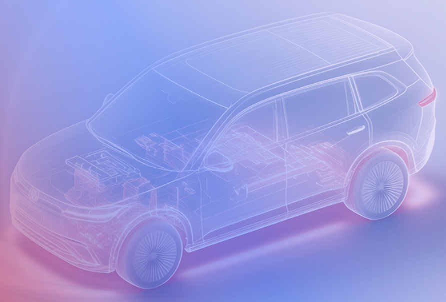
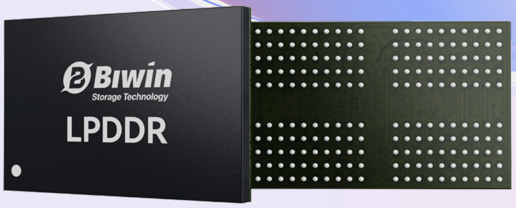
Biwin
Storage Technology

TGL268 Automotive LPDDR



Designed for demanding industrial environments, the BIWIN TGL268 LPDDR4X provides high-speed performance with exceptional energy efficiency. Ideal for applications in automation, embedded systems, and industrial computing, it meets JEDEC standards and features a compact form factor.



Available in capacities from 2 GB to 8 GB, the TGL268 operates at ultra-low VDDQ voltages and supports data transfer rates up to 4266 Mbps. With a wide operating temperature range of -40°C to +95°C, this memory module ensures stable performance under extreme conditions. Its Partial Array Self-Refresh (PASR) function further enhances power efficiency, ensuring reliability while minimizing energy use. Broad compatibility ensures seamless integration across a variety of industrial systems.

With advanced BGA 200-ball packaging technology, the TGL268 delivers consistent performance and durability, even under harsh environmental conditions.

Key Features

High Performance and Low Power Consumption

The BIWIN TGL268 supports data rates up to 4266 Mbps, enabling high-speed data transfer to meet the demands of performance-critical industrial applications. It incorporates Partial Array Self-Refresh (PASR) technology to minimize power usage during idle or low-activity periods, effectively extending battery life and improving overall energy efficiency.

Stable Operation in Extreme Industrial Environments

Designed for harsh working conditions, the TGL268 delivers stable performance across a wide operating temperature range of -40°C to +95°C. This ensures long-term reliability and durability in environments subject to extreme thermal variations.

Versatile Capacity Options and Exceptional Compatibility

Available in capacities ranging from 2 GB to 8 GB, the TGL268 accommodates varying storage requirements across industrial scenarios. It offers broad compatibility with major platforms, facilitating seamless integration into complex industrial automation systems, embedded devices, and computing equipment.

Advanced Packaging for Enhanced Reliability

The BIWIN TGL268 leverages cutting-edge BGA 200-ball package, ensuring high integration and reliability. Through BIWIN's proprietary testing and packaging processes, the TGL268 undergoes thorough quality assurance, guaranteeing exceptional performance and durability throughout the manufacturing process.

Technologies

- S.M.A.R.T.
- LDPC Codes
- Power Loss Protection

Applications

- Industrial Automation
- Industrial Computer
- Embedded System

Specifications

Model Name	TGL268
Interface	LPDDR4X
Data Rate	4266 Mbps
Capacity	2 GB / 4 GB / 6 GB / 8 GB
Voltage	VDD1 = 1.8 V VDD2 = 1.1 V VDDQ = 0.6 V or 1.1 V
Programmable Read Latency	36 / 40 tCK
Programmable Write Latency	18 / 34 tCK
BUS	32-bit
Prefetch DDR Architecture	16n
Dimensions	10.00 x 14.50 x 0.90 mm
Package	BGA 200 Ball
Operating Temperature	-40°C to +95°C
Storage Temperature	-40°C to +95°C
Certifications	RoHS, REACH
Warranty	3-Year Limited

Order Information

Capacity	Part Number
2 GB	BWMZAX32H2A-16GI-X
4 GB	BWMZCX32H2A-32GI-X
6 GB	BWMEIX32H2A-48GI-X
8 GB	BWMZCX32H2A-64GI-X

1. Tested by BIWIN labs. Actual performance may vary due to systems, devices, or environment.
2. Maintenance and future updates are required throughout the product life cycle. Specifications are subject to change without notice.
3. The pictures are for illustration only. Actual products may vary due to product enhancements or changes.
4. Not all products are sold in all regions of the world.
5. Please visit www.biwintechnology.com for warranty details in your region.
6. For more information, please contact sales@biwintech.com.

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