NSIG (688126.SS): 300mm wafer capacity ramp-up to support growth; Photonics SOI in production ramp

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NSIG continues to ramp up its 300mm wafer capacity, which has reached 1.0mn wpm across its Shanghai and Taiyuan production sites, and targets to reach 1.2mn wpm by end-2026. The company's 300mm wafer sales volume increased by over 90% YoY in 1H26, supported by new customer additions and product expansion across logic, memory, CIS and power applications. We expect the continued capacity ramp and product mix upgrade towards prime wafers and high-end applications to support the company's longer-term revenue growth. However, higher depreciation during the new-capacity ramp and continued pressure on 200mm wafers could weigh on near-term margins. We are Sell rated on less upside compared to the average upside of 130% across our Great China Tech coverage (with 2027E P/E well above peers).

Positive on Photonics SOI demand: NSIG started early in 200mm and 300mm SOI wafer manufacturing and has expanded from RF to multiple applications, including Silicon Photonics. Management noted that the company's Photonics SOI wafers are expected to enter volume shipments in 2027. We see Photonics SOI as a medium-term growth opportunity for NSIG, supported by rising demand from AI optical applications.

Exhibit 1: NSIG capacity expansion plan





Capacity Expansion	12" wafer capacity (k wpm)	8" wafer capacity (k wpm)
2026 target	1,200	500
1H26	1,000	500
2025	800	500
1H25	750	500
2H24	650	500
1H24	500	500
2H23	450	500
1H23	370	500
2H22	300	500
1H22	Targeting 12" capacity to reach 600k wpm	

Source: Company data

Earnings revision: We revise up our 2026E net loss estimate to Rmb1,061mn from Rmb911mn previously, and revise our 2027E-28E net income estimates by -1% / +2%. We revise our 2026E-28E revenue estimates by -1% / +6% / +2%, with the higher 2027E-28E revenue estimates reflecting the continued ramp-up of 300mm

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wafer capacity and shipments. We lower our 2026E-28E GM estimates by 2.8ppt / 1.4ppt / 0.5ppt, as higher depreciation and initial underutilization during the new-capacity ramp more than offset the revenue uplift in 2027E. As utilization of the new capacity improves, we expect the margin pressure to narrow in 2028E, supporting the 2% increase in our net income estimate. We keep our opex ratio estimates largely unchanged.

Exhibit 2: Earnings revision

Rmb mn	2026E			2027E			2028E		
	New	Old	Diff	New	Old	Diff	New	Old	Diff
Revenue	5,369	5,404	-1%	7,718	7,263	6%	8,270	8,069	2%
Gross profit	181	336	-46%	1,792	1,791	0%	2,241	2,208	1%
Operating income	(761)	(606)	na	778	784	-1%	1,058	1,028	3%
Net income	(1,061)	(911)	na	930	939	-1%	1,195	1,168	2%
Margins									
Gross margin	3.4%	6.2%	-2.8ppts	23.2%	24.7%	-1.4ppts	27.1%	27.6%	-0.5ppts
Operating margin	-14.2%	-11.2%	-3ppts	10.1%	10.8%	-0.7ppts	12.8%	12.7%	0.1ppts
Net margin	-19.8%	-16.8%	-2.9ppts	12.1%	12.9%	-0.9ppts	14.5%	14.5%	0ppts

Source: Goldman Sachs Global Investment Research

Exhibit 3: NSIG P&L Summary

(Rmb m)	1Q25	2Q25	3Q25	4Q25	1Q26	2Q26	3Q26E	4Q26E	2024	2025	2026E	2027E	2028E
Revenue	802	896	944	1,075	1,084	1,233	1,463	1,589	3,388	3,716	5,369	7,718	8,270
Gross profit	(92)	(131)	(166)	(246)	(128)	(65)	146	228	(304)	(634)	181	1,792	2,241
Operating expense	(175)	(171)	(193)	(229)	(253)	(236)	(212)	(240)	(659)	(769)	(941)	(1,014)	(1,183)
Operating income	(266)	(302)	(359)	(476)	(382)	(301)	(66)	(11)	(963)	(1,403)	(761)	778	1,058
Pre tax profit	(292)	(241)	(366)	(989)	(576)	(440)	(81)	(26)	(1,164)	(1,889)	(1,122)	1,034	1,195
Net income	(209)	(158)	(265)	(876)	(483)	(482)	(73)	(23)	(971)	(1,508)	(1,061)	930	1,195
EPS (Rmb)	(0.08)	(0.06)	(0.10)	(0.27)	(0.15)	(0.15)	(0.02)	(0.01)	(0.35)	(0.55)	(0.32)	0.28	0.36
Margins / ratio													
Gross margin	-11.4%	-14.6%	-17.5%	-22.9%	-11.8%	-5.3%	10.0%	14.4%	-9.0%	-17.1%	3.4%	23.2%	27.1%
Opex ratio	-21.8%	-19.1%	-20.5%	-21.3%	-23.4%	-19.2%	-14.5%	-15.1%	-19.4%	-20.7%	-17.5%	-13.1%	-14.3%
Operating margin	-33.2%	-33.7%	-38.0%	-44.2%	-35.2%	-24.4%	-4.5%	-0.7%	-28.4%	-37.7%	-14.2%	10.1%	12.8%
Net margin	-26.0%	-17.6%	-28.1%	-81.5%	-44.6%	-39.1%	-5.0%	-1.5%	-28.6%	-40.6%	-19.8%	12.1%	14.5%
QoQ													
Revenue	-12%	12%	5%	14%	1%	14%	19%	9%					
Gross profit	nm	nm	nm	nm	nm	nm	nm	56%					
Operating income	nm	nm	nm	nm	nm	nm	nm	nm					
Pre tax profit	nm	nm	nm	nm	nm	nm	nm	nm					
Net income	nm	nm	nm	nm	nm	nm	nm	nm					
YoY													
Revenue	11%	6%	4%	18%	35%	38%	55%	48%	6%	10%	44%	44%	7%
Gross profit	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	891%	25%
Operating income	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	36%
Pre tax profit	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	16%
Net income	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	28%

Source: Company data, Goldman Sachs Global Investment Research

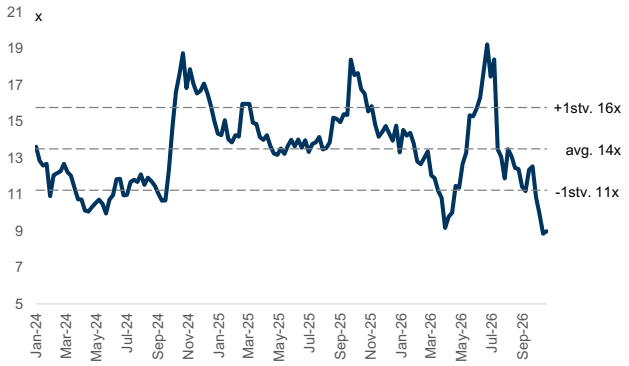
Valuation: We are Sell rated on NSIG with a revised 12-month target price of Rmb16.1 (vs. Rmb16.9 previously), based on our revised earnings and a 57.3x 2027E target P/E (vs. 59.6x previously), which is based on the global peer correlation between P/E and NI growth. Maintain Sell.

Exhibit 4: The target multiple is derived from the correlation between peers P/E and the sum of forward year earnings and OPM

	2027E P/E	2028E OPM	2028E NI YoY	Ratio
NSIG	57	27%	28%	1.0
	2027E P/E	**2028E OPM**	**2028E NI YoY**	**Ratio**
Centec	207	18%	62%	2.6
Accotest	34	45%	26%	0.5
Vanchip	37	9%	10%	2.0
LAM Research	24	42%	33%	0.3
SMIC - A	27	16%	22%	0.7
KLA	26	47%	18%	0.4
Piotech	51	24%	62%	0.6
Average				**1.0**

Source: Company data, Goldman Sachs Global Investment Research, Refinitiv Eikon

Exhibit 5: NSIG 12M forward P/S



Source: Eikon Datastream

Price Target Risks and Methodology - NSIG

We are Sell rated on NSIG with a 12m target price of Rmb16.1 based on near-term P/E. We derive our 2027E target P/E multiple of 57.3x from the correlation between global peers' P/E and earnings growth.

Key upside risks: 1) Stronger-than-expected customer demand could result in a positive impact on NSIG's ASP and rev growth. 2) Lower-than-expected depreciation level could lead to higher GM. 3) Faster yield improvement or better product mix leading to greater-than-expected profitability ramp.

688126.SS	12m Price Target: **Rmb16.10**	Price: **Rmb18.08**	Downside: **11.0%**

Sell

Market cap: Rmb59.8bn / $9.0bn
Enterprise value: Rmb63.8bn / $9.6bn
3m ADTV: Rmb1.5bn / $226.0mn
China
Greater China Technology
M&A Rank: 3
Leases incl. in net debt & EV?: No

GS Forecast

	12/25	12/26E	12/27E	12/28E
Revenue (Rmb mn) New	**3,716.0**	**5,369.2**	**7,718.3**	**8,270.0**
Revenue (Rmb mn) Old	3,716.0	5,404.4	7,262.9	8,069.2
EBITDA (Rmb mn)	(283.3)	524.3	2,167.6	3,556.2
EPS (Rmb) New	**(0.55)**	**(0.32)**	**0.28**	**0.36**
EPS (Rmb) Old	(0.55)	(0.28)	0.28	0.35
P/E (X)	NM	NM	64.2	50.0
P/B (X)	3.3	3.8	3.6	3.3
Dividend yield (%)	0.0	0.0	0.0	0.0
CROCI (%)	(0.6)	2.0	11.4	16.4

	3/26	6/26	9/26E	12/26E
EPS (Rmb)	(0.15)	(0.15)	(0.02)	(0.01)

Source: Company data, Goldman Sachs Research estimates, FactSet. Price as of 28 Oct 2026 close.

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