China technology

Key takeaways from China AI PCB tour: AI upcycle intact, capacity and execution matter

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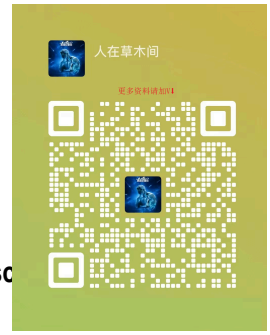
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We hosted a China PCB tour in the Greater Bay area this week, visiting several PCB equipment vendors and manufacturers, as well as an industry expert. Key takeaways included: 1) supply chain is optimistic on sustained AI PCB growth, supported by strong orders and multi-year visibility; 2) NVDA's Vera Rubin PCB mass production is happening, while Kyber NLV144 rack architecture remains under testing with multiple solutions; 3) optical module specification upgrades and potential adoption of CoWoP design are driving meaningful demand mSAP process; 4) domestic AI infrastructure buildout could bring additional demand for high-end AI PCB from 2027; and, 5) CCL pricing pressure is bifurcating, with manageable price and supply for high-end CCL, and severe pricing/shortage issue for low-end CCL. We remain positive on VGT's leadership in AI PCB segment, with on track capacity expansion supporting mass-volume delivery.

- **Market share follows quality volume delivery.** NVDA's Vera Rubin PCB has been moving to mass production stage, with incumbent and new PCB vendors participating in production. While initial allocation may be more balanced, we do not view new supplier entry as automatic share loss for current leading names, as final share should depend on scaled delivery capability, including yield stability, material readiness, capacity support and delivery speed. Separately, the Kyber NVL144 architecture remains under testing, with backplane complexity, warpage control, material selection and system-level validation still key bottlenecks. Even if Kyber is delayed, the impact on 2028 AI PCB TAM should be largely offset by stronger demand for existing NVDA generations and increasing adoptions of ASIC solutions.

- **New demand pools emerging.** Beyond AI servers, growing optical module shipment with upgrading toward 1.6T and higher-speed configuration, as well as future CoWoP-related platform PCB designs, are driving meaningful demand for mSAP process. Multiple PCB vendors are adding capacity for such opportunity, but market share should ultimately depend on yield performance and mass-volume delivery capability. Besides, domestic AI infrastructure buildout and specification upgrades could bring incremental demand for high-end AI PCB from 2027.

- **CCL pressure is bifurcated.** CCL supply tightness and price hikes are major margin debates. Our checks suggest that high-end CCL supply for AI applications is manageable with limited contract price increases, as customers prioritize supply assurance and allow price renegotiation. PCB makers with stable CCL access and yields should be better placed to defend margins. By contrast, low-end CCL price has risen more sharply under tight supply; PCB makers with high consumer and auto exposure could face more severe margin pressure, given tighter CCL supply and weaker ability to pass through cost inflation.



See page 2 for analyst certification and important disclosures, including non-US analyst disc