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Innodisk Market Notes

January 2026

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DRAM Market & Product Update

Innodisk DRAM Business Unit

DRAM Market Outlook: AI-Driven Shortages & The Consolidation of DDR4 Supply

▪ Overall Market Dynamics

Recently, the “**memory super cycle**” has rapidly swept across the global market, creating a significant impact on the hardware manufacturing industry.

Driven by the explosive growth of **AI-related demand**, memory prices continue to rise, while supply constraints are becoming increasingly severe. Looking ahead, the memory shortage throughout 2026 appears unavoidable, with available supply becoming more limited and the imbalance between supply and demand continuing to intensify.

▪ Micron’s strategic shift

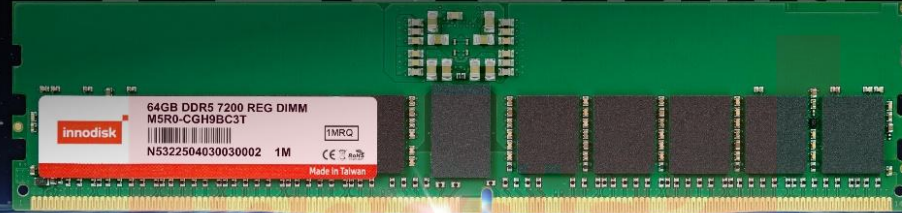
Micron has officially initiated the **discontinuation** of its 29-year-old consumer memory and storage brand, **Crucial**. As AI demand increasingly pulls capacity toward high-end DRAM, HBM, and enterprise-grade SSDs, Micron has chosen to concentrate its resources on higher value-added, higher-margin products to strengthen its long-term competitiveness. ([News link](#))

▪ DDR4 supply landscape restructuring

As the three major DRAM manufacturers progressively shift capacity toward DDR5 and HBM, DDR4 supply will shrink sharply. Based on current trends, by 2027, the **only stable global sources of DDR4 supply** are expected to be **Taiwanese manufacturers—Nanya and Winbond**.

DRAM Module New Product

7200 MT/s



Innodisk, a leading global AI solution provider, introduces the industry's first DDR5 7200 RDIMM as a major upgrade to its DDR5 series, delivering superior performance and the largest 64GB single-module capacity in the industrial market, driving innovation across the embedded and edge AI segments.

The DDR5 7200 series delivers a data transfer rate of 7200 MT/s, representing a 12.5% increase in speed, and offers capacities ranging from 8GB to 64GB, with RDIMM models available from 16 GB to 64 GB. It meets the requirements of enterprise data centers and edge AI servers, while also supporting the growing need for on-premises confidential computing, enabling sensitive data to be processed locally with stronger security and privacy protection.

To meet the diverse demands of data-intensive applications, the rest of the DDR5 7200 product family, including CUDIMM, CSODIMM, ECC CUDIMM, and ECC CSODIMM form factors, is set to roll out before Q1 2026, providing customers with a wider range of competitive options.

NAND Flash Market & Product Update

NAND Flash Market Trends



NAND Flash Industry Outlook

Kioxia's NAND Flash Makes a Generational Leap to 332 Layers, Targeting AI Opportunities in 2026

Japanese NAND Flash manufacturer Kioxia plans to begin mass production of its 10th-generation NAND Flash in 2026 at its Kitakami facility in Iwate Prefecture, Japan. The move aims to meet growing storage demands in AI data centers.

The 10th-generation NAND increases vertical memory cell layers from 218 to 332, boosting bit density by 59%, data transfer speeds by 33%, and power efficiency. While research and development took place at Kioxia's Yokkaichi plant in Mie Prefecture, mass production will be carried out at the Kitakami K2 fab, which started operations in September 2025. The facility previously produced 8th-generation NAND and is now transitioning to 10th-generation production.

Kioxia's strategy assigns high-performance NAND products to Yokkaichi and high-capacity NAND products to Kitakami. The 10th-generation NAND falls into the high-capacity category. The Yokkaichi plant is also expected to begin mass production of 9th-generation NAND for smartphones by March 2026. It will use CBA (CMOS directly Bonded to Array) technology to improve data transfer speed and power efficiency while controlling costs.



NAND Flash Industry Outlook

AI Infrastructure Expansion Fuels NAND Flash Market Growth

AI infrastructure expansion by cloud providers drove strong enterprise SSD demand in 3Q25, boosting the top five NAND Flash suppliers' combined revenue by 16.5% QoQ to nearly USD 17.1 billion. Improved supply-demand balance and a higher enterprise SSD mix lifted ASPs.

In 4Q25, continued AI demand for TLC and QLC enterprise SSDs is expected to support NAND Flash price increases of 20–25%, despite shipment growth being limited by normalized inventories and process migration losses.

Samsung led the market with USD 6.0 billion revenue and 32.3% share. SK Group ranked second with USD 3.53 billion. Kioxia showed the strongest growth, with revenue up 33.1% QoQ to USD 2.84 billion, driven by AI server demand and BiCS8 technology migration. Micron and SanDisk followed with USD 2.42 billion and USD 2.31 billion, respectively.

3Q25 NAND Flash前五大品牌商營收排名

Rankings	Company	Revenue (US\$M)		Market Share (%)	
		3Q25	QoQ (%)	3Q25	2Q25
1	Samsung	6,000.0	15.4%	32.3%	32.9%
2	SK Group (SK hynix + Solidigm)	3,525.6	5.7%	19.0%	21.1%
3	Kioxia	2,841.0	33.1%	15.3%	13.3%
4	Micron	2,423.0	15.4%	13.0%	13.5%
5	SanDisk	2,308.0	21.4%	12.4%	12.0%
Total of Top 5		17,097.6	16.5%	92.0%	93.0%

註1：2Q25匯率均值：美元兌日圓匯率：1:144.5；美元兌韓圓匯率：1:1,299.8
註2：3Q25匯率均值：美元兌日圓匯率：1:147.5；美元兌韓圓匯率：1:1,306.9
Source: TrendForce, Dec. 2025



PRODUCT HIGHLIGHTS



Innodisk Datacenter SSD

Reliability

Datacenters are running 24/7. High-reliability SSDs are essential to support the workload and data integrity.

Endurance

SSDs for datacenter should possess good endurance level for constant write and erase operations.

Performance

Datacenters process massive amount of data. High-performance and low latency is needed for the high data demand.

Security

SSDs with security features help to protect data against any unauthorized access or attack

Maintenance

Minimizing service down-time is critical. Reducing any debugging effort helps to improve datacenter operating efficiency.

Customization

Innodisk is able to customize the solution to meet the specific requirements of an application.

**Meeting the Key Aspects in
Modern Datacenters**



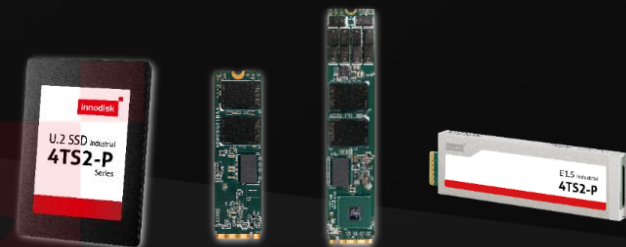
Product Highlight

Datacenter Boot SSD Selection



SATA 3TS9-P Series

Form Factors	2.5" SSD, M.2 2280		
Seq. Read/Write	550/520 MB/s (max.)		
Endurance (JEDEC 219, Enterprise workload, Warranty 5 Years)	Application	Recommended Capacity*	DWPD
	Mainstream	240GB-960GB	1
Operation Temp.	0°C - 70°C		



PCIe 4TS2-P Series

Form Factors	U.2, M.2 2280, M.2 22110, E1.S		
Seq. Read/Write	6950/4100 MB/s (max.)		
Endurance (JEDEC 219, Enterprise workload, Warranty 5 Years)	Application	Recommended Capacity*	DWPD
	Mainstream	240GB-960GB	1
Operation Temp.	0°C - 70°C		

*Higher capacity available. Please refer to product datasheet for more info.



Product Highlight

Data Center Storage SSD- PCIe Gen5



Features

- 3D eTLC/QLC
- NVMe 2.0
- Innodisk DSSD Feature Set
- Enhanced Thermal Management
- Customizable Features
- OCP 2.0

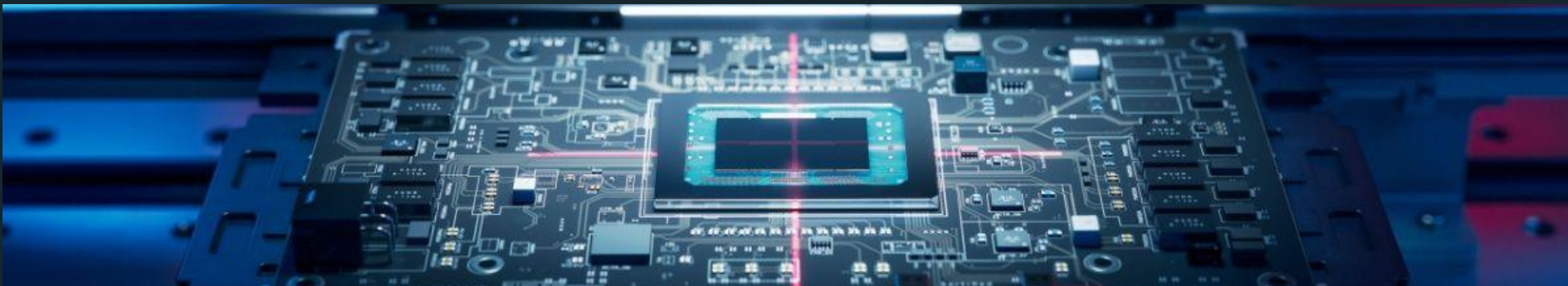
PCIe 5TS-P / 5QS-P Series

Form Factors	U.2, E1.S, E3.S, E3.L		
Seq. Read/Write	14 / 10 GB/s (max.)		
Endurance (JEDEC 219, Enterprise workload, Warranty 5 Years)	Application	Capacity*	DWPD
	Mainstream (eTLC)	1.9TB-15.3TB	1
	Mixed-use (eTLC)	1.6TB-12.8TB	3
	High-capacity (E3.L QLC)	128TB	TBA

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IPA Product Update

Innodisk Intelligent Peripheral Appliance



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INDUSTRIAL NETWORK UPGRADE WAVE

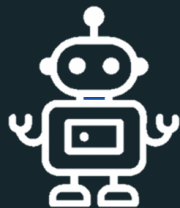
Market Opportunities And Strategy For High-speed Network



Intelligent Peripheral Appliance, Embedded Peripheral Div.

10G/25G NICs: Fast, predictable, and built for industrial AI and robotics

enable **low latency**, **deterministic control**, and **high-bandwidth data processing** for AI, factories, and robotics.



Humanoid Robots

High-speed networking is the foundation of coordination and intelligence.

"Sub- μ s synchronization enables multi-sensor coordination and more precise motion."



Smart Factory

Image and control traffic must be separated.

"No bottlenecks in defect detection — control traffic stays unaffected by image data."



Edge Server

The central hub for factory AI and robot collaboration.

"Aggregates multi-source data, accelerates AI model updates, and enables faster collaborative responses."



AI Inference

Enables AI models to make decisions in real time

2.5G
33 MIN

10G
9MIN

25G
3 MIN

"Real-time image transmission, uninterrupted inference, and faster data offload."



COMMUNICATION

High Speed GbE LAN

10GbE LAN



EGPL-T102
M.2 to 1 10GbE LAN
Marvell AQC113
Op. Temp. -20 °C to 60 °C



EGPL-T103/EGPL-T203
M.2 to 1/2 10GbE LAN
Intel E610-XAT/XA(I)T2
Op. Temp. 0 °C to 70 °C
Op. Temp. -40 °C to 85 °C
EST. Q1 2026

ELPL-T101/T201
PCIe 1/2port 10GbE RJ45
Intel E610-XAT/XA(I)T2
Op. Temp. 0 °C to 70 °C
Op. Temp. -40 °C to 85 °C
EST. Q1 2026

EGPL-T2F1
M.2 dual 10GbE SFP+
Intel X710-BM2
Op. Temp. 0 °C to 55 °C
EST. Q1 2026

ELPL-T2F1
PCIe dual 10GbE SFP+
Intel X710-BM2
Op. Temp. 0 °C to 55 °C
EST. Q1 2026

EGPL-T4F1
M.2 2280 four port 10 GbE SFP+
Intel X710-BM2
Op. Temp. 0 °C to 55 °C
Evaluation

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25GbE LAN

PCIe 25GbE SFP28 2port
Intel E830
Op. Temp. 0 °C to 65 °C
EST. Q2 2026

PCIe 25GbE SFP28 2port
Intel E835
EST. Q2 2026

PCIe 25GbE SFP28 4port
Intel E835
Evaluation

No longevity time means no EOL plan in 3 years, but IC EOL not included in this policy

Op. Temp=Operating Temperature (Ta)

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2025 December Product Release

SENSING INTELLIGENCE



EV3F-ZSM1-RXCF

GMSL2 3MP Fixed Focus
Camera Module



3MP @ 60 FPS



HDR, LFM



IP69K

- GMSL2™ Interface, 3MP @ 60fps (Max Resolution)
- Support HDR, LFM, ISP inside, with IP69K Housing
- Dynamic Range: 120dB
- Lens FOV (D/H/V) : 80°/64°/41°
- Platform Support : NVIDIA Jetson Orin
- Complies with CE / FCC Class A



LFM (LED Flicker Mitigation)

LFM (LED Flicker Mitigation) is a **camera sensor technology** designed to **reduce flickering effects caused by LED lighting** in captured images or videos. LED lights often flicker at high frequencies invisible to the human eye but can create visible banding or distortion in recordings.

LFM is essential for applications like **traffic monitoring**, **automotive cameras**, and **smart surveillance**, where clear imaging under various lighting conditions is critical. By minimizing LED flicker, LFM ensures more stable, accurate, and readable images, especially when capturing fast-moving scenes or critical visual information.



Without LFM

vs



With LFM



Scene: Automotive Camera



Scene: Traffic Monitor



Scene: Outdoor AMR



Scene: Outdoor Robotics



EV3F-ZSM1-RXCF

GMSL2
3M@ 60 FPS
LFM
HDR/ 120dB



EV2F-00M3-RHCF

GMSL2 2MP Fixed Focus
Camera Module



2MP @ 30 FPS



HDR



IP67

- GMSL2™ Interface, 2MP @30fps (Max Resolution)
- Support HDR, ISP inside, with IP67 Housing
- Dynamic Range: 120dB Lens
- FOV (D/H/V) : 72°/64°/39°
- Platform Support : NVIDIA Jetson Orin
- Complies with CE / FCC Class A



CAMERA MODULE SELECTOR

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¹DMIC
Microphone
*▲

Digital
Optional

Updated: 2025/12/17		Features												Lens & Dimension			
Item	Interface	Model Name	ISP	Sensor	Resolution	Frame Rate	HDR	Global Shutter	Low Light	DMIC ¹	External Trigger	*Housing	Feature	FOV (D/H/V)	Dimension L x W (mm)	Lens	Sample Ready
1	USB 2.0	 EV2U-SGR1-MMC1	Sonix	GalaxyCore GC2053	2MP	30 FPS			✓	▲				121°/102°/54°	38 x 38 32 x 32	M12	✓
2		 EV2U-RMR1-UMCB	Realtek	OmniVision OV2740	2MP	30 FPS				▲				77°/69°/42°	60 x 8	M5	✓
3		 EV2U-RMR2-MMC1	Realtek	OmniVision OV2732	2MP	30 FPS				▲				86°/72°/38°	58 x 25	M12	✓
4		 EV2U-SSM1-RLCF	Sonix	SONY IMX307	2MP	30 FPS			✓	▲	✓	▲		121°/102°/54°	38 x 38 32 x 32 41 x 41(H)	M12	✓
5		 EV2U-LOM1-RHCF	SunplusIT	onsemi AR0246	2MP	30 FPS	✓			▲		▲		976/88°/57°	38 x 38 32 x 32 41 x 41(H)	M12	✓
6		 EV2U-LOM2-GSCF	SunplusIT	onsemi AR0234	2MP	60 FPS		✓		▲	✓	▲		97°/87°/61°	38 x 38 32 x 32 41 x 41(H)	M12	✓
7		 EV8U-LSM1-RLCF	SunplusIT	SONY IMX415	8MP	30 FPS			✓	▲		▲		89°/81°/51°	38 x 38 41 x 41(H)	M12	✓
8		 EV8U-LSM1-RLCN	SunplusIT	SONY IMX415	8MP	30 FPS			✓			▲	Night Vision	89°/81°/51°	38 x 38 41 x 41(H)	M12	2025/ 01
9		 EV8U-LSM1-RLCA	SunplusIT	SONY IMX415	8MP	30 FPS			✓	▲		▲	Auto Focus	89°/81°/51°	38 x 38 41 x 41(H)	M12	✓
10		 EV8U-LSN1-RSCA	SunplusIT	SONY IMX179	8MP	20 FPS							Auto Focus	72° / 61° / 47°	62 x 9.5	M5	✓



CAMERA MODULE SELECTOR

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¹DMIC
Microphone

Digital

*▲

Optional

Updated: 2025/12/17		Features											Lens & Dimension				Sample Ready
Item	Interface	Model Name	ISP	Sensor	Resolution	Frame Rate	HDR	Global Shutter	Low Light	DMIC ¹	External Trigger	*Housing	Feature	FOV (D/H/V)	Dimension L x W (mm)	Lens	
11	MIPI CSI-2	 EV2M-OOM3-RHCF	onsemi	onsemi AR0246	2MP	30 FPS	✓				✓	▲		96°/88°/57°	30 x 30 39 x 39(H)	M12	✓
12		 EV2M-CSM1-RHCF	iCatch	SONY IMX290	2MP	120 FPS	✓		✓			✓		106°/92°/51°	46 x 46(H)	M12	✓
13		 EV2M-OOM1-UHCA	onsemi	onsemi AR0234	2.3MP	60 FPS		✓				▲		104°/86°/46°	38 x 38 46 x 46(H)	M12	✓
14		 EV2M-OOM4-GSCF	onsemi	onsemi AR0235C	2.3MP	120 FPS		✓				▲		TBD	30 x 30 39 x 39(H)	M12	2026/ 02
15		 EV2M-ZOM1-GSCV	Socionext	onsemi AR0234	2.3MP	60 FPS		✓					Varifocal	128°/103°/60°	42 x 42	M12	✓
16		 EV5M-CSM1-RTCF	iCatch	SONY IMX335	5MP	30 FPS	✓		✓			✓		130°/100°/73°	46 x 46(H)	M12	✓
17		 EV8M-CSM1-RTCF	iCatch	SONY IMX415	8MP	30 FPS			✓			✓		148°/125°/67°	46 x 46(H)	M12	✓
18		 EV8M-OOM1-RHCF	onsemi	onsemi AR0822	8MP	30 FPS	✓				✓	▲		107°/100°/67°	30 x 30 39 x 39(H)	M12	✓
19		 EVDm-OOM1-RHCF	onsemi	onsemi AR1335	13MP	20 FPS	✓					▲		91°/71°/52°	30 x 30 39 x 39(H)	M12	✓



CAMERA MODULE SELECTOR

¹ DMIC
Microphone
* ▲ Digital
Optional

	Updated:	2025/12/17						Features							Lens & Dimension			
Item	Interface	Model Name	ISP	Sensor	Resolution	Frame Rate	HDR	Global Shutter	Low Light	DMIC ¹	External Trigger	*Housing	Feature	FOV (D/H/V)	Dimension L x W (mm)	Lens	Sample Ready	
20	MIPI over Type-C	 EV2C-OOM3-RHCF	onsemi	onsemi AR0246	2MP	30 FPS	✓					▲		96°/88°/57°	30 x 30 41 x 41(H)	M12	✓	
21		 EV8C-OOM1-RHCF	onsemi	onsemi AR0822	8MP	30 FPS	✓					▲		107°/100°/67°	30 x 30 41 x 41(H)	M12	✓	





CAMERA MODULE SELECTOR

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¹ DMIC
Microphone

Digital

*▲

Optional

Updated:		2025/12/17					Features							Lens & Dimension			
Item	Interface	Model Name	ISP	Sensor	Resolution	Frame Rate	HDR	Global Shutter	Low Light	DMIC ¹	External Trigger	*Housing	Feature	FOV (D/H/V)	Dimension L x W (mm)	Lens	Sample Ready
22	GMSL2	 EV2F-OOM3-RHCF	onsemi	onsemi AR0246	2MP	30 FPS	✓					✓IP67		72°/64°/39°	42 x 41	M12	✓
23		 EV2F-CSM2-RTCF	iCatch	SONY IMX662	2MP	60 FPS			✓			✓IP67		TBD	42 x 41	M12	TBD
24		 EV2F-OOM4-GSCF	onsemi	onsemi AR0235CS	2.3MP	120 FPS		✓				✓IP67		TBD	42 x 41	M12	TBD
25		 EV2F-COM1-GSCF	iCatch	onsemi AR0234	2.3MP	60 FPS		✓				✓IP67		148°/118°/70°	42 x 41	M12	✓
26		 EV3F-ZSM1-RXCF	SONY ISX031	SONY ISX031	3MP	60 FPS	✓					✓IP69K	LFM	80°/64°/41°	25 x 25	M12	✓
27		 EV5F-CSM1-RTCF	iCatch	SONY IMX335	5MP	30 FPS	✓		✓			✓IP67		139°/105°/76°	42 x 41	M12	✓
28		 EV8F-CSM1-RTCF	iCatch	SONY IMX415	8MP	30 FPS	✓		✓			✓IP67		148°/125°/67°	42 x 41	M12	✓
29		 EV8F-COM1-RHCF	onsemi	onsemi AR0822	8MP	30 FPS	✓					✓IP67		119°/110°/72°	42 x 41	M12	2025/ 12
30		 EV8F-NSM1-RXCF	NextChip	SONY IMX728	8MP	30 FPS	✓					✓IP67	LFM	TBD	42 x 41	M12	TBD
31		 EVDF-OOM1-RHCF	onsemi	onsemi AR1335	13MP	20 FPS	✓					✓IP67		91°/71°/52°	42 x 41	M12	✓

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ARCHITECT INTELLIGENCE