

Novatek Microelectronics Corp (3034 TT)

Mixed 1Q23, but Guiding a Continued Recovery

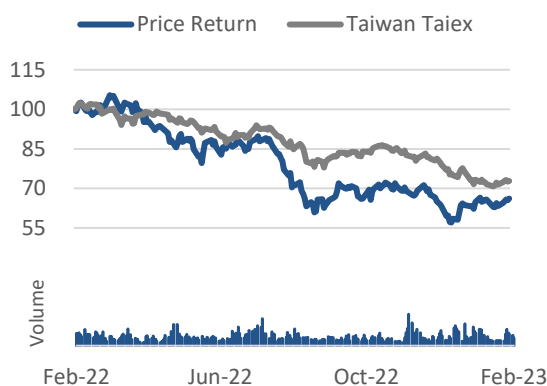
Investment Focus

Maintain OUTPERFORM

| | |
|---------------|------------|
| Rating | OUTPERFORM |
| Current Price | NT\$356.00 |
| Target Price | NT\$400.00 |

| | |
|---------------------------|---------------------------|
| Market cap | NT\$216.63bn / US\$7.23bn |
| Daily traded value (3mth) | US\$72.13mn |
| Shares in issue | 608.51mn |
| Free float (%) | 92% |
| 1 yr high - low | NT\$481.00-NT\$213.50 |

Note: Current Price NT\$356.00 is the close price on 7 Feb 2023



Source: Factset

| | 1mth | 3mth | 12mth |
|--------------------------|-------|-------|--------|
| Absolute | 1.1% | 43.8% | -7.8% |
| Absolute USD | 3.6% | 54.4% | -14.7% |
| Relative to Taiwan TaieX | -6.0% | 27.4% | 6.1% |

| (NT\$ mn) | Dec-21A | Dec-22A | Dec-23E | Dec-24E |
|--------------------|---------|---------|---------|---------|
| Revenue | 135,366 | 109,957 | 104,095 | 108,114 |
| (+/-) | 69% | -19% | -5% | 4% |
| Net profit | 38,866 | 27,970 | 20,281 | 21,276 |
| (+/-) | 29% | 25% | 19% | 20% |
| Diluted EPS (NT\$) | 63.87 | 45.96 | 33.33 | 34.96 |
| GPM | 49.8% | 46.3% | 39.3% | 39.2% |
| ROE | 55.2% | 41.7% | 31.2% | 30.4% |
| P/E | 6 | 8 | 11 | 10 |

Source: Company data, HTI

Raise TP to NT\$400, retain Outperform: 4Q22 earnings were a neutral to a slight positive due to a slightly lower margin guidance but positive comments on 2Q23 sequential trend in revenue, margin as well as inventories. In the mid to long term, we reiterate our view of a longer TV/IT restocking (into 2Q23), stabilized pricing as well as long term drivers of OLED DDI, AR/VR, auto TDDI and high-end TV SoCs. As such, we fine tune our estimates and lift TP to NT\$400, now based on 12x 2023E P/E from 11x 2023E P/E as a result of an improving visibility. Retain Outperform.

Strong results but a mixed guidance: 4Q22 revenue of NT\$22.4bn (+15% QoQ /-39% YoY) and GM of 40.5% (+2.1ppt QoQ/-10.9ppt YoY), both of which were better than expected, driven by TV and OLED DDIC. 4Q22 EPS of NT\$6.6 (-6% QoQ/-63% YoY) also came in above expectations. For 1Q23, mgmt. guides revenue of +1% QoQ and GM of 38.5% at mid-point, which is a slight miss due to ASP erosions. Mgmt expects the inventory digestion will continue into 1Q23 but expects the trend to stabilize by 2Q23. We note that its inventory dollar came down significantly by 30% QoQ in 4Q22. Looking further ahead, mgmt. expects revenue to grow into 2Q23 with a likely improvement in GM.

Rush orders to drive panel price & utilization: Driven by restocking, mgmt. expects IT restocking to continue into 1Q23 and TV to be flattish; Looking ahead, due to lowered inventories and low panel price levels (way below cash cost), we expect the panel price to rebound starting 2Q23, helping LDDIC pricing (and sentiment); as a result, the panel utilization rate will likely rise to 80-85% level in 2Q23, adding demand on panel components, amid an improving macro condition (i.e., China economy recovery, lower inflation, etc).

Margin to (finally) bottom out: Despite a slightly lower 1Q23 GM guidance, mgmt. expects GM to stabilize onwards, suggesting the cyclical bottom is above pre-COVID level. Structurally, we believe the pricing for LDDIC, OLED DDIC and even TDDI will likely to stabilize driven by the likely panel price recovery, low inventories (especially OLED DDIC) and an already low pricing (some reached pre-COVID level for TDDI). Meanwhile, the improving product mix and a favorable foundry cost will likely further support its margins.

Risks: 1) weak end-demand; 2) panel price pressure; 3) the oversupply of foundry; 4) competition.

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Earnings forecasts

4Q22 results better than expected

4Q22 revenue of NT\$22.4bn (+15% QoQ / -39% YoY) and GM of 40.5% (+2.1ppt QoQ / -10.9ppt YoY), both of which were better than expected, driven by TV and OLED DDIC. 4Q22 EPS of NT\$6.6 (-6% QoQ / -63% YoY) also came in above expectations. Inventory dollar amount declined by 30% QoQ and DOI decreased to 82 days (vs 3Q22 DOI at 139 days). Mgmt believes this inventory will stabilize in the near term.

1Q23 guidance came in a mixed bag

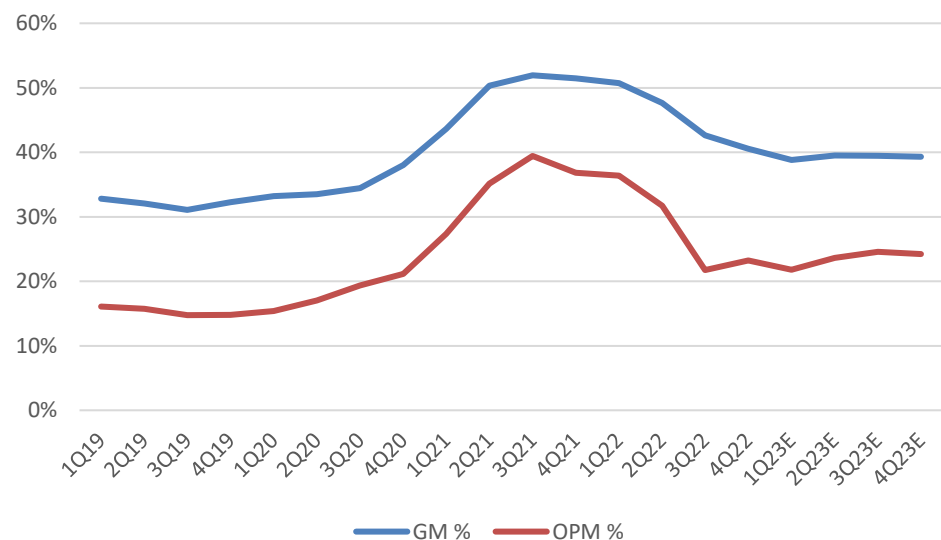
For 1Q23, mgmt. guides revenue of +1% QoQ and GM of 38.5% at mid-point, which is a slight miss due to ASP erosions. Mgmt expects the inventory digestion will continue into 1Q23 but expects the trend to stabilize by 2Q23. We note that its inventory dollar came down significantly by 4Q22. Looking further ahead, mgmt. expects revenue to grow into 2Q23 with a likely improvement in GM.

Figure 1: Novatek's 4Q22 results

| NTD mn | 4Q22 | 2Q22 | QoQ | 4Q21 | YoY | Consensus | Diff | HTI | Diff |
|------------------|--------|--------|-------|--------|--------|-----------|------|--------|------|
| Revenue | 22,420 | 19,564 | 15% | 36,542 | -39% | 20,452 | 10% | 22,038 | 2% |
| Gross profit | 9,090 | 8,344 | 9% | 18,803 | -52% | 8,082 | 12% | 8,809 | 3% |
| Opex | 3,881 | 4,089 | -5% | 5,352 | -27% | 3,933 | -1% | 4,130 | -6% |
| Operating profit | 5,209 | 4,255 | 22% | 13,451 | -61% | 4,148 | 26% | 4,679 | 11% |
| Pre-tax profit | 4,984 | 5,266 | -5% | 13,593 | -63% | 4,300 | 16% | 4,847 | 3% |
| Net profit | 4,043 | 4,305 | -6% | 10,935 | -63% | 3,475 | 16% | 3,878 | 4% |
| EPS (NT\$) | 6.64 | 7.07 | -6% | 17.97 | -63% | 5.72 | 16% | 6.37 | 4% |
| | | | ppt. | | ppt. | | ppt. | | ppt. |
| GM | 40.5% | 42.7% | (2.1) | 51.5% | (10.9) | 39.5% | 1.0 | 40.0% | 0.6 |
| OPM | 23.2% | 21.7% | 1.5 | 36.8% | (13.6) | 20.3% | 3.0 | 21.2% | 2.0 |
| Pretax margin | 22.2% | 26.9% | (4.7) | 37.2% | (15.0) | 21.0% | 1.2 | 22.0% | 0.2 |
| Net margin | 18.0% | 22.0% | (4.0) | 29.9% | (11.9) | 17.0% | 1.0 | 17.6% | 0.4 |

Source: Company results announcement, HTI estimates, BBG consensus

Figure 2: Novatek's GM and OPM trends



Source: Bloomberg, IDC, HTI

Earnings revision

By factoring in 4Q22 results and 1Q23 guidance, we revise our 2022/23E earnings estimates by +1%/0%, respectively.

Figure 3: 2022/23E earnings revisions

| NTD mn | 2021 | 2022 | | 2023 | | Revision | |
|-----------------------|---------|---------|---------|---------|---------|----------|------|
| | | Old | New | Old | New | 2022 | 2023 |
| Net sales | 135,366 | 109,574 | 109,957 | 104,425 | 104,095 | 0% | 0% |
| Gross profit | 67,392 | 50,660 | 50,941 | 41,074 | 40,907 | 1% | 0% |
| Op. profit | 47,773 | 32,199 | 32,729 | 24,674 | 24,612 | 2% | 0% |
| Pre-tax Income | 48,115 | 34,375 | 34,511 | 25,254 | 25,352 | 0% | 0% |
| Net profit | 38,866 | 27,805 | 27,970 | 20,203 | 20,281 | 1% | 0% |
| EPS | 63.87 | 45.69 | 45.96 | 33.20 | 33.33 | 1% | 0% |
| Key ratios (%) | | | | | | | |
| Gross margin | 49.8% | 46.2% | 46.3% | 39.3% | 39.3% | | |
| Operating margin | 35.3% | 29.4% | 29.8% | 23.6% | 23.6% | | |
| Pre-tax margin | 35.5% | 31.4% | 31.4% | 24.2% | 24.4% | | |
| Net profit margin | 28.7% | 25.4% | 25.4% | 19.3% | 19.5% | | |

Source: Company data, HTI estimates

Figure 4: Novatek's quarterly P&L forecast

| (NTD Billion) | 2021 | 1Q22 | 2Q22 | 3Q22 | 4Q22 | 2022 | 1Q23E | 2Q23E | 3Q23E | 4Q23E | 2023E |
|---------------------------|---------|--------|--------|--------|--------|---------|--------|--------|--------|--------|---------|
| Revenue | 135,366 | 36,512 | 31,461 | 19,564 | 22,420 | 109,957 | 22,835 | 25,608 | 27,951 | 27,700 | 104,095 |
| Gross Profit | 67,392 | 18,524 | 14,982 | 8,344 | 9,090 | 50,941 | 8,868 | 10,111 | 11,034 | 10,894 | 40,907 |
| Operating expenses | 19,618 | 5,244 | 4,998 | 4,089 | 3,881 | 18,212 | 3,890 | 4,055 | 4,170 | 4,180 | 16,295 |
| Operating Income | 47,773 | 13,280 | 9,985 | 4,255 | 5,209 | 32,729 | 4,978 | 6,056 | 6,864 | 6,714 | 24,612 |
| Int&other inc/(exp) | 342 | 485 | 512 | 1,011 | -225 | 1,782 | 185 | 185 | 185 | 185 | 740 |
| Pretax Income | 48,115 | 13,766 | 10,496 | 5,266 | 4,984 | 34,511 | 5,163 | 6,241 | 7,049 | 6,899 | 25,352 |
| Taxes or tax credit | 9,249 | 2,631 | 2,009 | 961 | 941 | 6,542 | 1,033 | 1,248 | 1,410 | 1,380 | 5,070 |
| Minority interest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net Income | 38,866 | 11,135 | 8,487 | 4,305 | 4,043 | 27,970 | 4,131 | 4,993 | 5,639 | 5,519 | 20,281 |
| Net EPS In NT\$ | 63.87 | 18.30 | 13.95 | 7.07 | 6.64 | 45.96 | 6.79 | 8.20 | 9.27 | 9.07 | 33.33 |
| Fully diluted shares (bn) | 609 | 609 | 609 | 609 | 609 | 609 | 609 | 609 | 609 | 609 | 609 |
| Margin Analysis: | | | | | | | | | | | |
| Gross margins | 50% | 51% | 48% | 43% | 41% | 46% | 39% | 39% | 39% | 39% | 39% |
| Operating margin | 35% | 36% | 32% | 22% | 23% | 30% | 22% | 24% | 25% | 24% | 24% |
| Pre-tax margin | 36% | 38% | 33% | 27% | 22% | 31% | 23% | 24% | 25% | 25% | 24% |
| Tax rate | 19% | 19% | 19% | 18% | 19% | 19% | 20% | 20% | 20% | 20% | 20% |
| Net margin | 29% | 30% | 27% | 22% | 18% | 25% | 18% | 19% | 20% | 20% | 19% |
| YoY % Change: | | | | | | | | | | | |
| Net revenues | 69% | 38% | -8% | -49% | -39% | -19% | -37% | -19% | 43% | 24% | -5% |
| Gross profit | 141% | 61% | -13% | -58% | -52% | -24% | -52% | -33% | 32% | 20% | -20% |
| Operating income | 223% | 84% | -17% | -72% | -61% | -31% | -63% | -39% | 61% | 29% | -25% |
| Net income | 229% | 90% | -13% | -65% | -63% | -28% | -63% | -41% | 31% | 37% | -27% |
| Fully diluted EPS | 229% | 90% | -13% | -65% | -63% | -28% | -63% | -41% | 31% | 37% | -27% |

Source: Company data, HTI estimates

Valuation & recommendation:

Our new TP of NT\$400 is based on 12x 2023E P/E, 20% higher than its mid-cycle level, as we may have passed the worst of the downturn, and Novatek's GM is likely to stay at higher than pre-COVID level. On the other hand, the industry dynamics is challenging due to competition, but the pressure appears much lower than before, as TDDI price has down to a pre-COVID level, and the migration to OLED continues. Our valuation method is based on a target P/E multiple approach, which is generally used for downstream makers.

Figure 5: Novatek 12-month forward P/E

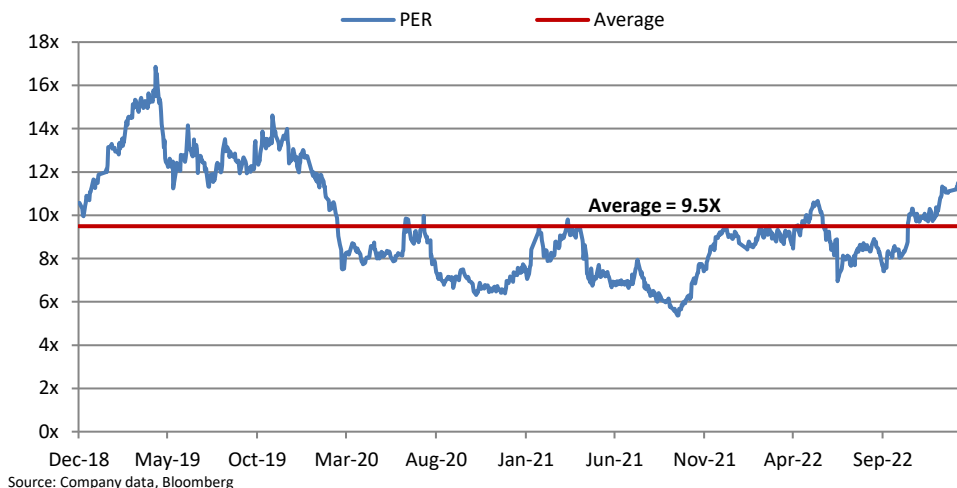
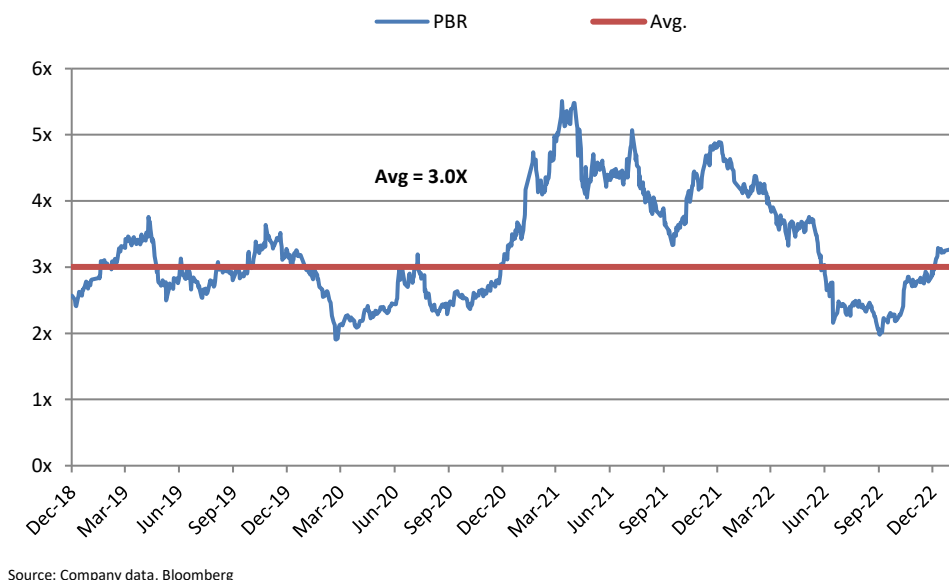


Figure 6: Novatek 12-month forward P/B



Risks:

Downside: 1) weak end-demand; 2) panel price pressure; 3) the oversupply of foundry; 4) competition. Upside: 1) strong end-demand; 2) panel upcycle; 3) foundry tightness.

Financial Statement

| Key Ratios | Dec-20A | Dec-21A | Dec-22A | Dec-23E | Dec-24E | Balance sheet | Dec-20A | Dec-21A | Dec-22A | Dec-23E | Dec-24E |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|---|----------------|----------------|-----------------|-----------------|-----------------|
| Valuation Measures | | | | | | Total cash and equivalents | 22,875 | 60,129 | 53,784 | 49,667 | 52,764 |
| Growth | | | | | | Inventories | 8,156 | 14,186 | 16,862 | 18,054 | 18,767 |
| Revenue growth | 24.2% | 69.3% | -18.8% | -5.3% | 3.9% | Accounts receivable | 13,373 | 23,572 | 16,569 | 15,685 | 16,291 |
| Operating profit growth | 18.5% | 35.3% | 29.8% | 23.6% | 23.9% | Total current assets | 44,951 | 100,115 | 89,024 | 85,119 | 89,601 |
| Net profit growth | 14.8% | 28.7% | 25.4% | 19.5% | 19.7% | LT investments | 3,061 | 4,289 | 4,389 | 4,489 | 4,589 |
| Margins | | | | | | Net fixed assets | 6,577 | 6,906 | 7,577 | 8,237 | 8,746 |
| Gross margin | 35.0% | 49.8% | 46.3% | 39.3% | 39.2% | others | 3,512 | 9,283 | 9,283 | 9,283 | 9,283 |
| Operating EBITDA margin | 18.8% | 36.1% | 30.7% | 24.7% | 25.0% | Total non-current assets | 13,150 | 20,478 | 21,250 | 22,009 | 22,618 |
| Operating margin | 18.5% | 35.3% | 29.8% | 23.6% | 23.9% | Total assets | 58,101 | 120,593 | 110,273 | 107,128 | 112,220 |
| Net profit margin | 14.8% | 28.7% | 25.4% | 19.5% | 19.7% | Short-term borrowing | - | - | 264 | 271 | 279 |
| Key Ratios | | | | | | Account payable | 9,724 | 16,976 | 14,739 | 15,781 | 16,404 |
| ROE | 29.6% | 55.2% | 41.7% | 31.2% | 30.4% | Total current liabilities | 17,463 | 35,909 | 30,382 | 30,611 | 31,805 |
| ROA | 22.5% | 43.5% | 24.2% | 18.7% | 19.4% | Long-term debt | - | - | - | - | - |
| Stability | | | | | | Total non-current liabilities | 695 | 14,233 | 12,809 | 11,528 | 10,376 |
| Gross Debt/Equity (%) | - | - | 0.4 | 0.4 | 0.4 | Total liabilities | 18,157 | 50,142 | 43,191 | 42,140 | 42,180 |
| Cash Flow Interest Coverage (X) | (34.8) | 171.1 | 21.4 | 102.4 | 107.4 | Paid-in capital | 6,085 | 6,085 | 6,085 | 6,085 | 6,085 |
| Current Ratio (X) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | Capital surplus | 3,823 | 4,778 | 4,778 | 4,778 | 4,778 |
| Quick Ratio (X) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | Retained earnings | 30,036 | 59,589 | 56,220 | 54,125 | 59,177 |
| Net debt to equity | Net cash | Net cash | Net cash | Net cash | Net cash | Capital adjustment | - | - | - | - | - |
| Profit & Loss (NTDm) | | | | | | Shareholders' equity | 39,943 | 70,451 | 67,082 | 64,988 | 70,039 |
| Total turnover | 79,956 | 135,366 | 109,957 | 104,095 | 108,114 | Total liabilities & shareholders' equity | 58,101 | 120,593 | 110,273 | 107,128 | 112,220 |
| Cost of sales | 51,998 | 67,974 | 59,015 | 63,188 | 65,684 | Cash Flow (NTD m) | | | | | |
| Gross profit | 27,958 | 67,392 | 50,941 | 40,907 | 42,430 | Net profit | 11,817 | 38,866 | 27,970 | 20,281 | 21,276 |
| Total operating costs | 13,180 | 19,618 | 18,212 | 16,295 | 16,615 | Depreciation & amortisation | 266 | 1,101 | 1,055 | 1,067 | 1,217 |
| Operating profit | 14,778 | 47,773 | 32,729 | 24,612 | 25,815 | Change in working capital | 0 | 0 | (1,046) | 10 | (199) |
| Net other Non-op. Income/(Loss) | (330) | 228 | 1,369 | 200 | 200 | Others | 3,296 | 1,755 | 0 | 0 | 0 |
| Net Extraordinaries | - | - | - | - | - | Cash flow from operations | 15,380 | 41,721 | 27,979 | 21,358 | 22,294 |
| Interest income | 102 | 127 | 420 | 560 | 600 | Cash flow from investing activities | (3,650) | (8,414) | (1,826) | (1,826) | (1,826) |
| Interest expense | 1 | 14 | 6 | 20 | 20 | Cash flow from financing activities | (6,764) | 3,955 | (32,498) | (23,649) | (17,370) |
| Pre-tax profit | 14,549 | 48,115 | 34,511 | 25,352 | 26,595 | Total cash generated | 4,965 | 37,262 | (6,345) | (4,117) | 3,098 |
| Taxation & Minority interest | 2,732 | 9,249 | 6,542 | 5,070 | 5,319 | Free cash flow | 11,730 | 33,307 | 26,153 | 19,532 | 20,467 |
| Net income to ord equity | 11,817 | 38,866 | 27,970 | 20,281 | 21,276 | | | | | | |

Source: company data, HTI estimates

APPENDIX

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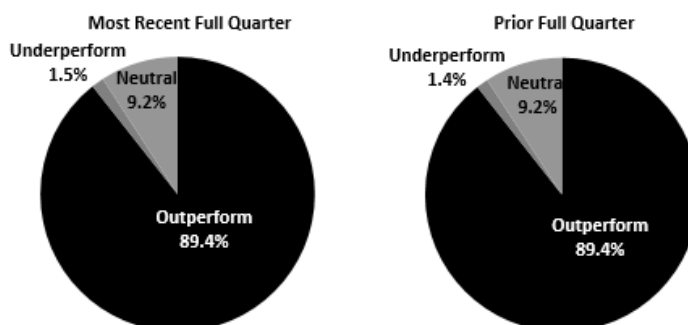
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| | Outperform | Neutral (hold) | Underperform |
|------------------------------|------------|-------------------|--------------|
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| IB clients* | 5.2% | 7.3% | 8.3% |

*Percentage of investment banking clients in each rating category.

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SELL: The stock's total return over the next 12-18 months is expected to be below the return of its relevant broad market benchmark, as indicated below.

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Novatek Microelectronics Corp - 3034 TT



1. 11 Feb 2022 OUTPERFORM at 462.0 target 610.0.
2. 8 May 2022 OUTPERFORM at 391.0 target 515.0.
3. 17 Jun 2022 UNDERPERFORM at 366.5 target 350.0.
4. 7 Aug 2022 UNDERPERFORM at 247.5 target 230.0.
5. 9 Nov 2022 NEUTRAL at 255.5 target 222.0.
6. 26 Dec 2022 OUTPERFORM at 302.0 target 365.0.

Source: Company data Bloomberg, HTI estimates