Supply Chain Update: Procurement Guidance

BRADLEY A. GASTWIRTH
Global Head of Research and Market Intelligence
B.gastwirth@circulartechnology.net

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This note shares recent, on-the-ground updates gathered from discussions across the component supply chain in Asia along with company calls spanning substrates, materials, memory, storage, and core infrastructure components. It synthesizes what suppliers are signaling today about availability, allocation behavior, and pricing into clear, actionable guidance for procurement teams planning 2026 deployments. The focus is not on headlines, but on how supply conditions are evolving in practice and what procurement teams should prioritize now to reduce risk, secure allocation, and avoid late-cycle disruptions.

Executive Summary

- **AI/HPC-grade ABF substrates appear likely to remain structurally constrained** into 2026, with only partial easing possible in 2027.
- **The constraint increasingly appears material-driven**, with T-Glass acting as a key upstream bottleneck affecting both ABF and high-end CCL.
- **DDR5 (server-grade) remains very tight**, while HBM availability appears to be improving, though timing and configuration still matter.
- **NAND pricing has reset sharply**, with raw NAND up ~80% in November; strong enterprise SSD demand limits downside despite consumer softness.
- **High-capacity HDDs appear likely to remain on allocation** through 2026.
- **CPU supply appears tight** but manageable.
- **Handset and PC forecast cuts are being cited** broadly across the component supply chain, but appear concentrated in client-grade components and do not materially ease server- and AI-grade constraints.

PROCUREMENT TAKEAWAY

2026 supply risk shifts from headline shortages to allocation priority, upstream materials, and securing the exact components required for system builds.

Why ABF & CCL Shortages Matter

ABF substrates and high-end CCL are foundational components used across advanced electronics, not just AI accelerators.

ABF substrates sit between the silicon chip and the system board, routing power and signals from processors into servers and systems.

CCL (Copper-Clad Laminate) is the base material used to build multilayer PCBs that connect and support nearly every electronic system.

These materials are used across: AI accelerators and servers, CPUs and networking silicon, Data center motherboards and accelerator boards, Enterprise storage and networking equipment, Automotive and industrial systems.

Why this matters for procurement: When AI-grade ABF or high-end CCL is constrained, the impact is system-wide, delaying server builds, storage deployments, and network expansions even when silicon itself is available.

Important distinction: While ABF and CCL are used broadly, current supply pressure is concentrated in AI- and HPC-grade materials, which require higher layer counts, tighter tolerances, and specialized inputs. Lower-end applications (including many MCUs and consumer electronics) typically use simpler configurations and are less exposed to today's bottlenecks.

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2026 Procurement Operating Realities

ALLOCATION MATTERS MORE THAN PRICE.

In constrained categories, suppliers increasingly prioritize consistency, visibility, and strategic alignment over marginal price concessions.

EXACT SPECIFICATIONS MATTER.

In 2026, procurement challenges increasingly come from not being able to secure the exact components required for system builds, even when overall supply appears available.

CAPACITY ANNOUNCEMENTS LAG USABLE SUPPLY.

Material qualification, yield ramp, and platform validation often delay the impact of announced expansions by multiple quarters.

SHARED UPSTREAM INPUTS CREATE CROSS-CATEGORY RISK.

Stress in one component category can unexpectedly impact others due to common materials and manufacturing steps.

Deep Dive: ABF Substrates (AI / HPC)

WHAT APPEARS TO BE HAPPENING

AI/HPC-grade ABF demand continues to exceed effective supply despite announced capacity expansions. Industry participants indicate a potential 10–20% supply shortfall in 2026, with improvement but not full normalization in 2027.

WHAT'S CONSTRAINING SUPPLY

The limiting factor appears less about substrate build capacity and more about upstream materials, particularly T-Glass. T-Glass supply remains highly concentrated, with available volumes prioritized for high-end AI applications. Alternative suppliers are in qualification, but timelines remain uncertain.

PROCUREMENT IMPLICATIONS

- Allocation behavior is likely to persist even as nominal capacity increases.
- Substrate availability alone does not guarantee delivery; material-backed supply matters.
- Design and sourcing flexibility, where possible, becomes a key risk-management lever.

SYSTEM-LEVEL IMPACT

Even modest ABF shortfalls can cascade into delayed server shipments, forced SKU substitutions, or uneven quarterly deliveries.

COMPONENT RISK SNAPSHOT

ABF (AI/HPC-grade): Very tight
T-Glass / High-end CCL: Very tight
DDR5 (server-grade): Very tight
HBM: Tight but improving
NAND / Enterprise SSD: Firm to rising pricing
HDD (high-capacity): Allocation risk persists
CPU: Tight but manageable

Memory & Storage

DEMAND SIGNALS FROM HANDSETS AND PCS.

Across the Asia supply chain, handset and PC forecast reductions are being consistently communicated by multiple component suppliers. These cuts appear driven by a combination of end-demand softness and higher bill-of-material costs, particularly in memory.

WHY THIS DOES NOT MATERIALLY EASE 2026 RISK.

Handsets and PCs primarily consume client-grade components, which do not fully overlap with AI- and server-grade supply.

AI infrastructure, enterprise servers, and data center storage continue to absorb higher content per system, offsetting consumer softness.

As a result, handset and PC cuts do not appear sufficient to meaningfully loosen constraints.

PROCUREMENT TAKEAWAY.

- Consumer electronics softness should not be assumed to free supply for enterprise or hyperscale deployments.
- Category-level planning remains essential.

DDR5 (Server-Grade)

WHAT WE OBSERVED

DDR5 remains very tight, particularly for server-grade modules.

Demand spans AI servers, general compute, and enterprise refresh cycles simultaneously.

Higher memory content per system continues to pressure supply.

PROCUREMENT IMPLICATIONS

Allocation behavior is likely to persist through 2026.

Early commitments and vendor diversification matter more than spot pricing.

Late-cycle buying increases exposure to price escalation and partial fills.

HBM (High-Bandwidth Memory)

WHAT APPEARS TO BE HAPPENING

HBM availability appears to be improving into 2026 as capacity additions come online and better yields are happening. Still somewhat tight, but conditions appear much better than in prior years and will get loosen as the year progresses.

WHAT STILL MATTERS

Risk has shifted to timing, density, and configuration alignment with specific accelerator platforms. Substitution flexibility remains limited once designs are locked.

NAND / Enterprise SSD

WHAT WE OBSERVED

- Raw NAND pricing increased approximately 80% in November, signaling a structural pricing reset.
- Enterprise SSD demand continues to scale alongside AI infrastructure builds.

Do handset and PC cuts offset this? Consumer softness primarily affects client-grade NAND. Enterprise SSDs consume significantly more NAND per unit and rely on longer qualification cycles. **As a result, pricing and allocation pressure in enterprise SSDs appears likely to persist.**

PROCUREMENT IMPLICATIONS

- Budget risk skews upward into Q1.
- Early commitments and mix clarity matter more than spot availability.

HDD (HIGH-CAPACITY)

High-capacity HDD supply appears likely to remain allocation-constrained through 2026.

Demand from cloud storage, AI data lakes, and archival workloads continues to absorb capacity.

PROCUREMENT IMPLICATIONS

Allocation agreements and validated lead times should be treated as strategic planning inputs.

Buffer strategies should align with verified workload growth rather than generic inventory targets.

Procurement Playbook

Treat AI-grade ABF and server-grade DDR5 as allocation-managed categories through 2026.

Secure commitments tied to material availability, not just component output.

Lock memory and storage supply earlier in the cycle to reduce repricing risk.

Avoid over-optimizing designs around narrow component specifications.

Maintain consistent, credible forecasts; reliability increasingly influences allocation outcomes.

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774.418.0241 info@circulartechnology.net circulartechnology.net