

TAIWAN

Novatek Microelectronics

29 October 2008

3034 TT **Outperform**

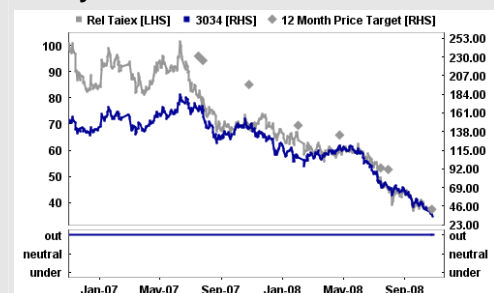
Stock price as of 28 Oct 08	NT\$	33.30
12-month target	NT\$	42.00
Upside/downside	%	+26.1
Valuation	NT\$	71.00
- ROE-g/COE-g		

GICS sector	semiconductors & semiconductor equipment
Market cap	NT\$m 19,500
30-day avg turnover	NT\$m 166.9
Market cap	US\$m 584
Number shares on issue	m 585.6

Investment fundamentals

Year end 31 Dec		2007A	2008E	2009E	2010E
Total revenue	m	36,117	27,557	25,121	25,706
Reported profit	m	7,585	4,045	3,433	3,672
Profit bonus exp	m	5,722	4,045	3,433	3,672
Bon exp/rep prof	%	24.6	0.0	0.0	0.0
Adjusted profit	m	5,722	4,045	3,433	3,672
EPS rep	NT\$	14.02	6.91	5.86	6.27
EPS rep growth	%	18.7	-50.7	-15.1	7.0
EPS bonus exp	NT\$	10.58	6.91	5.86	6.27
EPS bonus growth	%	23.8	-34.7	-15.1	7.0
PE rep	x	2.4	4.8	5.7	5.3
PE bonus exp	x	3.1	4.8	5.7	5.3
Total DPS	NT\$	8.24	5.18	4.69	5.02
Total div yield	%	24.8	15.6	14.1	15.1
ROA	%	29.7	14.5	11.2	11.8
ROE	%	35.1	22.7	18.6	19.3
EV/EBITDA	x	1.5	3.2	3.9	3.6
Net debt/equity	%	-24.3	-40.1	-33.5	-37.8
Price/book	x	1.0	1.1	1.0	1.0

3034 TT rel Taix performance, & rec history



Source: Datastream, Macquarie Research, October 2008 (all figures in NT\$ unless noted)

Analyst

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Upside surprise on margins

Event

- Novatek reported its 3Q08 result and 4Q08 outlook today. While the sales outlook is in line, the GM result and outlook surprised us and the Street on the upside. We maintain our Outperform with a target price of NT\$42.

Impact

- Macquarie vs consensus.** Despite cutting our forecast for Novatek aggressively following the panel maker's result and outlook, we maintain our positive view on Novatek from a balance sheet and valuation point of view. Today, Novatek's result and guidance reinforce our positive view of the company, especially the upside surprise on margins, which is added proof of the company's execution and cost-down effort, in our view.
- 3Q08 net profit of NT\$1.1bn** (EPS of NT\$1.86; -4% QoQ and -33% YoY) was 11% ahead of our forecast, and the upside was largely from the better-than-expected GM. 3Q08 GM of 30.2% (+1.8ppts) beat our 27.9% forecast and the 0–1ppt QoQ decline expected by guidance/consensus. The upside was due partly to better NT\$/US\$ (0.7ppt), acquisition of Cheertek (higher GM), better product mix (higher SoC and small-panel driver IC), and continuous cost-down. For 4Q08, Novatek expects sales to decline by around 15% QoQ, with GM to drop by 1–2ppts. Sales outlook is in line with our expectation, while GM is better due to better 3Q08 base.
- Balance sheet items remain healthy.** Novatek's cash conversion cycle was maintained at around 100 days, similar to that for 1Q/2Q08. Net cash per share was at NT\$10 after the cash dividend payout. Net US\$ exposure at end-3Q08 was at about US\$100m vs US\$200m+ in 1Q08.
- Novatek expects SoC to outgrow driver IC businesses** in 4Q08, which also provide some supports to its GM. Novatek also mentioned the Cheertek business is already at net profitable, a good sign of cost-saving after acquisition. As for cost-down, Novatek indicated 60–70% of its source driver ICs are using 0.3um process now and the company is progressing to 0.18um.

Earnings revision

- We revised up our EPS forecast for 2008 slightly to reflect the better-than-expected GM, but we maintain our 2009–10F EPS broadly unchanged.

Price catalyst

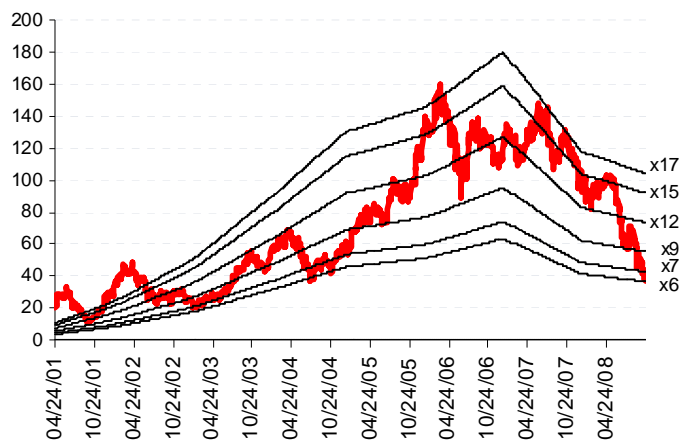
- 12-month price target: NT\$42.00 based on a PER methodology.
- Catalyst: Panel sector recovery, ramp up of other sales, and better margins.

Action and recommendation

- While Novatek's stock price may still have some pressure due to soft panel outlook, we continue to believe that the company deserves a revisit on its good execution, healthy balance sheet, and positive net cashflow as well as high cash yield. The better-than-expected GM should also ease some margin erosion concern. Value-driven investors may consider Novatek and Himax (HIMX US, US\$1.92, OP, TP: US\$3.2).

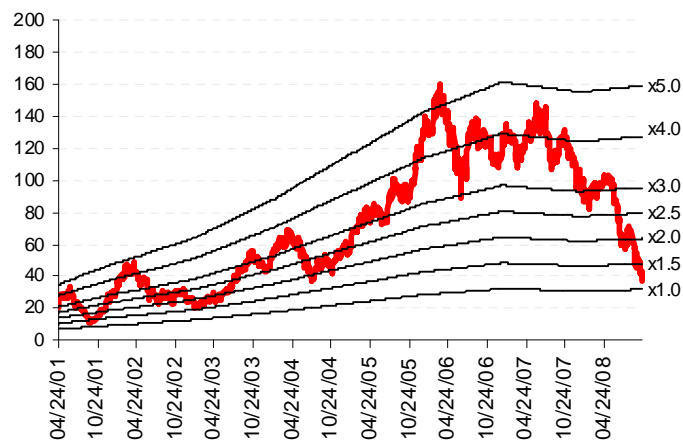
Please refer to the important disclosures and analyst certification on inside back cover of this document, or on our website www.macquarie.com.au/research/disclosures.

Fig 1 Novatek's PER - bonus expensed



Source: TEJ, Macquarie Research, October 2008

Fig 2 Novatek's P/BV



Source: TEJ, Macquarie Research, October 2008

Fig 3 Scenario analysis - fair value on dividend yield valuation

Fair value (NT\$)	Cash dividend payout ratio				
	perputual growth	65%	70%	75%	80%
-4%	25.8	27.8	29.8	31.8	33.8
-2%	30.7	33.1	35.5	37.8	40.2
0%	37.5	40.4	43.3	46.2	49.1
2%	47.7	51.4	55.0	58.7	62.4
4%	64.4	69.4	74.3	79.3	84.3

Assumption: 2009 EPS of NT\$5.9, COE of 10.2%

Source: Macquarie Research, October 2008

Fig 4 MACQ's ROE-g/COE-g fair value appraisal for Novatek

Beta	1.03
Risk free rate (%)	5.0
Market risk premium (%)	5.0
Cost of equity / discount rate	10.2
Average ROE 08-09 (%)	20.6
Perpetuity growth rate (%)	2.0
ROE-g	18.6
COE-g	8.2
Ratio	2.3
FY08F BVPS	31.0
Fair value	71

Source: Macquarie Research, October 2008

Fig 5 MACQ's earnings model for Novatek

		1Q08A	2Q08A	3Q08A	4Q08F	1Q09F	2Q09F	3Q09F	4Q09F	FY07A	FY08F	FY09F	FY10F
FX		31.5	30.4	31.7	32.5	32.5	32.5	32.5	32.5	32.8	31.5	32.5	32.5
Pre bonus exp.		1Q08A	2Q08A	3Q08A	4Q08F	1Q09F	2Q09F	3Q09F	4Q09F	FY07A	FY08F	FY09F	FY10F
Net sales	NT\$m	7,506	7,238	6,908	5,906	5,539	6,034	6,818	6,730	36,117	27,557	25,121	25,706
COGS	NT\$m	5,317	5,181	4,819	4,210	4,019	4,376	4,943	4,880	25,945	19,526	18,218	18,636
Gross profit	NT\$m	2,189	2,057	2,089	1,696	1,520	1,658	1,875	1,850	10,173	8,031	6,903	7,070
OPEX	NT\$m	648	672	723	715	609	652	709	639	2,598	2,757	2,609	2,432
OP profit	NT\$m	1,541	1,385	1,366	982	911	1,006	1,166	1,211	7,575	5,274	4,294	4,637
Non-op P&L	NT\$m	-222	131	99	124	79	86	98	98	175	132	361	395
Pretax profit	NT\$m	1,319	1,516	1,465	1,106	990	1,092	1,264	1,309	7,750	5,406	4,655	5,032
Tax expense	NT\$m	-30	-32	-45	-33	-40	-44	-51	-52	-166	-140	-186	-252
Net profit	NT\$m	1,289	1,484	1,420	1,072	950	1,048	1,213	1,257	7,585	5,266	4,468	4,781
EPS	NT\$	2.20	2.53	2.43	1.83	1.62	1.79	2.07	2.15	14.02	8.99	7.63	8.16
Profit margins		1Q08A	2Q08A	3Q08A	4Q08F	1Q09F	2Q09F	3Q09F	4Q09F	FY07A	FY08F	FY09F	FY10F
GM	%	29.2	28.4	30.2	28.7	27.4	27.5	27.5	27.5	28.2	29.1	27.5	27.5
OP margins	%	20.5	19.1	19.8	16.6	16.4	16.7	17.1	18.0	21.0	19.1	17.1	18.0
Net margins	%	17.2	20.5	20.6	18.2	17.2	17.4	17.8	18.7	21.0	19.1	17.8	18.6
Growth (QoQ)		1Q08A	2Q08A	3Q08A	4Q08F	1Q09F	2Q09F	3Q09F	4Q09F	FY07A	FY08F	FY09F	FY10F
Sales	%	-20.3	-3.6	-4.6	-14.5	-6.2	8.9	13.0	-1.3				
OP profit	%	-24.4	-10.2	-1.3	-28.2	-7.2	10.5	15.8	3.9				
Net profit	%	-33.3	15.1	-4.3	-24.5	-11.4	10.3	15.7	3.6				
Growth (YoY)		1Q08A	2Q08A	3Q08A	4Q08F	1Q09F	2Q09F	3Q09F	4Q09F	FY07A	FY08F	FY09F	FY10F
Sales	%	-1.5	-19.8	-31.4	-37.2	-26.2	-16.6	-1.3	14.0	14.9	-23.7	-8.8	2.3
OP profit	%	8.2	-25.8	-39.1	-51.9	-40.9	-27.3	-14.7	23.3	19.2	-30.4	-18.6	8.0
Net profit	%	-23.4	-18.5	-33.9	-44.5	-26.3	-29.3	-14.6	17.2	20.8	-30.6	-15.1	7.0
Post bonus exp.		1Q08A	2Q08A	3Q08A	4Q08F	1Q09F	2Q09F	3Q09F	4Q09F	FY07A	FY08F	FY09F	FY10F
Net sales	NT\$m	7,506	7,238	6,908	5,906	5,539	6,034	6,818	6,730	36,117	27,557	25,121	25,706
COGS	NT\$m	5,317	5,181	4,819	4,210	4,019	4,376	4,943	4,880	25,945	19,526	18,218	18,636
Gross profit	NT\$m	2,189	2,057	2,089	1,696	1,520	1,658	1,875	1,850	10,173	8,031	6,903	7,070
OPEX	NT\$m	946	1,016	1,052	963	830	895	990	931	4,461	3,978	3,645	3,541
OP profit	NT\$m	1,243	1,040	1,037	733	691	763	884	919	5,712	4,053	3,258	3,529
Non-op P&L	NT\$m	-222	131	99	124	79	86	98	98	175	132	361	395
Pretax profit	NT\$m	1,021	1,171	1,136	857	769	849	983	1,018	5,887	4,185	3,619	3,924
Tax expense	NT\$m	-30	-32	-45	-33	-40	-44	-51	-52	-166	-140	-186	-252
Net profit	NT\$m	991	1,140	1,091	824	730	805	932	965	5,722	4,045	3,433	3,672
EPS	NT\$	1.69	1.95	1.86	1.41	1.25	1.38	1.59	1.65	10.58	6.91	5.86	6.27
Profit margins		1Q08A	2Q08A	3Q08A	4Q08F	1Q09F	2Q09F	3Q09F	4Q09F	FY07A	FY08F	FY09F	FY10F
GM	%	29.2	28.4	30.2	28.7	27.4	27.5	27.5	27.5	28.2	29.1	27.5	27.5
OP margins	%	16.6	14.4	15.0	12.4	12.5	12.7	13.0	13.7	15.8	14.7	13.0	13.7
Net margins	%	13.2	15.7	15.8	13.9	13.2	13.3	13.7	14.3	15.8	14.7	13.7	14.3
Growth (QoQ)		1Q08A	2Q08A	3Q08A	4Q08F	1Q09F	2Q09F	3Q09F	4Q09F	FY07A	FY08F	FY09F	FY10F
Sales	%	-20.3	-3.6	-4.6	-14.5	-6.2	8.9	13.0	-1.3				
OP profit	%	-20.6	-16.3	-0.3	-29.3	-5.7	10.5	15.9	3.9				
Net profit	%	-32.1	15.1	-4.3	-24.5	-11.4	10.3	15.7	3.6				
Growth (YoY)		1Q08A	2Q08A	3Q08A	4Q08F	1Q09F	2Q09F	3Q09F	4Q09F	FY07A	FY08F	FY09F	FY10F
Sales	%	-1.5	-19.8	-31.4	-37.2	-26.2	-16.6	-1.3	14.0	14.9	-23.7	-8.8	2.3
OP profit	%	22.9	-26.7	-39.6	-53.2	-44.4	-26.6	-14.7	25.4	23.7	-29.0	-19.6	8.3
Net profit	%	-21.9	-17.0	-32.7	-43.5	-26.3	-29.3	-14.6	17.2	26.1	-29.3	-15.1	7.0

Source: Company data, Macquarie Research, October 2008

Novatek Microelectronics (3034 TT, Outperform, Target price: NT\$42.00)

Quarterly Results		3Q/08A	4Q/08E	1Q/09E	2Q/09E	Profit & Loss					
						2007A	2008E	2009E	2010E		
Revenue	m	6,908	5,906	5,539	6,034	Revenue	m	36,117	27,557	25,121	25,706
Gross Profit	m	2,094	1,696	1,520	1,658	Gross Profit	m	10,170	8,039	6,903	7,070
Operating Expenses	m	-1,057	-963	-830	-895	Operating Expenses	m	-2,595	-3,986	-3,645	-3,541
Operating Income	m	1,037	733	691	763	Operating Income	m	7,575	4,053	3,258	3,529
Net Non-operating income	m	99	124	79	86	Net Non-operating income	m	175	132	361	395
Pre-Tax Income	m	1,136	857	769	849	Pre-Tax Income	m	7,750	4,185	3,619	3,924
Tax Expense	m	-45	-33	-40	-44	Tax Expense	m	-166	-140	-186	-252
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Reported Earnings	m	1,091	824	730	805	Reported Earnings	m	7,585	4,045	3,433	3,672
Reported Earnings (bonus exp)	m	1,091	824	730	805	Reported Earnings (bonus exp)	m	5,722	4,045	3,433	3,672
Bonus exp / Reported Earnings	%	0.0	0.0	0.0	0.0	Bonus exp / Reported Earnings	%	24.6	0.0	0.0	0.0
Adjusted Earnings	m	1,091	824	730	805	Adjusted Earnings	m	5,722	4,045	3,433	3,672
EBITDA	m	1,134	792	746	824	EBITDA	m	7,876	4,377	3,509	3,786
EPS (rep)	NT\$	1.86	1.41	1.25	1.38	EPS (rep)	NT\$	14.02	6.91	5.86	6.27
EPS pcg growth (rep)	%	-53.1	-60.6	-26.3	-29.3	EPS growth (rep)	%	18.7	-50.7	-15.1	7.0
EPS (rep bonus exp)	NT\$	1.86	1.41	1.25	1.38	EPS (rep bonus exp)	NT\$	10.58	6.91	5.86	6.27
EPS pcg growth (rep bonus exp)	%	-37.8	-47.8	-26.3	-29.3	EPS growth (rep bonus exp)	%	23.8	-34.7	-15.1	7.0
EPS (adj)	NT\$	1.86	1.41	1.25	1.38	EPS (adj)	NT\$	10.58	6.91	5.86	6.27
EPS pcg growth (adj)	%	-37.8	-47.8	-26.3	-29.3	EPS growth (adj)	%	23.8	-34.7	-15.1	7.0
Revenue pcg growth	%	-31.4	-37.2	-26.2	-16.6	PE (rep)	x	2.4	4.8	5.7	5.3
Operating Income pcg growth	%	-53.8	-64.1	-44.4	-26.6	PE (rep bonus adj)	x	3.1	4.8	5.7	5.3
Reported Earnings pcg growth	%	-49.2	-57.4	-26.3	-29.3	PE (adj)	x	3.1	4.8	5.7	5.3
Gross Profit Margin	%	30.3	28.7	27.4	27.5	Total DPS	NT\$	8.24	5.18	4.69	5.02
Operating Income Margin	%	15.0	12.4	12.5	12.7	Total Div Yield	%	24.8	15.6	14.1	15.1
Reported Earnings Margin	%	15.8	13.9	13.2	13.3	Weighted Average Shares	m	541.0	585.6	585.6	585.6
EBITDA Margin	%	16.4	13.4	13.5	13.7	Period End Shares	m	541.0	585.6	585.6	585.6
Profit and Loss Ratios		2007A	2008E	2009E	2010E	Cashflow Analysis		2007A	2008E	2009E	2010E
Revenue Growth	%	14.9	-23.7	-8.8	2.3	Reported Earnings	m	7,585	4,045	3,433	3,672
Gross Profit Growth	%	19.5	-21.0	-14.1	2.4	Depreciation & Amortisation	m	301	324	251	257
Operating Income Growth	%	19.2	-46.5	-19.6	8.3	Chgs in Working Cap	m	-2,417	3,554	-901	420
Reported Earnings Growth	%	20.8	-46.7	-15.1	7.0	Other	m	11	1,355	7	109
EBITDA Growth	%	19.6	-44.4	-19.8	7.9	Operating Cashflow	m	5,480	9,278	2,790	4,458
Gross Profit Margin	%	28.2	29.2	27.5	27.5	Acquisitions	m	203	-85	-113	-120
Operating Income Margin	%	21.0	14.7	13.0	13.7	Capex	m	-437	-119	-73	-75
Reported Earnings Margin	%	21.0	14.7	13.7	14.3	Asset Sales	m	0	0	0	0
EBITDA Margin	%	21.8	15.9	14.0	14.7	Other	m	-198	-122	-106	-132
Payout Ratio	%	77.9	75.0	80.0	80.0	Investing Cashflow	m	-431	-327	-292	-327
EV/EBITDA	x	1.5	3.2	3.9	3.6	Dividend (Ordinary)	m	-4,169	-4,874	-3,034	-2,746
EV/EBIT	x	1.6	3.4	4.2	3.9	Equity Raised	m	0	0	0	0
Balance Sheet Ratios						Debt Movements	m	761	804	-12	491
ROE	%	35.1	22.7	18.6	19.3	Other	m	-520	-1,053	-463	-404
ROA	%	29.7	14.5	11.2	11.8	Financing Cashflow	m	-3,928	-5,123	-3,509	-2,660
ROIC	%	65.6	29.6	28.4	26.4	Net Chg in Cash/Debt	m	1,121	3,828	-1,011	1,471
Net Debt/Equity	%	-24.3	-40.1	-33.5	-37.8	Free Cashflow	m	5,043	9,158	2,717	4,383
Interest Cover	x	195.7	nfm	nfm	nfm	FCF per Share	NT\$	9.32	15.64	4.64	7.48
Price/Book	x	1.0	1.1	1.0	1.0	P/FCF	x	3.6	2.1	7.2	4.4
Book Value per Share	NT\$	32.3	31.0	32.1	32.9	Balance Sheet		2007A	2008E	2009E	2010E
						Cash	m	8,416	12,244	11,233	12,704
						Receivables	m	12,000	7,253	8,265	7,797
						Inventories	m	2,240	2,256	2,616	2,461
						Investments	m	0	0	0	0
						Fixed Assets	m	1,405	1,787	1,859	1,935
						Intangibles	m	198	2,964	2,734	2,522
						Other Assets	m	2,556	2,507	2,698	2,904
						Total Assets	m	26,815	29,011	29,405	30,323
						Payables	m	4,137	2,959	3,430	3,228
						Short Term Debt	m	4,183	4,954	4,942	5,422
						Long Term Debt	m	0	0	0	0
						Provisions	m	0	0	0	0
						Other Liabilities	m	1,046	2,938	2,234	2,388
						Total Liabilities	m	9,367	10,851	10,606	11,038
						Total S/H Equity	m	17,449	18,160	18,799	19,285
						Total Liab & S/H Funds	m	26,815	29,011	29,405	30,323

All figures in NT\$ unless noted.
Source: Macquarie Research, October 2008

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >5% in excess of benchmark return (>2.5% in excess for listed property trusts)
 Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts)
 Underperform – return >5% below benchmark return (>2.5% below for listed property trusts)

Macquarie – Asia/Europe

Outperform – expected return >+10%
 Neutral – expected return from -10% to +10%
 Underperform – expected return <-10%

Macquarie First South - South Africa

Outperform – expected return >+10%
 Neutral – expected return from -10% to +10%
 Underperform – expected return <-10%

Macquarie - Canada

Outperform – return >5% in excess of benchmark return
 Neutral – return within 5% of benchmark return
 Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) – return >5% in excess of benchmark return
 Neutral (Hold) – return within 5% of benchmark return
 Underperform (Sell) – return >5% below benchmark return

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Volatility index definition*

This is calculated from the volatility of historical price movements.

Very high–highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low–medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Australian/NZ/Canada stocks only

Financial definitions

All "Adjusted" data items have had the following adjustments made:
 Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
 Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / epowa*

ROA = adjusted ebit / average total assets

ROA Banks/Insurance = adjusted net profit / average total assets

ROE = adjusted net profit / average shareholders funds

Gross cashflow = adjusted net profit + depreciation

*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions – For quarter ending 30 September 2008

	AU/NZ	Asia	RSA	USA	CA	EUR
Outperform	43.17%	61.57%	63.08%	53.60%	71.54%	43.00%
Neutral	41.37%	16.43%	30.77%	37.60%	24.61%	48.00%
Underperform	15.47%	22.00%	6.15%	8.80%	3.85%	9.00%

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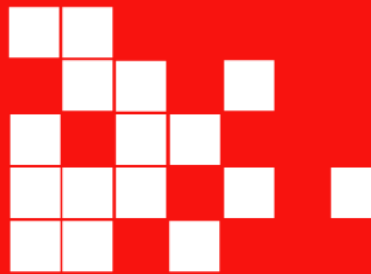
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