FUSION WORLDWIDE

2026 | Quarter 1

# Market Intelligence & Lead Time Report

**A quarterly snapshot of market volatility, manufacturer developments, lead time trends, and the components under the most pressure.**

# Market Volatility Index

The semiconductor market is entering Q2 2026 in a structurally constrained state, driven by sustained AI demand, limited capacity, and geopolitical pressure. HBM and advanced GPUs are sold out for 2026, with lead times across key components extending beyond 50+ weeks. This reflects a long-term reallocation of capacity toward AI, creating widespread shortages in legacy and industrial segments. At the same time, pricing is accelerating across both advanced and legacy components, driven by tariffs and material constraints like T-Glass. **The result is a high-risk, increasingly unpredictable sourcing environment.**

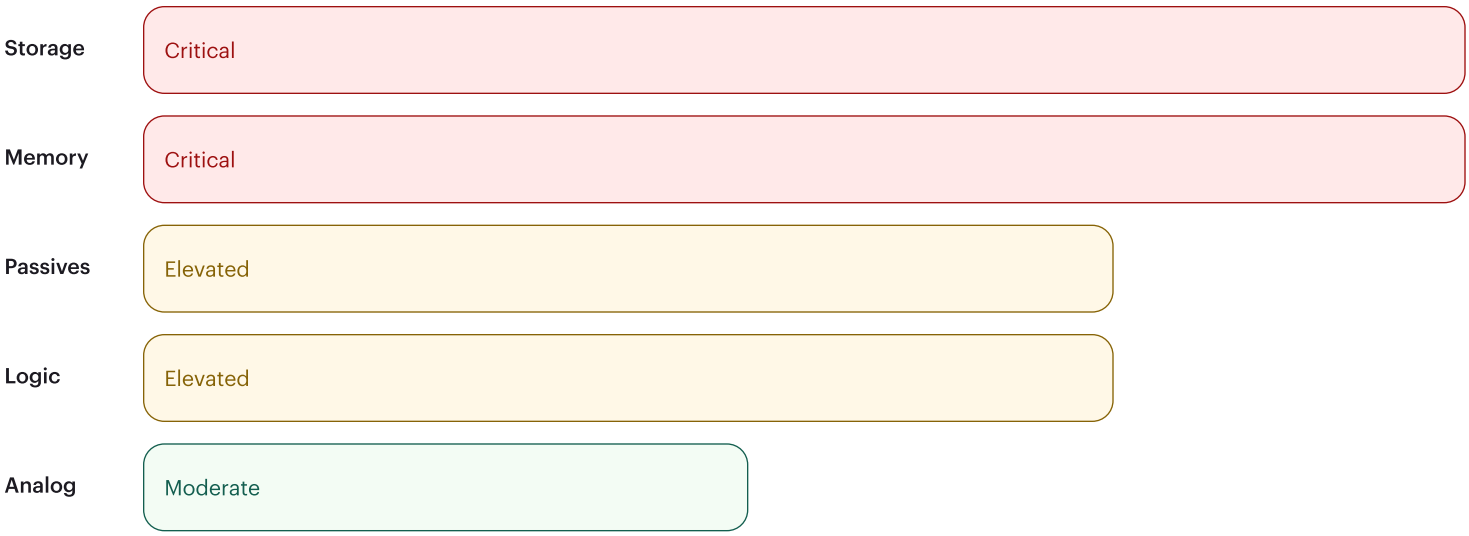
| Indicator | Q4 2025 Baseline | Q1 2026 Reading | Q2 2026 Forecast | Q1 → Q2 Change | Risk Status | Intelligence Context |
|---|---|---|---|---|---|---|
| **HBM Allocation Intensity** | 8.2/10 | 9.7/10 | 10/10 | +3% | Critical | 12–18 month lead times; 2026 capacity sold out. Hyperscalers signing LTAs to 2030. |
| **NAND Flash Availability** | 6.8/10 | 3.1/10 | 2.5/10 | -19% | Critical | 40% MLC capacity drop; manufacturers allocating NAND toward high-margin enterprise SSDs. |
| **DDR5 Availability/Allocation** | 7.5/10 | 9.5/10 | 10/10 | +5% | Critical | 2026 capacity is effectively sold out to hyperscalers. SK Hynix raising DDR5 prices by another 40% in Q2. |
| **DDR4 Pricing/Availability** | 5/10 | 7.8/10 | 8.5/10 | +9% | Elevated | Major vendors phasing out legacy DDR4 to prioritize HBM/DDR5. Q1 contract prices surged 105–110% QoQ. |
| **SSD (Enterprise/High-Capacity)** | 6.5/10 | 9.2/10 | 9.8/10 | +7% | Critical | Capacity pre-allocated to AI cloud giants. Manufacturers prioritizing 16TB+ units. Gartner predicts 130% price climb. |
| **Optical Receivers (800G/1.6T)** | 7/10 | 9.4/10 | 9.9/10 | +5% | Critical | AI backend network build-outs driving exponential demand. Severe EML and DSP shortages. Lead times 36–50 weeks. |
| **Networking Switches** | 18 Weeks | 32–44 Weeks | 48-52+ Weeks | +30% | Critical | Shift to 400G/800G Ethernet and InfiniBand creating backlog for high-radix switch silicon. Allocation only through Q4 2026. |
| **Small Core CPU Lead Times** | 42 Weeks | 52+ Weeks | 60+ Weeks | +15% | Critical | Mature-node (40nm–28nm) constraints as fabs prioritize RF/Power. Embedded 10nm parts extending into 2027. |
| **GPU Lead Times** | 34 Weeks | 40-52 Weeks | 52+ Weeks | +15% | Critical | Blackwell allocations locked through Q3 2026. RTX 5090 production limited by GDDR7 shortages until April. |
| **Legacy Analog Pricing Stability** | -8% YoY | -5% YoY | +10% YoY | +15% | Elevated | ADI and TI implementing 10–30% price increases on legacy parts starting late Q1/early Q2. |
| **All Voltage MOSFETs** | 20 Weeks | 30-52 Weeks | 40-60 Weeks | +25% | Critical | Infineon, Onsemi, and Vishay absorbing Nexperia overflow; lead times doubling as capacity hits limits. |
| **High Reliability Passives** | 14 Weeks | 20-24 Weeks | 28-32 Weeks | +33% | Elevated | T-Glass substrate shortage is the primary bottleneck. AI server demand driving +22% pricing. |

**Structural Capacity Constraints:** AI demand has fully absorbed 2026 supply. HBM and GPUs are sold out, with 12–18 month and 52+ week lead times. This is a long-term shift, not a short-term disruption.

**Memory Supply Compression:** HBM production is consuming memory capacity across the board. DDR5 is critically allocated, DDR4 pricing is up over 100% quarter-over-quarter, and NAND and SSD capacity is shifting to enterprise, tightening supply at every level.

**Constraints Across the Stack:** AI demand is driving shortages well beyond memory. Optical and networking components are running 36–52+ weeks, and enterprise SSDs are pre-allocated with prices rising.

## Market Volatility: Q1 2026 Product Risk Level




**Memory & Storage (0-90 Day Risk):** High likelihood of production disruption without immediate action.

**Logic & Passives (90-180):** Increasing lead times and potential allocation pressure.

**Analog (Monitor Closely):** Currently stable, but conditions can tighten quickly with demand rebound.

## Global Semiconductor Sales Trend (2024-2026E)


Global semiconductor sales reached a record $791.7 billion in 2025, up 25.6% year over year, and are projected to surpass $1 trillion in 2026, driven primarily by AI and data center demand. Logic and memory led growth in 2025, with strong gains across Asia-Pacific and the Americas. However, this growth is highly concentrated and masks underlying structural imbalances.


DDR4 and MCU lead times are expanding most significantly, reaching ~40 weeks and ~32 weeks in Q1 2026. Analog and passives are also trending upward, signaling broader supply tightening. This environment requires longer procurement windows and earlier allocation planning for critical components.

# Manufacturer Update

As of March 2026, the semiconductor market is being reshaped by accelerating AI infrastructure investment, with global sales projected to surpass $1 trillion. Capacity is rapidly shifting toward AI-driven components such as HBM, CoWoS-packaged ICs, and enterprise SSDs, creating downstream shortages across legacy, industrial, and automotive segments. As a result, widespread price increases are taking hold in Q1 and Q2, with some components rising by as much as 85%.

1. AMD
2. TSMC
3. Lattice Semiconductor
4. Nexperia
5. Skyworks
6. Qualcomm
7. Onsemi
8. Renesas
9. Vishay
10. GlobalFoundries
11. SK Hynix
12. Samsung Semiconductor
13. Micron Technology
14. Intel
15. Nvidia
16. STMicroelectronics
17. Microchip Technology
18. Infineon
19. NXP Semiconductors
20. Texas Instruments (TI)

## 1. AMD

Rapidly gaining market share in both desktop and server CPUs, with its server CPU capacity for 2026 effectively sold out, leading to extended lead times for high-core count SKUs.

- **Current Status:** AMD is rapidly gaining market share in both desktop (35%+) and server (20%+) segments, challenging Intel's dominance.
- **Lead Times:** Server CPUs (Genoa/Turin) are at 20–24+ weeks; high-core count SKUs facing 8-month+ delays.
- **Pricing:** No broad price hikes announced, but high-demand server SKUs seeing premium pricing in the open market.
- **Allocation / Supply Notes:** 2026 production capacity for server CPUs is effectively sold out.
- **Key Risk:** High-core count server CPUs are on strict allocation; secure multi-quarter forecasts.

## 2. TSMC

Advanced nodes are booked through 2026, with CoWoS packaging a key AI bottleneck, crowding out other segments.

- **Current Status:** Advanced nodes (2nm/3nm) are fully booked through late 2026.
- **Lead Times:** CoWoS packaging remains the primary bottleneck for AI chips, with no easing expected until late 2026.
- **Pricing:** Implementing new foundry price hikes for 2026 to offset rising energy and geopolitical risk costs.
- **Allocation / Supply Notes:** AI-driven demand is crowding out legacy node capacity, impacting industrial and consumer segments.
- **Key Risk:** Any disruption in Taiwan (geopolitical) would immediately trigger a global "Level 1" supply crisis.

## 3. Lattice Semiconductor

Facing severe supply constraints and unpredictable decommitments, largely due to the T-Glass substrate shortage.

- **Current Status:** Lattice is leading in secure control FPGAs (MachXO5-NX) but facing severe supply constraints.
- **Lead Times:** Exploded to 32–52 weeks (up from 8 weeks).
- **Pricing:** Potential for price adjustments due to T-Glass raw material costs.
- **Allocation / Supply Notes:** Unable to support New Product Introduction (NPI) demand; lead times for NPI exceed 44 weeks.
- **Key Risk:** Severe allocation constraints for automotive-grade and high-end devices.

## 4. Nexperia

Supply chain fractured by internal conflict, creating a sustained, high-risk global shortage.

- **Current Status:** CRITICAL. The internal conflict between Nexperia's Dutch headquarters and its Chinese parent (Wingtech) has escalated into a full-blown supply crisis. As of March 9, 2026, Nexperia China has begun independent production of bipolar discrete devices using its own 12-inch wafer platform, defying the Dutch parent company.
- **Lead Times:** 25–45+ weeks. Lead times are highly volatile and unreliable. Alternate manufacturers (onsemi, Vishay, Diodes Inc.) are also seeing extended lead times as they absorb overflow demand.
- **Allocation / Supply Notes:** Supply is fragmented and high-risk. Many OEMs are refusing to accept parts with China Country of Origin (COO) date codes post-dispute. The market is now split between European- and Chinese-origin Nexperia stock, each with its own supply chain and risk profile.
- **Key Risk:** The Nexperia situation is a structural supply chain failure, not a temporary disruption. Customers must assume supply will remain unstable through 2026 and actively qualify multiple alternate sources. Relying on a single Nexperia supply channel (either EU or China) is not a viable strategy.

## 5. Skyworks

RF demand is strengthening, with tightening supply emerging in advanced handset components.

- **Current Status:** Emphasizing RF front-end modules for mobile and connectivity; showcasing 6G innovations.
- **Lead Times:** Extending in 2025/2026, particularly for advanced handset components.
- **Allocation / Supply Notes:** Inventory levels managed tightly as bookings strengthen.
- **Key Risk:** Advanced handset components are tightening; monitor smartphone demand cycles.

## 6. Qualcomm

Stable recovery underway, but advanced-node constraints persist under AI and premium demand.

- **Current Status:** Prioritizing 5G/compute SoCs for mobile and networking.
- **Lead Times:** Pressures easing compared to 2024, but advanced nodes remain tight.
- **Allocation / Supply Notes:** Benefiting from normalized inventory and recovering channel demand.
- **Key Risk:** Advanced nodes are still under pressure from AI and premium smartphone demand.

## 7. Onsemi

Overflow from Nexperia is driving a surge in orders and sharply increasing lead times across power components.

- **Current Status:** Focusing on power and sensor ICs for automotive/industrial; absorbing Nexperia overflow.
- **Lead Times:** Switching regulators and MOSFETs doubled to 30–52 weeks.
- **Allocation / Supply Notes:** Wafer capacity constraints at Le Shan, China facility.
- **Key Risk:** Lead times have doubled; immediate action required for MOSFET supply.

## 8. Renesas

Automotive MCU supply remains constrained, with extended lead times continuing into 2026.

- **Current Status:** Targeting automotive MCUs and power ICs; timing unit acquired by SiTime.
- **Lead Times:** Extended to 20–45 weeks for automotive MCUs.
- **Allocation / Supply Notes:** Continued fab-light and outsourcing mix adjustments.
- **Key Risk:** Automotive MCU lead times remain among the longest in the industry.

## 9. Vishay

Escalating demand and cost pressure are triggering extended lead times and emergency price increases.

- **Current Status:** Emphasizing discretes and passives; announced emergency price adjustments in Q2 2026.
- **Lead Times:** Low voltage MOSFETs stretched to 40–52 weeks.
- **Pricing:** Confirmed emergency price adjustments on MOSFET and IC lines as of March 2, 2026.
- **Allocation / Supply Notes:** Absorbing overflow demand from other manufacturers.
- **Key Risk:** Emergency price hikes indicate severe cost/supply pressure.

## 10. GlobalFoundries

Specialty process demand is tightening capacity, with allocations increasing across key technologies.

- **Current Status:** Focusing on specialty processes (analog, RF, silicon photonics, automotive).
- **Lead Times:** Typically 16–26 weeks due to high demand.
- **Allocation / Supply Notes:** Expanding U.S. and European capacity.
- **Key Risk:** Specialty technologies are facing tighter allocations.

## 11. SK Hynix

Prioritizing HBM4 and enterprise DDR5 is driving higher pricing and limiting availability for non-LTA buyers in legacy memory.

- **Current Status:** Heavily prioritizing HBM3E/HBM4; inventory at a historic low of 4 weeks.
- **Lead Times:** 2026 capacity for HBM and DDR5 is largely sold out.
- **Pricing:** Raising DDR5 prices by an additional 40% in Q2 2026.
- **Allocation / Supply Notes:** Implementing a "post-settlement" pricing model.
- **Key Risk:** HBM/DDR5 availability is virtually zero for non-LTA customers.

## 12. Samsung Semiconductor

Prioritizing HBM4 and enterprise DDR5 is driving higher pricing and limiting availability for non-LTA buyers in legacy memory.

- **Current Status:** Shifting all focus to high-margin HBM4 and enterprise DDR5, leading the era of 30 trillion won quarterly profits.
- **Lead Times:** Automotive eMMC lead times pushed to 2027.
- **Pricing:** Proposing 110% month-over-month price increases for DIMMs and SSDs to major OEMs.
- **Allocation / Supply Notes:** 2026 capacity for HBM and DDR5 is largely sold out; implementing a "post-settlement" pricing model.
- **Key Risk:** Legacy memory (DDR4, MLC NAND) is being phased out rapidly; customers must migrate to newer tech or face total stockouts.

## 13. Micron Technology

AI-driven prioritization is tightening supply, with critical shortages emerging in automotive memory.

- **Current Status:** Focusing on AI-optimized memory; expects global memory shortages to persist until 2028.
- **Lead Times:** Effectively stopped quoting for automotive-grade eMMC; lead times to 2027.
- **Pricing:** Raising prices as part of the broader memory rally.
- **Allocation / Supply Notes:** Reduced output of mainstream DRAM and NAND to prioritize HBM.
- **Key Risk:** Automotive-grade eMMC is a critical stockout risk.

## 14. Intel

Intel is reallocating PC capacity to server CPUs, with price increases of 12-20% effective March 29, 2026, for certain lines.

- **Current Status:** Deploying advanced logic (Meteor Lake/Nova Lake); reallocating PC capacity to server CPUs.
- **Lead Times:** Embedded 10nm parts (Elkhart Lake) extending into 2027–2028.
- **Pricing:** Implementing 12–20% price increases effective March 29, 2026.
- **Allocation / Supply Notes:** Sapphire Rapids and Emerald Rapids Xeon CPUs remain scarce.
- **Key Risk:** Price increases take effect at the end of March; pull in orders now.

## 15. Nvidia

AI computing demand remains strong ahead of GTC 2026 (Rubin expected), but networking lead times are extended and RTX 5090 supply is constrained by GDDR7 shortages.

- **Current Status:** NVIDIA remains the dominant force in AI computing, with shares surging ahead of the GTC 2026 conference (March 16) where the Rubin architecture will be unveiled.
- **Lead Times:** 20–50 weeks for networking (ConnectX-7); Blackwell allocations are locked through Q3 2026.
- **Pricing:** Blackwell server editions seeing 25% price hikes, with some offers reaching $8,300–$8,800.
- **Allocation / Supply Notes:** RTX 5090 production is limited until April 2026 due to GDDR7 memory shortages.
- **Key Risk:** The shift to Blackwell and Rubin is creating a massive backlog; sales teams should prioritize customers with existing allocations.

## 16. STMicroelectronics

Automotive demand is keeping key MCU lines constrained despite broader inventory stabilization.

- **Current Status:** Prioritizing MEMS sensors and MCUs; automotive and industrial portfolios remain resilient.
- **Lead Times:** Typical 12–18 weeks; specific automotive lines (CAN/LIN) at 18–22 weeks.
- **Allocation / Supply Notes:** Stabilized inventory in some lines, but automotive remains tight.
- **Key Risk:** Automotive CAN/LIN lines are the most constrained.

## 17. Microchip Technology

Supply is improving overall, but legacy logic is being redirected to strategic customers.

- **Current Status:** Raising output of analog semiconductors; reallocating legacy logic to strategic customers.
- **Lead Times:** 8-bit/32-bit MCUs at 4–18 weeks; analog and timing at 4–26 weeks.
- **Allocation / Supply Notes:** Improving production utilization as bookings strengthen.
- **Key Risk:** Legacy logic is being diverted to strategic accounts; distributors must secure windows early.

## 18. Infineon

### Infineon

Implementing price hikes of up to 25% from April 1, 2026, as it benefits from AI data center demand but faces rising costs and persistent supply tightness.

- **Current Status:** Infineon is benefiting from robust AI data center demand but facing rising raw material and infrastructure costs.
- **Lead Times:** Lead times for switching regulators and MOSFETs have doubled to 30–52 weeks as they absorb Nexperia overflow.
- **Pricing:** Confirmed price increases of up to 25% effective April 1, 2026.
- **Allocation / Supply Notes:** Investing €2.7 billion in 2026 to accelerate capacity expansion for AI power solutions.
- **Key Risk:** Supply tightness will persist through 2026 as new capacity won't be fully operational until 2027.

## 19. NXP Semiconductors

T-Glass constraints are driving allocation volatility and unexpected decommitments.

- **Current Status:** Emphasizing automotive MCUs and i.MX processors.
- **Lead Times:** Extended to 16–20 weeks on high-demand automotive/industrial lines.
- **Allocation / Supply Notes:** Facing T-Glass substrate constraints impacting cross-category decommitments.
- **Key Risk:** T-Glass shortage is causing unpredictable decommitments.

## 20. Texas Instruments (TI)

Poised for significant price increases, potentially up to 85% effective April 1, 2026, across certain product lines, necessitating immediate customer notification.

- **Current Status:** TI is aggressively expanding its portfolio, recently acquiring Silicon Labs for $7.5B to lead in IoT wireless connectivity.
- **Lead Times:** Extended lead times of 180 days (26 weeks) for booking remain standard for automotive and AI segments.
- **Pricing:** CRITICAL. New reports indicate price hikes effective April 1, 2026, could reach up to 85% for certain lines.
- **Allocation / Supply Notes:** Enforcing strict quotation protocols requiring detailed end-customer data before releasing pricing.
- **Key Risk:** The April 1 price hike is significantly higher than previous estimates; immediate customer notification is required.

# Lead Times & Pricing

→ Stable ↑ Rising ↑↑ Strongly Rising ↑↑↑ Critical

| Product (Sub-Category) | Brand | Lead Time (Weeks) | Allocation | Pricing Trend |
|---|---|---|---|---|
| **Hardware** | | | | |
| **Chipsets** | | | | |
| **Desktop Chipsets** | Intel | 8-16 | Available | ↑ |
| | AMD | 8-14 | Available | → |
| | NVIDIA | 10-18 | Constrained | ↑ |
| **Embedded Chipsets** | Intel | 14-24 | Constrained | ↑ |
| | AMD | 12-20 | Available | → |
| | MediaTek | 14-22 | Constrained | ↑ |
| **Mobile Chipsets** | NVIDIA | 12-20 | Constrained | ↑ |
| | AMD | 10-18 | Available | → |
| | Intel | 12-20 | Constrained | ↑ |
| | Qualcomm | 14-22 | Constrained | ↑ |
| **Server Chipsets** | Intel | 16-26 | Allocation Only | ↑ |
| | AMD | 14-24 | Allocation Only | ↑ |
| | Broadcom | 16-28 | Constrained | ↑ |
| | Marvell | 14-22 | Constrained | ↑ |
| **CPUs** | | | | |
| **Desktop CPUs** | AMD | 8-14 | Available | → |
| | Intel | 10-16 | Constrained | ↑ |
| **Server CPUs** | AMD | 16-30 | Allocation Only | ↑ ↑ |
| | Intel | 20-40 | Allocation Only | ↑ ↑ |
| | Ampere | 14-26 | Constrained | ↑ |
| | Qualcomm | 16-28 | Constrained | ↑ |
| **Mobile CPUs** | Intel | 12-24 | Constrained | ↑ |
| | AMD | 8-14 | Available | ↑ |
| | Qualcomm | 12-20 | Constrained | ↑ |
| | Apple | 16-24 | Constrained | ↑ |
| **Embedded CPUs** | Intel | 14-26 | Constrained | ↑ |
| | AMD | 12-22 | Constrained | ↑ |
| | NXP Semiconductors | 14-24 | Constrained | ↑ |
| | Qualcomm | 14-24 | Constrained | ↑ |

| Product (Sub-Category) | Brand | Lead Time (Weeks) | Allocation | Pricing Trend |
|---|---|---|---|---|
| **Hardware (Continued)** | | | | |
| **CPUs (Continued)** | | | | |
| **Workstation CPUs** | Intel | 16-30 | Allocation Only | ↑ ↑ |
| | AMD | 14-24 | Constrained | ↑ |
| | Ampere | 16-28 | Constrained | ↑ |
| | Qualcomm | 14-22 | Constrained | ↑ |
| **Expansion Cards** | | | | |
| **Cable Assemblies** | NVIDA | 12-20 | Constrained | ↑ |
| | Amphenol | 8-14 | Available | → |
| | TE Connectivity | 10-16 | Available | → |
| | Molex | 10-16 | Available | → |
| **Host Bus Adapters** | Broadcom | 12-20 | Constrained | ↑ |
| | Microchip | 10-18 | Available | → |
| | Intel | 14-22 | Constrained | ↑ |
| | Marvell | 12-20 | Constrained | ↑ |
| **Network Interface Cards** | NVIDIA | 16-26 | Allocation Only | ↑ ↑ |
| | Broadcom | 12-20 | Constrained | ↑ |
| | Intel | 12-20 | Constrained | ↑ |
| | Marvell | 14-22 | Constrained | ↑ |
| **RAID Controllers** | Broadcom | 14-23 | Available | → |
| | Intel | 14-22 | Constrained | ↑ |
| | Microchip | 10-18 | Available | → |
| | Adaptec | 10-18 | Available | → |
| **Graphics** | | | | |
| **Accelerator Cards** | NVIDA | 16-30 | Allocation Only | ↑ ↑ ↑ |
| | AMD | 14-24 | Allocation Only | ↑ ↑ |
| | Intel | 12-20 | Constrained | ↑ |
| | Marvell | 14-22 | Constrained | ↑ |
| **Gaming Cards** | AMD | 8-14 | Available | → |
| | NVIDIA | 8-16 | Available | → |
| | Sapphire | 10-16 | Available | → |
| | Zotac | 10-16 | Available | → |
| **Professional Cards** | NVIDIA | 12-20 | Constrained | ↑ |
| | AMD | 10-18 | Constrained | ↑ |
| | PNY Technologies | 12-18 | Available | ↑ |
| | Intel | 12-20 | Constrained | ↑ |

| Product (Sub-Category) | Brand | Lead Time (Weeks) | Allocation | Pricing Trend |
|---|---|---|---|---|
| **Hardware (Continued)** | | | | |
| **Memory Modules (Continued)** | | | | |
| **Memory Modules** | | | | |
| **Desktop Modules** | Samsung | 20-32 | Allocation Only | ↑ ↑ ↑ |
| | SK Hynix | 20-28 | Allocation Only | ↑ ↑ ↑ |
| | Micron | 20-28 | Allocation Only | ↑ ↑ ↑ |
| | Kingston | 6-12 | Constrained | ↑ ↑ |
| **Laptop Modules** | Samsung | 20-32 | Allocation Only | ↑ ↑ ↑ |
| | SK Hynix | 20-28 | Allocation Only | ↑ ↑ ↑ |
| | Micron | 20-28 | Allocation Only | ↑ ↑ ↑ |
| **Server Modules** | Samsung | 24-52+ | Allocation Only | ↑ ↑ ↑ |
| | SK Hynix | 20-52+ | Allocation Only | ↑ ↑ ↑ |
| | Micron | 20-28 | Allocation Only | ↑ ↑ ↑ |
| | Kingston | 6-12 | Constrained | ↑ ↑ |
| **Motherboards** | | | | |
| **Desktop Motherboards** | ASUS | 8-14 | Available | → |
| | ASRock | 8-14 | Available | → |
| | Gigabyte | 8-14 | Available | → |
| | MSI | 8-14 | Available | → |
| **Server Motherboards** | Supermicro | 16-28 | Constrained | ↑ |
| | ASUS | 14-24 | Constrained | ↑ |
| | ASRock | 14-22 | Available | ↑ |
| | Gigabyte | 14-22 | Available | ↑ |
| **Power Supplies** | | | | |
| **Consumer Power Supplies** | Corsair | 8-14 | Available | → |
| | EVGA | 8-14 | Available | → |
| | Antec | 8-14 | Available | → |
| | Seasonic | 10-16 | Available | → |
| **Industrial Power Supplies** | Advantech | 14-28 | Constrained | ↑ |
| | Siemens | 16-28 | Constrained | ↑ |
| | Phoenix Contact | 14-24 | Available | ↑ |
| | Bekhoff | 16-28 | Constrained | ↑ |
| **Server Power Supplies** | Supermicro | 14-24 | Constrained | ↑ |
| | HP Enterprise | 16-28 | Constrained | ↑ |
| | Murata | 14-38 | Constrained | ↑ |
| | CISCO | 16-28 | Constrained | ↑ |

| Product (Sub-Category) | Brand | Lead Time (Weeks) | Allocation | Pricing Trend |
|---|---|---|---|---|
| **Hardware (Continued)** | | | | |
| **Peripherals & Accessories** | | | | |
| **Single Board Computers** | Raspberry Pi | 6-12 | Available | → |
| | NVIDIA | 14-26 | Constrained | ↑ ↑ |
| | Digi International | 10-18 | Available | → |
| | Advantech | 12-20 | Available | ↑ |
| **Transceiver Modules** | Coherent (Finisar) | 16-26 | Constrained | ↑ ↑ |
| | Intel | 14-22 | Constrained | ↑ |
| | Amphenol | 12-20 | Available | ↑ |
| | NVIDIA | 20-30 | Allocation Only | ↑ ↑ |
| **Storage** | | | | |
| **Consumer Hard Disk Drives** | Western Digital | 16-26 | Allocation Only | ↑ ↑ ↑ |
| | Seagate | 16-26 | Allocation Only | ↑ ↑ ↑ |
| | Toshiba | 12-20 | Constrained | ↑ ↑ |
| | Samsung | 14-22 | Constrained | ↑ ↑ |
| **Server Hard Disk Drives** | Western Digital | 20-40+ | Allocation Only | ↑ ↑ ↑ |
| | Seagate | 20-40+ | Allocation Only | ↑ ↑ ↑ |
| | Toshiba | 16-28 | Constrained | ↑ ↑ |
| | HGST | 10-28 | Constrained | ↑ ↑ |
| **Consumer Solid State Drives** | Samsung | 12-20 | Constrained | ↑ ↑ |
| | SK Hynix | 14-22 | Constrained | ↑ ↑ |
| | Western Digital | 12-20 | Constrained | ↑ ↑ |
| | Kioxia | 20-30 | Allocation Only | ↑ ↑ |
| **Industrial Solid State Drives** | Kingston | 10-18 | Available | ↑ |
| | Western Digital | 14-22 | Constrained | ↑ |
| | Transcend | 10-18 | Available | ↑ |
| | Micron | 14-22 | Constrained | ↑ |
| **Server Solid State Drives** | Samsung | 16-28 | Allocation Only | ↑ ↑ ↑ |
| | SK Hynix | 16-26 | Allocation Only | ↑ ↑ ↑ |
| | Western Digital | 16-28 | Allocation Only | ↑ ↑ ↑ |
| | Kioxia | 20-30 | Allocation Only | ↑ ↑ ↑ |
| **Semiconductors** | | | | |
| **Discretes** | | | | |
| **BJTs** | Microchip | 10-20 | Available | → |
| | Renesas | 12-18 | Available | → |
| | Toshiba | 10-18 | Available | → |
| | onsemi | 14-20 | Available | → |

| Product (Sub-Category) | Brand | Lead Time (Weeks) | Allocation | Pricing Trend |
|---|---|---|---|---|
| **Semiconductors (Continued)** | | | | |
| **Diodes** | onsemi | 14-20 | Available | → |
| | Vishay | 8-14 | Available | → |
| | STMicroelectronics | 14-16 | Available | → |
| | Littelfuse | 10-18 | Available | → |
| **Discretes (Continued)** | | | | |
| **IGBTs** | Infineon | 16-44 | Constrained | ↑ |
| | STMicroelectronics | 14-20 | Available | ↑ |
| | onsemi | 20-40 | Constrained | ↑ |
| | Microchip | 14-26 | Available | ↑ |
| **MOSFETs** | Vishay | 25-52 | Constrained | ↑ |
| | STMIcroelectronics | 13-26 | Available | ↑ |
| **Power Modules** | TDK | 14-28 | Constrained | ↑ |
| | Murata | 12-24 | Constrained | ↑ |
| | CUI Inc | 14-28 | Available | ↑ |
| | Vicor | 14-26 | Constrained | ↑ |
| **SCRs - Thyristors** | Infineon | 14-26 | Available | → |
| | STMicroelectronics | 14-20 | Available | → |
| **SiC Diodes** | Infineon | 16-30 | Constrained | ↑ |
| | onsemi | 16-28 | Constrained | ↑ |
| | STMicroelectronics | 16-24 | Constrained | ↑ |
| | Wolfspeed | 18-30 | Constrained | ↑ |
| **SiC MOSFETs** | Infineon | 16-39 | Constrained | ↑ |
| | onsemi | 16-31 | Constrained | ↑ |
| | STMicroelectronics | 17-20 | Constrained | ↑ |
| | Wolfspeed | 18-34 | Constrained | ↑ |
| **Electromechanical** | | | | |
| **Relays** | TE Connectivity | 12-14 | Available | → |
| | Panasonic | 14-30 | Constrained | ↑ |
| | Omron | 14-30 | Constrained | ↑ |
| | American Zettler | 16-30 | Constrained | ↑ |
| **Switches** | TE Connectivity | 10-12 | Available | → |
| | Panasonic | 14-30 | Constrained | ↑ |
| | ZF Electronics | 18-20 | Available | → |
| | Grayhill | 12-24 | Available | → |

| Product (Sub-Category) | Brand | Lead Time (Weeks) | Allocation | Pricing Trend |
|---|---|---|---|---|
| **Semiconductors (Continued)** | | | | |
| **Integrated Circuits** | | | | |
| **FPGAs** | Microchip | 8-32 | Constrained | ↑ |
| | Lattice | 25-35 | Constrained | ↑ ↑ |
| | AMD (Xilinx) | 16-30 | Constrained | ↑ |
| | Intel (Altera) | 16-28 | Constrained | ↑ |
| **Microcontrollers** | Microchip | 4-28 | Available | ↑ |
| | STMicroelectronics | 13-52 | Constrained | ↑ |
| | NXP Semiconductors | 16-52 | Constrained | ↑ |
| | Renesas | 14-24 | Constrained | ↑ |
| **Microprocessors** | NXP Semiconductors | 16-26 | Constrained | ↑ |
| | Texas Instruments | 12-22 | Available | ↑ |
| | Microchip | 10-20 | Available | → |
| | Qualcomm | 14-24 | Constrained | ↑ |
| **Memory - Flash** | Microchip | 4-26 | Constrained | ↑ |
| | Kioxia | 20-30 | Allocation Only | ↑ ↑ |
| | Toshiba | 14-24 | Constrained | ↑ ↑ |
| | Infineon | 12-26 | Constrained | ↑ |
| **Memory - RAM** | Renesas | 12-14 | Available | ↑ |
| | onsemi | 20-40 | Constrained | ↑ ↑ |
| | Microchip | 4-11 | Available | ↑ |
| | Alliance Memory | 8-30 | Available | ↑ |
| **Voltage Regulators - Switching** | Microchip | 8-20 | Available | ↑ |
| | Analog Devices | 12-18 | Constrained | ↑ |
| | Renesas | 12-18 | Constrained | ↑ |
| | Infineon | 14-24 | Constrained | ↑ |
| **LDO Voltage Regulators** | Microchip | 8-20 | Available | ↑ |
| | Renesas | 12-18 | Constrained | ↑ |
| | Analog Devices | 12-18 | Constrained | ↑ |
| | Toshiba | 10-18 | Available | ↑ |
| **Passive Components** | | | | |
| **Ceramic Capacitors** | Murata | 8-20 | Constrained | ↑ ↑ |
| | TDK | 16-20 | Constrained | ↑ ↑ |
| | Samsung Electro-Mechanics | 20-24 | Constrained | ↑ ↑ |
| | Kyocera | 20-24 | Constrained | ↑ ↑ |

| Product (Sub-Category) | Brand | Lead Time (Weeks) | Allocation | Pricing Trend |
|---|---|---|---|---|
| **Semiconductors (Continued)** | | | | |
| **Integrated Circuits (Continued)** | | | | |
| **Aluminum Electrolytic Capacitors** | Nichicon | 22-30 | Constrained | ↑ |
| | Panasonic | 18-40 | Constrained | ↑ |
| | Rubycon | 20-30 | Constrained | ↑ |
| | ELNA | 20-30 | Available | ↑ |
| **Tantalum Capacitors** | Vishay | 12-14 | Available | ↑ |
| | Yageo (KEMET) | 26-30 | Constrained | ↑ |
| | TDK | 16-20 | Constrained | ↑ |
| | AVX (Kyocera) | 14-22 | Constrained | ↑ |
| **Thick Film Chip Resistors** | Vishay | 10-14 | Available | → |
| | Panasonic | 12-16 | Available | → |
| | ROHM | 8-10 | Available | → |
| | Yageo | 10-14 | Available | → |
| **Fixed Inductors** | TDK | 16-20 | Constrained | ↑ |
| | Murata | 8-12 | Constrained | ↑ |
| | Panasonic | 23-25 | Constrained | ↑ |
| | Vishay | 10-12 | Available | ↑ |

# Commodities Update

The commodities market as of March 2026 is defined by acute scarcity and escalating prices across a broad spectrum of semiconductor and electronic components, primarily fueled by the insatiable demand from the AI sector. This has created a cascading effect, leading to significant supply constraints and strategic shifts in procurement.

### Key Highlights

- **Server CPUs are in critical shortage, with AMD and Intel experiencing sold-out capacity and extended lead times, accompanied by significant price increases.**
- **AI & Consumer GPUs face critical shortages for AI GPUs and tight supply for consumer RTX 5090 due to GDDR7 memory constraints.**
- **Integrated Circuits (ICs) and FPGAs are experiencing tight to critical shortages, driven by AI and automotive demand, with lead times extending significantly and prices rising.**
- **Passive Components (MLCC, Tantalum) are in a structural shortage, fueled by AI and EV demand, leading to widespread price hikes and extended lead times, exacerbated by the T-Glass substrate shortage.**
- **RDIMM / DDR5 Memory is in acute scarcity, with 2026 capacity sold out and Q2 prices expected to double, forcing customers into "capacity pre-booking" strategies.**
- **SSD (Enterprise & Consumer) and HDD (High-Capacity) are experiencing tight to critical shortages, with enterprise capacity pre-allocated to AI cloud giants and entire 2026 HDD capacity sold out, leading to extended lead times and rising prices.**
- **eMMC is in acute scarcity, particularly for automotive-grade units, with lead times extending to 2027 and legacy eMMC prices tripling.**

## Server CPUs

- **Market Condition:** CRITICAL SHORTAGE. Entire 2026 production capacity for AMD is sold out; Intel Xeon inventory at all-time low.
- **Lead Times:** 20–24+ weeks (AMD); up to 6 months (Intel Xeon).
- **Pricing Trend:** RISING. Intel price increases of 12–20% effective March 29, 2026.
- **Notable Constraints:** High-core count SKUs; allocation limits in China.
- **Sales Action:** Secure multi-quarter forecasts; transition customers to available nodes where possible.

## Desktop CPUs

- **Market Condition:** BALANCED TO TIGHT. AMD gaining significant share (35%+); Intel reallocating wafer supply to server CPUs.
- **Lead Times:** 4–12 weeks; high-end gaming/workstation CPUs tighter.
- **Pricing Trend:** STABLE TO RISING. Potential for spillover from server price hikes.
- **Notable Constraints:** High-end gaming SKUs; Intel 10nm capacity.
- **Sales Action:** Monitor AMD share gains; alert customers to potential Intel price hikes in late March.

## GPU (AI & Consumer)

- **Market Condition:** CRITICAL SHORTAGE (AI); TIGHT (Consumer). AI GPU demand is insatiable; consumer RTX 5090 supply constrained by GDDR7 shortages.
- **Lead Times:** 20–50 weeks (AI/Networking); RTX 4000/5000 Ada remain extended at 48–52 weeks.
- **Pricing Trend:** RISING. Blackwell server editions seeing 25% price hikes; RTX 5090 prices increasing by 5–10%.
- **Notable Constraints:** GDDR7 memory availability; TSMC CoWoS packaging.
- **Sales Action:** Prioritize customers with existing allocations for AI GPUs; avoid the spot market for RTX 5090.

## Motherboards

- **Market Condition:** TIGHT. Delivery windows fluctuate depending on memory (DDR5/RDIMM) availability.
- **Lead Times:** 12–20 weeks; highly variable.
- **Pricing Trend:** RISING. Driven by component cost increases (ICs, Passives).
- **Notable Constraints:** Standalone motherboard allocation is less predictable than integrated platforms.
- **Sales Action:** Bundle motherboard orders with memory to ensure matched delivery.

## Integrated Circuits (ICs)

- **Market Condition:** TIGHT. Delivery windows fluctuate depending on memory (DDR5/RDIMM) availability.
- **Lead Times:** 12–20 weeks; highly variable.
- **Pricing Trend:** RISING. Driven by component cost increases (ICs, Passives).
- **Notable Constraints:** Standalone motherboard allocation is less predictable than integrated platforms.
- **Sales Action:** Bundle motherboard orders with memory to ensure matched delivery.

## FPGA

- **Market Condition:** CRITICAL SHORTAGE. Driven by AI server demand consuming T-Glass raw materials.
- **Lead Times:** 32–52 weeks (AMD/Xilinx); 44+ weeks (Lattice).
- **Pricing Trend:** RISING. Potential for emergency adjustments.
- **Notable Constraints:** Automotive-grade and high-end devices; T-Glass substrate.
- **Sales Action:** Urge customers to design in alternatives or secure multi-year inventory.

## Passive Components (MLCC, Tantalum, T-Glass)

- **Market Condition:** STRUCTURAL SHORTAGE. AI servers use 300x more MLCCs than an iPhone.
- **Lead Times:** 20+ weeks; high-end tantalum capacitors reaching 30+ weeks.
- **Pricing Trend:** RISING. Yageo and KEMET raised prices by 15–30% in February/March 2026.
- **Notable Constraints:** T-Glass substrate shortage is a "primary bottleneck" affecting all high-end passives.
- **Sales Action:** Buffer stock for automotive and industrial customers who cannot compete with AI server volume.

## eMMC

- **Market Condition:** ACUTE SCARCITY. Severe shortages for 8GB and 16GB automotive-grade eMMC.
- **Lead Times:** 2027 for Samsung and Micron automotive eMMC.
- **Pricing Trend:** RISING. Legacy eMMC pricing has tripled.
- **Notable Constraints:** Kioxia and SanDisk quotations are scarce; authorized channels halting pricing.
- **Sales Action:** Secure 2026/2027 requirements now; plan for only 15–20% of requested allocations for SanDisk.

## RDIMM / DDR5 Memory

- **Market Condition:** ACUTE SCARCITY. 2026 capacity is sold out; demand-supply gap is at a 15-year peak.
- **Lead Times:** 54+ weeks for DDR5; HBM is on allocation only.
- **Pricing Trend:** RISING. DDR5 16Gb eTT chips jumped from $4.10 to $24.00 in six months. Q2 prices set to double again.
- **Notable Constraints:** Hyperscalers (Google, Meta, Amazon) have locked up 2026 capacity.
- **Sales Action:** SECURE INVENTORY NOW. Use "capacity pre-booking" strategies; avoid the spot market as prices are 6x higher than contract.

## SSD (Enterprise & Consumer)

- **Market Condition:** TIGHT. Enterprise capacity pre-allocated to AI cloud giants.
- **Lead Times:** 6+ weeks for standard OEM; high-capacity enterprise units are on allocation.
- **Pricing Trend:** RISING. Gartner predicts overall memory/SSD prices will climb 130% by year-end.
- **Notable Constraints:** Manufacturers are prioritizing high-density (16TB+) units; lower capacity (240GB-480GB) is being phased out.
- **Sales Action:** Alert customers using legacy low-capacity drives to transition to high-density units immediately.

## HDD (High-Capacity)

- **Market Condition:** CRITICAL SHORTAGE. Entire 2026 capacity for Seagate and WD is sold out.
- **Lead Times:** Extending into 2028 for some backorders.
- **Pricing Trend:** RISING. "Pay-to-Play" models requiring 100% prepayment are becoming standard.
- **Notable Constraints:** 20TB+ drives are the priority; 1TB/2TB units are reaching EOL.
- **Sales Action:** Secure multi-year forecasts from customers; standard lead-time quotes are no longer valid.

# Hottest Items by MPN

| Part Number | Model | Capacity / Generation |
|---|---|---|
| **AMD Server CPUs** | | |
| **100-000001443** | EPYC 9755 | 5th Gen Turin |
| **100-000001197** | EPYC 9375F | 5th Gen Turin |
| **100-000001554** | EPYC 9575F | 5th Gen Turin |
| **100-000000800** | EPYC 9334 | 4th Gen Genoa |
| **100-000001460** | EPYC 9745 | 5th Gen Turin |
| **100-000001523** | EPYC 9555P | 5th Gen Turin |
| **Micron SSD** | | |
| **MTFDDAK960TGA-1BC1ZABYY** | Micron 5400 PRO SATA | 960GB |
| **MTFDDAK3T8TGA-1BC1ZABYY** | Micron 5400 PRO SATA | 3.84 TB |
| **MTFDDAK480TGA-1BC1ZABYY** | Micron 5400 PRO SATA | 480GB |
| **Solidigm SSD** | | |
| **SBFPF2BV307T001** | Solidigm D5-P5336 U.2 | 30 TB |
| **Samsung SSD** | | |
| **MZ7L31T9HBLT-00A07** | Samsung PM893 SATA | 1.92TB |
| **MZQL23T8HCLS-00A07** | Samsung PM9A3 | 3.84TB |

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