 160 MHz. The integrated 2.4 GHz Wi-Fi 6 RF module adheres to the IEEE 802.11ax standard and is backward compatible with the IEEE 802.11b/g/n standard, ensuring compatibility with different network environments. It supports Orthogonal Frequency Division Multiple Access (OFDMA) enabling multiple devices to share channel resources, resulting in 60% higher data transmission rate compared to Wi-Fi 4. Additionally, it supports Multi-User Multiple-Input Multiple-Output (MU-MIMO), enabling multiple devices to work simultaneously without interfering with each other, thus achieving high-efficiency and low-latency communication in multi-device high-density access scenarios.

The integrated Bluetooth LE 5.2 RF module extends communication range, increases throughput, enhances security, and improves power efficiency in accordance with the latest Bluetooth specifications. It provides 2 Mbps high-speed data mode and multiple rates of 125K/500Kbps to effectively reduce transmission time and improve sensitivity. It facilitates the establishment and configuration of stable and high-speed wireless networks even in complex environments with multiple devices.

The GD32VW553 series integrates up to 4MB Flash, 320KB SRAM, and 32KB configurable Instruction Cache (I-Cache) to greatly improve CPU processing efficiency. The GD32VW553, while delivering excellent wireless performance, is also equipped with rich universal wired interfaces. The power supply voltage

ranges from 1.8 V to 3.6 V and it supports high temperature up to 105°C to meet the application scenarios such as industrial control interconnection, lighting equipment, and socket panels.

For full product
info and datasheet
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Giga Device is a Semiconductor Technology leader focused on Flash memory, Microcontroller, Sensor and Analog products.

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