Taiwan Cooling Components

Addressing recent FAQ on ASIC and GPU liquid cooling project delay

Technology

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Investors have rising concerns about the delayed ramp of AWS' liquid-cooled Trainium 3 (T3) servers, in addition to previous concerns on the schedule of Google TPU v8 and Nvidia VR200 in the past month. For the AWS liquid-cooled T3 project, our team highlighted in our previous note in early October (link) the hiccups during downstream ramp, which have caused a 2-month delay of system-level component order shipments (cold plate module/manifold, chassis, rail kit, etc.) to mid to late 4Q26, but not seeing redesign requirements for the supply chain. However, we believe this is more of a short-term product transition period (from air cooling to liquid cooling) in 4Q26 (T3 liquid cooling mix only MSD-HSD% in 4Q, based on JPMe), while we should see more meaningful liquid-cooled T3 related orders in 1H27 with liquid cooling penetration reaching ~50% by mid-2027, in our view. As for the Nvidia VR200 and Google TPU v8 projects, they are entering mass production in Sep/Oct and Nov 2026, respectively, from the cooling vendors' perspective. We believe the delay concerns on these major ASIC and GPU liquid cooling servers have put pressure on related supply-chain vendors recently, especially AVC and Fositek within our coverage, as they are the major cold plate and QD (Quick Disconnect) vendors of these projects. However, we remain constructive on the liquid cooling space into 2027 with more meaningful liquid cooling penetration from 1H27, post the near-term shipment volatility in 4Q26.

- **AWS liquid-cooled T3 mass production schedule expected to be pushed out to mid-to-late 4Q26, but bigger ramp in 1H27.** From the cooling vendors' perspective, there is a 2-month delay in liquid-cooled T3 server shipments from Sep to Nov/Dec 2026, mainly given lower yields on downstream execution issues along with some component mismatches. This has led to lower liquid cooling penetration of AWS T3 at only HSD% in 4Q26 from the cooling component perspective (based on ~1k T3 liquid cooling order shipments, down from previous expectations of 2-3k equivalent racks in 4Q26), while from an ODM rack build perspective, T3 liquid cooling mix is even lower at ~5%, in our view. However, we believe the liquid-cooled server volume will ramp up meaningfully in 1H27 (especially from Mar/Apr) with smoother production, while 2027 full-year T3 liquid cooling mix could potentially reach >50%.
- **Google TPU v8t (Zebrafish) liquid cooling orders started shipping in small volumes from Oct 2026 and are expected to ramp in late-4Q26/1Q27.** There were market concerns on TPU delay from both the upstream chip level and PCB level in the past month. However, we believe the current schedule is more clear in the supply chain, with PCB makers expecting mass production in November (though still a delay from some bull-case expectations) and liquid cooling vendors starting small volume shipments in Oct and Nov, and more meaningful ramp should be in late 4Q26 or 1Q27.
- **Nvidia VR200 liquid cooling shipments just kicking off in 4Q26.** We believe the cold plate vendors have started shipping VR200 orders from late-Sep (mainly for Mellanox switch tray) and 4Q26 (Nvidia compute tray orders), although the volume still looks lower than previous expectations (4Q26 VR200 cold plate shipments totalling at 5-10k racks and ODM build at 5-7k now, based on JPMe, vs previous expectations of >10k) given sub-optimal yields at the downstream.

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Asia Vital Components(3017.TW/NT$3,145.00/OW), Fositek(6805.TW/NT$2,335.00/OW)

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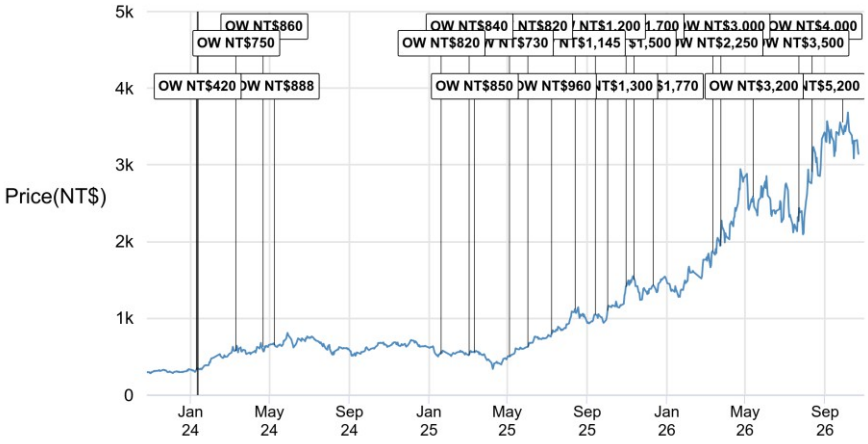
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Asia Vital Components (3017.TW, 3017 TT) Price Chart



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Initiated coverage Aug 26, 2004. All share prices are as of market close on the previous business day.
Break in coverage Feb 27, 2006 - Jan 11, 2024.

Date	Rating	Price (NT$)	Price Target (NT$)
11-Jan-24	OW	329.00	420
11-Mar-24	OW	574.00	750
22-Apr-24	OW	630.00	860
10-May-24	OW	654.00	888
20-Jan-25	OW	530.00	820
04-Mar-25	OW	519.00	840
12-Mar-25	OW	560.00	850
05-May-25	OW	507.00	730
03-Jun-25	OW	629.00	820
09-Jul-25	OW	795.00	960
14-Aug-25	OW	1120.00	1,145
14-Sep-25	OW	1050.00	1,200
03-Oct-25	OW	1100.00	1,300
31-Oct-25	OW	1410.00	1,500
13-Nov-25	OW	1505.00	1,700
12-Dec-25	OW	1430.00	1,770
13-Mar-26	OW	1875.00	2,250
25-Mar-26	OW	1945.00	3,000
14-May-26	OW	2585.00	3,200
23-Jul-26	OW	2265.00	3,500
13-Aug-26	OW	2910.00	4,000
29-Sep-26	OW	3555.00	5,200

Fositek (6805.TW, 6805 TT) Price Chart



Date	Rating	Price (NT$)	Price Target (NT$)
10-Dec-24	OW	1020.00	1,320
19-Jan-25	OW	663.00	1,230
04-Feb-25	OW	648.00	1,030
06-May-25	OW	445.00	830
02-Aug-25	OW	916.00	980
14-Aug-25	OW	1045.00	1,170
21-Aug-25	OW	1000.00	1,500
05-Nov-25	OW	1435.00	1,750
12-Nov-25	OW	1560.00	2,000
07-Apr-26	OW	1885.00	2,350
05-May-26	OW	2215.00	2,600
29-Sep-26	OW	2530.00	4,000

Source: Bloomberg Finance L.P. and J.P. Morgan; price data adjusted for stock splits and dividends.
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