

United Microelectronics Corp.

Intel and UMC to collaborate on 12nm foundry

Reiterate Rating: BUY | PO: 58.00 TWD | Price: 52.30 TWD

Breaking News

- UMC/INTC announced to co-develop 12nm based on INTC US capacities. Production to begin in '27. Aim at mobile/comms/networking
- +ve read on offering w/o capex, global footprint, shortened lead-time. Upside capped by profit-sharing, execution/client risk

Positive to UMC; low impact (if any) to TSMC

We see positive impacts for UMC, due to (1) widening offerings into 12nm without capex burden; (2) increasing global footprint; and (3) shortened business expansion lead-time. However, the upside could be capped by (1) earnings upside likely diluted by the profit-sharing scheme; (2) execution risks given the new collaboration; (3) potential client interest conflicts with Intel's presence; and (4) product competitiveness given lower cost effectiveness. As a side note, we see low impact for TSMC (Taiwan Semiconductor Manufacturing), due to (1) the remote timeline of 2027; (2) low revenue exposure in 12-16nm (8% in 2024, we estimate); and (3) UMC's lack of experience in 7nm and below, and thus Intel unlikely to see immediate improvement in the segment. The potential long-term implication on GFS (GlobalFoundries) if there is another source of mid-range foundry capacity that is based in US.

Teaming up with Intel on 12nm; US production in 2027

On 25 Jan (Asia time), UMC and Intel together announced their collaboration plan on 12nm platform development to address mobile, communication infrastructure and networking applications. Leveraging Intel's existing Arizona Fab 12/22/32 capacities (i.e., lower upfront investment) and FinFET design capability, as well as UMC's foundry experience, the production of the new co-developed 12nm process is expected to begin in 2027. The two firms aim to broaden their TAM (total addressable market) with a more geographically diversified supply chain and their complementary strengths.

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Equity

Brad Lin >>
Research Analyst
Merrill Lynch (Taiwan)
+886 2 2376 3728
brad.lin@bofa.com

Vivek Arya
Research Analyst
BofAS
+1 646 855 1755
vivek.arya@bofa.com

Angela Huang >>
Research Analyst
Merrill Lynch (Taiwan)
+886 2 2376 3726
angela.y.huang@bofa.com

Mike Yang >>
Research Analyst
Merrill Lynch (Taiwan)
+886 2 2376 3729
mike.c.yang@bofa.com

Stock Data

Price (Common / ADR)	52.30 TWD / 8.27 USD
Price Objective	58.00 TWD / 9.40 USD
Date Established	26-Oct-2023 / 26-Oct-2023
Investment Opinion	B-1-7 / B-1-7
52-Week Range	42.40 TWD-54.80 TWD
Market Value (mn)	20,884 USD
Market Value (mn)	653,914 TWD
Shares Outstanding (mn)	12,503.1 / 2,500.6
Average Daily Value (mn)	112.13 USD
Free Float	87.3%
BofA Ticker / Exchange	XUMIF / TAI
BofA Ticker / Exchange	UMC / NYS
Bloomberg / Reuters	2303 TT / 2303.TW
ROE (2023E)	18.2%
Net Dbt to Eqty (Dec-2022A)	-49.1%

Exhibit 1: Acronyms

Acronyms and the corresponding full names

Acronym	Full name
7/12/16nm	7/12/16-nanometer
FinFET	Fin Field Effect Transistor
INTC	Intel Corp.

Source: BofA Global Research

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Price objective basis & risk

United Microelectronics Corp. (XUMIF / UMC)

Our PO NT\$58 (ADR PO US\$9.4) is based on 12x 2024E P/E, which is at low- to mid-end of UMC's historical range since 2010, when it started to generate stable net income. In our view, P/E valuation is appropriate for UMC given its strong growth in earnings over past few years, future growth potentials with upside in TAM and market shares, and enhanced FCF generation capability. We think 12x P/E, on par with the average P/E level of Asian pure-play foundry peers, is justified, supported by resilient GPM/OPM/ROE profile and 6%+ dividend yield.

Downside risks to our PO are

- 1) softening end-demand to inflect the semis cycle, hurting the company's ASP/margin
- 2) greater competition pressure by tier-2 foundry peers, including Hua Hong, SMIC, PSMC, and GlobalFoundries, or by leader TSMC when it seeks to fill its utilization during industry downturn.

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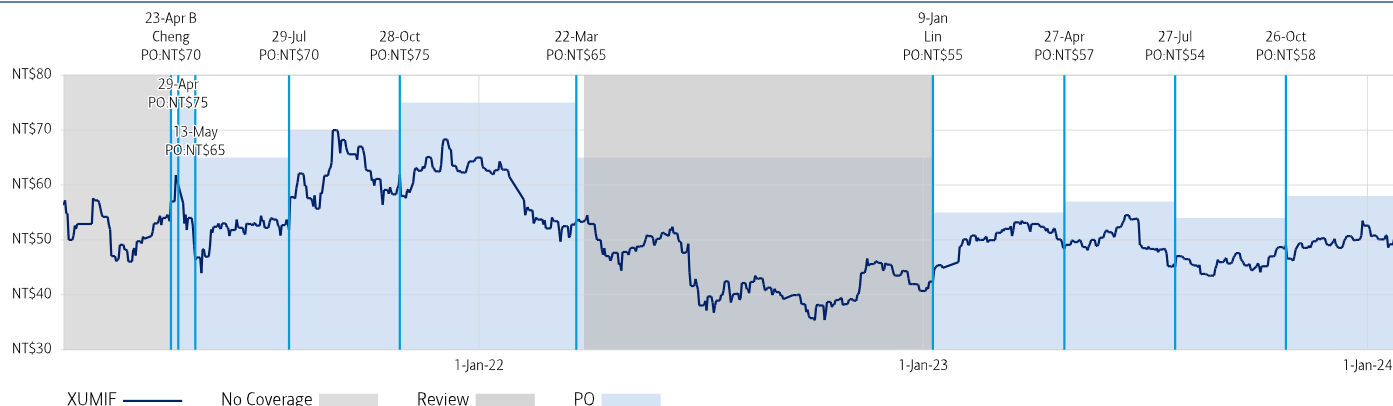
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XUMIF (XUMIF) Price Chart



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United Microelectron (UMC) Price Chart



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Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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