

China Technology

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SMIC/Hua Hong Semi 3Q23: in-line revenue; ASP/GPM pressure to persist into 4Q23E

Both SMIC and Hua Hong Semi posted in-line 3Q23 results but GPM pressure continued on lower UTR and ASP. Looking ahead, both companies expected stabilizing demand on smartphone/CE recovery, and highlighted concerns on high inventory in automotive market. On mature nodes, both expected stable demand into 2024 but lack growth momentum, and SMIC guided 8-inch UTR to remain at 50-70% in 2024. Overall, we believe PC/smartphone recovery remains the bright spot in 4Q23/2024E. Names to pay attention include Luxshare (002475 CH), Q-tech (1478 HK), BYDE (285 HK) and Sunny Optical (2382 HK), as well as Chinese foundries such as SMIC (981 HK) and Hua Hong (1347 HK).

- **Both reported in-line 3Q23 results but GPM under pressure on lower UTR and ASP.** SMIC's revenue growth of 3.9% QoQ and Hua Hong's revenue decline of 10% QoQ are in-line with previous guidance/consensus. 3Q GPM pressure continued due to UTR and ASP decline. In particular, SMIC's UTR/ASP decline were mainly due to larger commodity product mix, while Hua Hong's UTR/ASP were dragged by weak 8/12-inch utilization and customer demand.
- **Mixed 4Q guidance.** SMIC guided 4Q revenue to grow 1-3% QoQ and GPM of 16-18% on depreciation from capacity expansion, largely in-line with consensus. However, Hua Hong guided 4Q revenue of US\$ 450-500mn (midpoint -16% QoQ), 20% below consensus due to ASP decline but stable shipment. 4Q GPM of 2-5% was also well below consensus due to ASP decline and inventory write-down.
- **2024 outlook: flattish smartphone and inventory concerns on auto.** SMIC expected China's smartphone market recovery in 2H23E driven by inventory digestion and new models launch, while inventory correction for overseas' smartphone and consumer electronics will persist into 2024. Overall, SMIC expected smartphone/CE market to remain flattish in 2024. Both SMIC and Hua Hong believes the automotive segment will face inventory adjustment in the near term, despite Hua Hong's recent rush orders of discrete IGBT/SJ products.
- **Stable mature process demand but lack growth momentum; 8/12-inch ASP under pressure.** SMIC guided positive UTR improvement driven by 8-inch products including fast charging/PMIC/Bluetooth/Wifi demand recovery. However, on ASP, both SMIC and Hua Hong expected 8-inch/12-inch ASP will be under pressure, and mature process market will lack growth momentum going into 2024.
- **Encouraging capex to fuel capacity expansion.** SMIC revised up FY23E capex to US\$ 7.5bn (+26% YoY) given geopolitical tensions and continued capacity expansion. Hua Hong guided 8-inch capex of US\$ 50-100mn (vs. US\$ 130mn in 2023) and 12-inch capex of US\$ 2bn (vs. US\$ 1bn in 2023), and Wuxi Phase II construction completion and tools will start move-in in 4Q24E with target capacity of 83k in 2025.

Valuation Table

Name	Ticker	Mkt Cap (HK\$ mn)	Price (LC)	P/E (x)		P/B (x)		ROE
				FY23E	FY24E	FY23E	FY23E	
SMIC	981 HK	244803	23.4	23.2	22.7	1.11	4.8	
Hua Hong Semi	1347 HK	41900	20.2	11.6	13.8	0.67	6.8	

Source: Company data, CMBIGM estimates

China Technology Sector

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Key takeaways of SMIC (981 HK, NR) 3Q23 results:

1. 3Q23 Results

- Revenue: US\$1.62bn, -15% YoY/+3.9% QoQ, within previous guidance, below consensus (US\$1.64bn) by 1.1%, driven by increase in wafer shipment (+9.5% QoQ) in 3Q23
- GPM: 19.8%, -19.1ppts YoY/-0.5ppts QoQ, within previous guidance (18-20%), above consensus (19.2%) by 0.6ppts
- Net profit: US\$93.98mn, -80% YoY/-76.7% QoQ, below consensus by 47.2%
- Capacity 795.75kwpm, +5.5% QoQ
- Utilization rate 77.1%, vs. 78.3% in 2Q23 & 92.1% in 3Q22
- Capex of US\$2,134.7mn vs. US\$1,731.5mn in 2Q23

2. 3Q23 sales breakdown

By size

- 12-inch: 74.0% of total sales, +5.6ppts YoY/-0.7ppts QoQ
- 8-inch: 26.0% of total sales, -5.6ppts YoY/+0.7ppts QoQ

By application

- Smart Phone: 25.9% of total sales, -0.1ppts YoY/-0.9ppts QoQ
- Consumer Electronics: 24.1% of total sales, -2.4ppts YoY/-0.2ppts QoQ
- Internet of Things: 11.5% of total sales, -9.1ppts YoY/-0.4ppts QoQ

By geography

- China: 84.0% of total sales, +8.9ppts YoY/+4.4ppts QoQ
- America: 12.9% of total sales, -7.6ppts YoY/-4.7ppts QoQ
- Euroasia: 3.1% of total sales, -1.3ppts YoY/+0.3ppts QoQ

3. 4Q23 Guidance

- Revenue to increase by 1-3% QoQ, mid-point below consensus (US\$1.69bn) by 2.2%
- GPM: 16-18%, mid-point below consensus (18.7%) by 1.7ppts
- Raise 2023 capex to US\$7.5bn, +26% YoY (vs. previous flattish guidance)

4. Other highlights

- Stable foundry market, mature process demand growth on inventory reduction but lack of growth momentum
- Smartphone and consumer inventory correction delay in overseas market; China's market may show slight recovery but overall flattish in 2024
- High inventory in auto related products and customers tightened orders
- 40nm (CMOS/MCU/high-voltage DDIC) products and 50nm (CMOS/sensor/smartphone DDI/NOR Flash/BCD/power supply) capacity remain tight
- 8-inch products including fast charge/PMIC/Bluetooth/wifi demand recovery but flattish in 2024 with UTR at 50-70%
- 2023 capex was revised up on geopolitical tensions and for ensuring capacity ramp up
- 2023 capacity expansion; Tianjin 8-inch capacity to add 40k; 12-inch capacity to add 20k

Key takeaways of Hua Hong Semiconductor (1347 HK, NR) 3Q23 results:

1. 3Q23 results

- Revenue: US\$568.5mn, -9.7% YoY/-10% QoQ, below consensus (US\$575\$mn) by 1.1%, primarily due to decreased ASP
- GPM: 16.1%, -21.1ppts YoY/-11.6ppts QoQ below consensus by 0.9ppts, primarily due to decreased ASP and capacity utilization
- Net profit: US\$13.9mn, -86.6% YoY/ -82.3% QoQ, below consensus (US\$38.4\$mn) by 64%
- EPS: US\$0.009, -88.8% YoY/85% QoQ
- UTR:86.8%, vs. 102.7% in 2Q23 and 110.8% in 3Q22
- ROE: 1.2%, -13.2ppts YoY/-8.8ppts QoQ

2. 3Q23 sales breakdown

By fab

1) Hua Hong 8-inch:

- Revenue: US\$298.6mn, -22.3% YoY
- Capacity: 178K, flat QoQ
- UTR:78.4%, vs. 107.7% in 3Q22 and 92.9% in 2Q23

2) Hua Hong Wuxi (12-inch):

- Revenue: US\$269.9mn, +9.9% YoY
- Capacity:80K, +6.7% QoQ
- UTR:95.3%, vs.113.4% in 3Q22 and 112% in 2Q23

By technology platform

eNVM/standalone NVM/discrete/logic&RF/analog&PM

- Revenue: -32.8%/-15.3%/+23.3%/-15.6%/-17.1% YoY
- Account for 25.3%/6.5%/41.5%/8.8%/17.7% of total sales

By technology node

55&65nm/90&95nm/0.11&0.13μm/0.15&0.18μm/0.25μm/above 0.35μm

- Revenue: +11.2%/-38.2%/-26.6%/-35.9%/+141.9%/+12% YoY
- Account for 15.4%/15.4%/14.6%/6.2%/1.5%/46.9% of total sales

By end market

Consumer electronics/ Industrial & Auto/ Communications/ Computing

- Revenue: -20.4%/+7.0%/+32.4%/-33.9% YoY
- Account for 57.2%/28.0%/12.6%/2.2% of total sales

By Geography

China/North America/Asia/Europe/Japan

- Revenue: -2.4%/-39.4%/+28.5%/-37.8%/-55.9% YoY
- Account for 77.5%/8.6%/6.9%/6.1%/0.9% of total sales

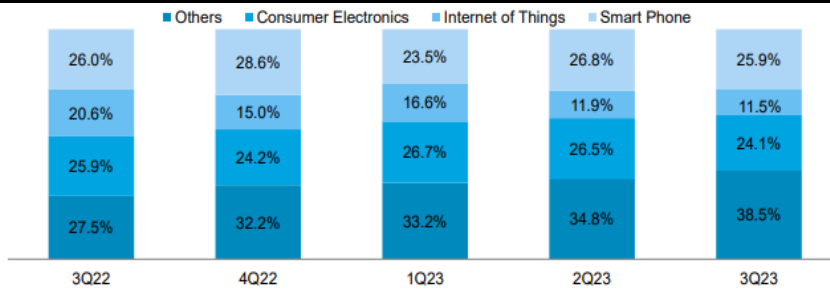
3. 4Q23 guidance

- Revenue: US\$450-500mn, mid-point below consensus (US\$563\$mn) by 20.0%
- GPM: 2%-5%, mid-point below consensus (17.7%) by 15.2ppts

4. Other highlights

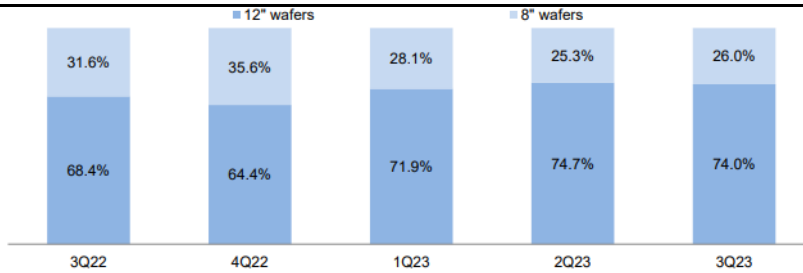
- 8/12-inch ASP under pressure
- Rush orders from discrete IGBT and SJ products
- Wuxi Phase I capacity to reach 94.5k in 1H24E; Phase II completion and tools move-in in 4Q24E
- 12-inch capacity allocation: 30-40% for discrete; 30% for analog and PMIC; the rest for logic and sensor
- FY24E capex allocation: 8-inch of US\$ 50-100mn and 12-inch of US\$ 2bn

Figure 1: SMIC: revenue by application in 3Q23



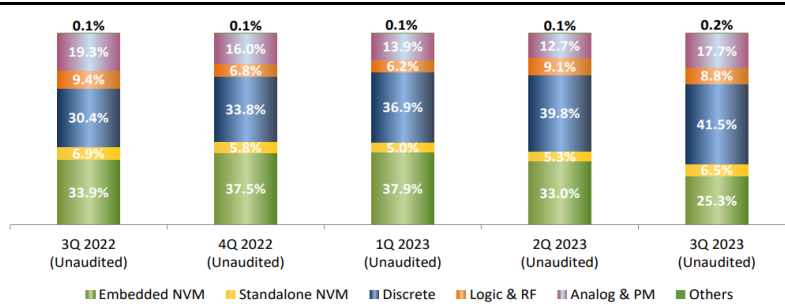
Source: Company data, CMBIGM estimates

Figure 2: SMIC: revenue size in 3Q23



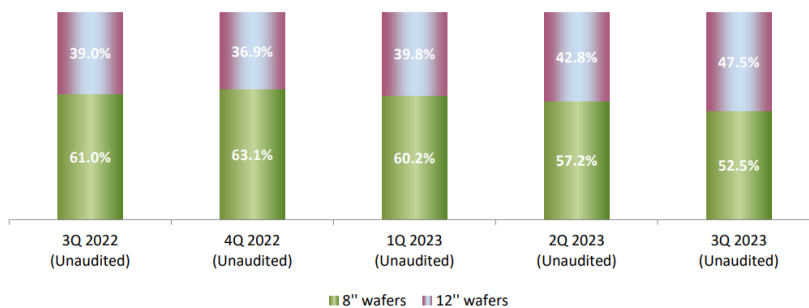
Source: Company, CMBIGM estimates

Figure 3: Hua Hong Semiconductor: revenue by technology platform in 3Q23



Source: Company data, CMBIGM estimates

Figure 4: Hua Hong Semiconductor: revenue by wafer size in 3Q23



Source: Company data, CMBIGM estimates

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