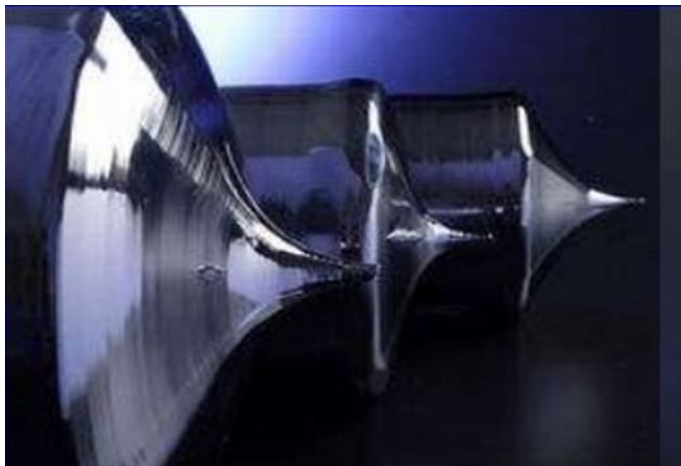


WAFER WORKS (6182 TT)

Flash Note

TSMC (2330 TT) 3Q21 earnings call memo & implication



TSMC (2330 TT)

3Q21 Earnings Call_20211014

Opening remarks

- 4Q21 Guidance

Revenue: USD15.4bn-15.7bn (3.5% to 5.5% q-q growth)

GM 51-53%

OPM 39-41%

Vaccine expenses will be booked in 4Q21, impact OPM 1 percentage point

- CAPEX

2021 30bn USD (unchanged)

- Profitability

GM higher than 50% is achievable

- Operation

2021 revenue to grow 24% y-y in USD

Inventory – customer will prepare higher level, higher than seasonal level, higher inventory level will last for longer time

Capacity remains tight in 2021 and 2022

Higher structural growth from 5G, HPC, IOT and automobile

- Japan Fab plan

Will build specialty fab in Japan, utilize 22 and 28nm (mature nodes)

Build fabs in 2022 and operations target is in late 2024

Still wait for board approval

- N3/N3E Status

N3 development is on track, production starts in 2H22, more tape out in first year than N5

N3E is scheduled one year after N3

Q&A

1. long-term technology roadmap in 2025, timing of new technology (JPM)

- TSMC is very competitive schedule in N3 and N2, N2 density and performance is the best in 2025
- confident that leadership will be maintained

2. CAPX upside, higher longer-term growth? (JPM)

- if growth outlook is good, will raise CAPEX
- revenue CAGR target will not change currently , will provide more info in 2022/1

3. mature node will be bottleneck since CAPEX is majorly in advanced node? (GS)

- will work with customers closely in mature node

4. China smartphone inventory level is high, end demand is weaker while foundry see higher growth (imbalance)? (GS)

- not rule out the possibility of inventory correction.
- If correction occurs, TSMC is less impacted.

5. how higher above 50% for GM target? depreciation outlook in 2022 (CS)

- depreciation growth will disclose in 2022/1
- GM guidance will disclose in 2022/1
- higher level of utilization and cost improvement is ongoing, margin will be better due to cost improvement

6. capital intensity, CAPEX per K (CS)

- CAPEX per K in advanced node is higher

7. ramp up of N3, cost structure of N3, density gain?

- N3 cost is higher than N5 due to complexity (use new and more expensive equipment)
- customer engagement is higher than N5, N3 revenue contribution will see in 1Q23.

8. Europe new fab? 28nm node driver, oversupply risk in mature node?

- not rule out possibility of building fab in Europe
- build 28nm fab is for specialty technology
- no oversupply risk for TSMC

9. JV with local government or customers or self-build factory just like in US and

China? (Citi)

- not consider JV normally, but will review it case by case

10. commission of zero-emission growth in 2025, how to achieve? (Citi)

- more energy efficient, minimize carbon emission, use green energy, use carbon trading (carbon rights), green manufacturing

11. chip shortage problems, especially in automotive, when can be fixed (MS)

- automotive supply chain is longer and more complex than expected
- can not solve the entire supply chain solely from TSMC
- ASEAN pandemic also results in this problem
- OEM will see several quarters to improve

12. price hike (5-20%), how to determine the price hike change for different customers/nodes? Impact on 2022 GM (MS)

- Pricing strategy remains strategic, not too optimistic, to collaborate with customers to support capacity expansion
- not comment on pricing strategy

13. Japan Fab capacity amount? (UBS)

- not include in 100bn USD CAPEX guidance in three years, will be incremental, but not disclose the amount currently

14. smartphone momentum is slower, forecast of smartphone market, 5G penetration (KGI)

- 5G grows faster than 4G while admitting smartphone market is weaker currently
- update information in 2022/1

15. capacity intensity to maintain high to 2023? Start to bear fruit from capacity intensity (higher capacity intensity in 2010-2021)? (KGI)

- 2021 capacity intensity is 50%
- higher capital investment is reasonable
- can expect bearing fruit afterwards

17. pricing adjustment is enough to cover the cost?

18. higher CAPEX will support continuing price adjustment or just one-time?

- not comment pricing adjustment

19. For N3 and N3E, EUV affect cost structure?

- cost is similar, but higher density, transition efficiency

20. more customers to do prepayments?

- in the past, only 1-2 do prepayment
- now higher capacity and secure commitment, more customers will do prepayments.

21. expect inventory correction? what segment will be more impacted? (Daiwa)

- capacity remains tight in 2021 and 2022
- not rule out possibility of inventory correction
- smartphone and PC market will be more impacted
- smartphone unit is decreasing while silicon demand will not decrease due to silicon content increases.

22. which node has higher inventory risk?

- higher inventory is caused by necessity, will be last for a period of time

23. smartphone and PC market weak?

- weak end market is partially due to component shortage

24. will decrease capacity in advanced node and increase in mature nodes since losing shares in mature share?

- not change CAPX plan
- capacity proportion will be more in mature nodes? Not yet

25. blended ASP growth in 2022?

- provide in 2022/1 and not disclose blended ASP.