

DFI NVIDIA Jetson GMSL Edge AI Computing Platforms

Unlocking High-Speed, Long-Distance AI Vision

Powered by the NVIDIA Jetson Orin platform, this series delivers up to 275 TOPS of AI performance. It features comprehensive GMSL2 support, enabling low-latency, long-distance (up to 15m), and anti-interference high-resolution video transmission for critical industrial applications.

Learn more about the DFI x NVIDIA Jetson GMSL platforms

DFI's Orin-based Series Featuring GMSL2 Compatibility






Feature	EN40-N	V6Xa-ORN	X6a-AGX	ENX60-N
Target Use	Compact Edge Visuals	Ultimate Rugged IP67	Mini AI Station	Outdoor Rugged IP67
Jetson SOM	Orin Nano™/NX	Orin Nano™/NX	AGX Orin™ Industrial	Orin Nano™/NX
Performance	Up to 157 TOPS	Up to 100 TOPS	Up to 275 TOPS	Up to 157 TOPS
GMSL2 Ports	2x GMSL2	Up to 8x GMSL2	Up to 8x GMSL2	2x GMSL2
Ruggedness	Industrial Fanless	IP67 Rated Enclosure	Industrial Fanless	IP67 Rated Enclosure
I/O Highlight	4x USB 3.2, 4x RJ45	M12 Waterproof I/O	10G LAN, 2x USB 3.2	M12 Waterproof I/O
Op. Temp	-20°C to 60°C	-20°C (-40°C opt.) to 70°C	-20°C to 60°C	-20°C to 60°C

Why GMSL2?

Automotive-Grade Ruggedness

Featuring superior electromagnetic interference (EMI) immunity, it operates reliably in harsh industrial or in-vehicle environments. By utilizing a single cable (Power-over-Coax) to simultaneously transmit video, signals, and power, it significantly simplifies wiring complexity and enhances system durability.

Real-Time Responsiveness

GMSL2 provides near-zero latency for uncompressed video transmission. This is crucial for high-speed autonomous robots (AMR/AGV) to perform real-time obstacle avoidance and environmental recognition, ensuring AI algorithms make precise decisions within milliseconds.

15m Long-Distance & High-Bandwidth Transmission

GMSL2 surpasses conventional USB and Ethernet solutions by delivering lossless 4K video over distances up to 15 meters. Designed for ultra-low latency and deterministic behavior, it's an ideal interface for integrating high-density camera arrays into large autonomous vehicles and industrial automation systems.

DFI | oToBrite

Leverage seamless vision with oToBrite GMSL2 automotive cameras, now available through DFI's strategic partnership.