

China Technology

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Implications of UMC 3Q23: inventory correction, UTR/ margin under pressure, PC & smartphone rush order

UMC posted in-line 3Q23 results on strong computing/communication and better product mix. Looking ahead, mgmt. expects PC & smartphone inventory recovery but auto correction will persist into 2024. In addition, mgmt. expects 8-inch UTR and ASP to be under pressure but positive on 12-inch and specialty process demand. Overall, we believe investors will start to focus on PC/smartphone recovery in 4Q23/2024E. For stocks, we recommend to focus on Luxshare (002475 CH), Q-tech (1478 HK) and Sunny Optical (2382 HK), as well as Chinese foundries such as SMIC (981 HK) and Hua Hong (1347 HK).

- **3Q23 results in-line; strong computing/communication and better product mix.** UMC's 3Q revenue of -24%YoY/+1.4%QoQ is in-line with market expectation, driven by strong computing/communication segments, better product mix and favourable FX rate. Shipment decline of 2% QoQ but slight increase in ASP are in line with previous guidance. GPM of 35.9% is above consensus by 1.6ppts mainly on product mix.
- **Lower UTR in 4Q weighs on GPM.** Mgmt. guided 4Q wafer shipment to decline by ~5% QoQ but ASP will remain flat. UTR will be in the low-60% range compared with 67% in 3Q. Guided GPM is in the low 30% range which is slightly below consensus estimate of 34.4%.
- **PC& smartphone rush order and inventory recovery; auto inventory correction into 2024.** Mgmt. believes PC& smartphone demand gradually stabilized and expects rush orders in 4Q, which indicates an early sign of inventory recovery. However, automotive inventory is building up and mgmt. expects inventory correction will persist into 2024. In addition, industrial segment is better than auto given broad applications.
- **8-inch UTR/ASP under pressure; 12-inch solid demand.** Mgmt. expects 8-inch UTR and ASP to be under pressure given weak demand and intensified competition but 12-inch will focus on specialty process with solid demand and stable ASP. In addition, mgmt. reiterated that LTA is still intact with 25-30% coverage but is faced with adjustment in the short term. Looking into 2024, mgmt. expects UTR/shipment to grow YoY when cycle recovers.
- **Maintain FY23E capex; capacity expansion on track.** Mgmt. maintained FY23E capex guidance of US\$3bn and shared their capacity expansion plan: 1) P6 capacity to reach 12k in end 2023 and 32k in Sep 2024; 2) P3 Singapore capacity ramp up in Apr 2025.
- **Positive on smartphone supply chain.** Overall, we believe investors will start to focus on PC/smartphone recovery in 4Q23/2024E. We recommend to pay attention to names including Luxshare (002475 CH), Q-tech (1478 HK) and Sunny Optical (2382 HK), as well as Chinese foundries such as SMIC (981 HK) and Hua Hong (1347 HK).

Valuation Table

Name	Ticker	Mkt Cap (US\$ mn)	Price (LC)	P/E (x)		P/B (x)		ROE
				FY23E	FY24E	FY23E	FY23E	
SMIC	981 HK	21275	21.6	22.1	21.8	1.06		3.8
Hua Hong Semi	1347 HK	4277	18.6	12.3	13.8	0.79		10.5
TSMC	2330 TT	445537	544	17.8	14.7	4.09		24.8
UMC	2303 TT	18815	49.1	10.8	10.5	1.81		16.6

Source: Company data, CMBIGM estimates

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Key takeaways of UMC (2303 TT, NR) 3Q23 results:

1. 3Q23 Results

- Revenue: TWD57.069bn, -24.3% YoY/+1.4% QoQ, above consensus by 1.9%
- GPM: 35.9%, -11.4ppts YoY/-0.1ppts QoQ, above consensus by 1.6ppts due to product mix
- Net profit: TWD 15.971bn, -40.8% YoY/+2.1% YoY
- EPS: TWD 1.29, -40.1% YoY/+1.6% QoQ
- Blended ASP increased slightly in 3Q23
- Wafer shipment: declined by 2.3% QoQ
- UTR: 67% vs. 71% in 2Q23

2. 3Q23 sales breakdown

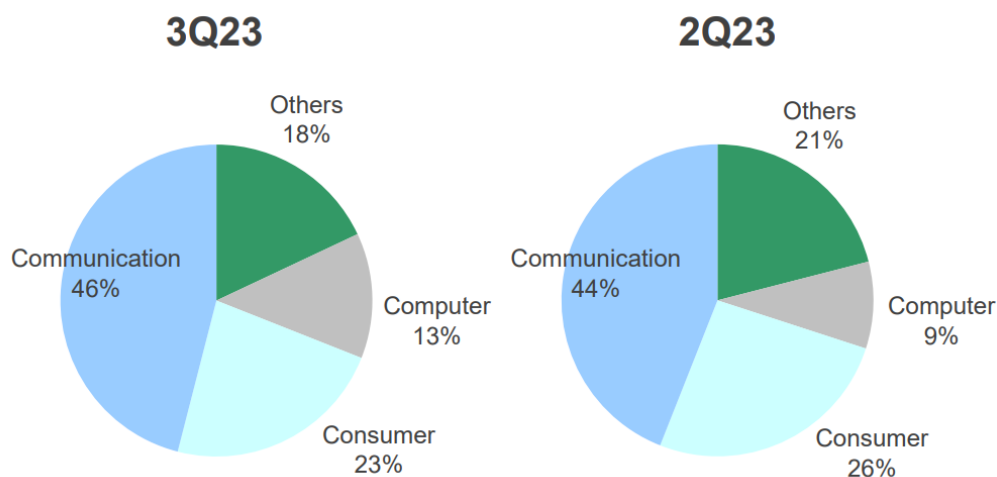
- Breakdown by technology
 - 14-28nm: 32% of sales, vs 29% in 2Q23
 - 28-40nm: 13% of sales, vs 12% in 2Q23
 - 40-65nm: 19% of sales, vs 23% in 2Q23
 - 65-90nm: 8% of sales, vs 10% in 2Q23
 - 90nm and above: 28% of sales, vs 26% in 2Q23
- Breakdown by application
 - Computer: 13% of sales, vs 9% in 2Q23
 - Communication: 46% of sales, vs 44% in 2Q23
 - Consumer: 23% of sales, vs 26% in 2Q23
 - Others: 18% of sales, vs 21% in 2Q23
- Breakdown by region
 - North America: 27% of sales, vs 27% in 2Q23
 - Asia Pacific: 58% of sales, vs 56% in 2Q23
 - Europe: 12% of sales, vs 12% in 2Q23
 - Japan: 3% of sales, vs 5% in 2Q23

3. 4Q23 Guidance

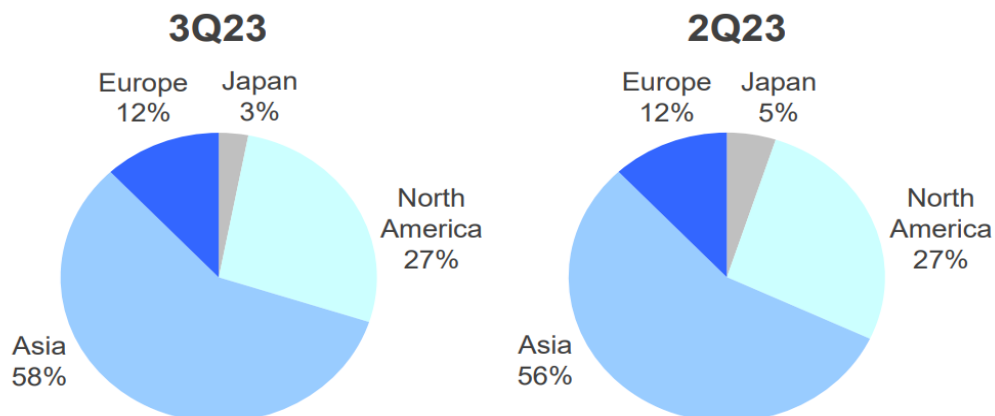
- Wafer shipment: decline by ~5% QoQ
- ASP: remain flat in USD
- GPM: in the low-30% range
- UTR: low-60% range
- 2023 Capex: US\$3bn unchanged

4. Other highlight

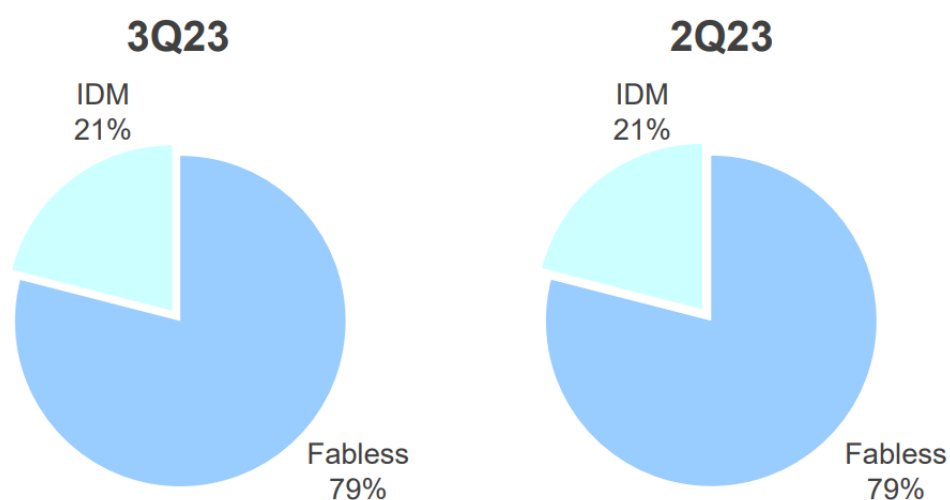
- Rush order from PC& smartphone in 4Q; auto inventory correction into 2024; industrial better than auto
- 8-inch UTR and ASP under pressure; 12-inch strong demand and stable ASP
- LTA:25-30%, intact but face adjustment in the short term
- 2024 outlook: UTR/Shipment YoY growth but focus on quarterly performance
- New capacity: P6 of 12 by end 2023 and 32k by Sep 2024; P3 capacity ramp-up in Apr 2025
- Capex: FY23E capex of US\$ 3bn remains unchanged

Figure 1: UMC: revenue by application 3Q23

Source: Company data, CMBIGM estimates

Figure 2: UMC: revenue by region 3Q23

Source: Company, CMBIGM estimates

Figure 3: UMC: revenue by customer type 3Q23

Source: Company data, CMBIGM estimates

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