

Axcelis Technologies

SiC goodness offset by mature node, memory; reiterate Neutral

Reiterate Rating: NEUTRAL | PO: 135.00 USD | Price: 122.20 USD

NT environment challenging, all eyes on CY25E recovery

Q4 sales of \$310mn (+6% QoQ/+17% YoY) \$10mn above mgmt's positive preannouncement (\$300mn) in January, but Q1 sales guide of \$242mn (down -22% QoQ and -5% YoY) well below consensus \$285mn. ACLS is feeling the same brunt as many of its industrial/automotive-exposed peers (AEIS, TXN) with general mature process node demand particularly weak (LRCX, GFS) into 1H. We also wonder if there were potential pull-forward of orders, particularly in memory given mgmt's implied CY24E memory guide is down YoY despite a strong anticipated DRAM ramp throughout the year (though implant cycle follows wafer start trends and typically trails the broader memory ASP cycle). While mgmt looks to 2H for a broad-based recovery (we model 2H sales up +27% HoH), company's new CY24E sales guide now points to flattish YoY sales vs. consensus +5% YoY on lower Q1 base. On the bright side, ACLS believes the all-important demand for power device market (SiC, Si) remains in-tact, with Chinese customers still keen on expanding capacity despite near-term utilization/demand concerns as they look to longer-term EV growth outlooks. On margins, CY24E represents a modest setback on lower sales run-rate, with CY25E now likely below mgmt's 45.0% target as well at 44.6%. Overall, we lower CY24/25E sales by -6%/-4% but pf-EPS by -13%/-9% on lower GMs. We lower PO to \$135 (on unchanged 15x CY25E P/E) from \$150 prior but reiterate Neutral on longer-term WFE outgrowth potentials (increasing power devices TAM, implant opportunities in leading-edge logic).

Likes: SiC visibility, 2H recovery, backlogs

1) SiC visibility remains relatively strong throughout CY24E, with strong backlog of \$1.2bn exiting Q4 showing no signs of slowing down despite concerns around EV unit weakness. 2) A broad-based recovery at mature node and memory customers should help drive >25% HoH growth in 2H, following a weak 1H.

Risks: Slowing mature node, memory, China exposure

1) We expect near-term softness in general mature node tools (~25% of system sales) through 1H24E, stemming from consumer/industrial applications. 2) ACLS continues to report weakness in memory and image sensor demand, despite better-than-expected results/outlooks at memory and smartphone vendors. 3) China exposure increased to 46% of sales in CY23 (vs. 41% in CY22) and is one of the highest amid semicaps.

Estimates(Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	5.45	7.43	7.15	8.22	9.06
EPS Change (YoY)	89.2%	36.3%	-3.8%	15.0%	10.2%
Consensus EPS (Bloomberg)	5.15	7.33	7.83	8.75	NA
Valuation (Dec)					
P/E	22.4x	16.4x	17.1x	14.9x	13.5x
EV / EBITDA*	16.9x	13.6x	14.3x	12.5x	11.5x
Free Cash Flow Yield*	5.12%	3.40%	5.46%	7.51%	7.21%
* For full definitions of <i>IQ</i> method SM measures, see page 12.					

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Refer to important disclosures on page 13 to 15. Analyst Certification on page 11. Price
Objective Basis/Risk on page 11.

08 February 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	150.00	135.00
2024E Rev (m)	1,206.4	1,132.6
2025E Rev (m)	1,285.9	1,230.9
2026E Rev (m)	1,371.3	1,305.3
2024E EPS	8.25	7.15
2025E EPS	9.08	8.22
2026E EPS	9.97	9.06

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Stock Data

Price	122.20 USD
Price Objective	135.00 USD
Date Established	8-Feb-2024
Investment Opinion	C-2-9
52-Week Range	105.28 USD - 201.00 USD
Mrkt Val (mn) / Shares Out	4,002 USD / 32.7
(mn)	
Free Float	98.3%
Average Daily Value (mn)	85.60 USD
BofA Ticker / Exchange	ACLS / NAS
Bloomberg / Reuters	ACLS US / ACLS.OQ
ROE (2024E)	24.4%
Net Dbt to Eqty (Dec-2023A)	-14.3%

See acronym definitions on p. 6

iQprofile[™] Axcelis Technologies

<i>i</i> Q method SM − Bus Performance*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	28.3%	28.5%	20.7%	19.9%	18.4%
Return on Equity	30.4%	32.2%	24.4%	22.7%	20.6%
Operating Margin	23.1%	23.5%	22.3%	23.5%	24.1%
Free Cash Flow	205	136	218	301	289
iOmethod SM - Quality of Farnings*					

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	1.2x	0.6x	1.0x	1.2x	1.1x
Asset Replacement Ratio	0.9x	1.6x	1.9x	1.9x	1.9x
Tax Rate	10.6%	11.6%	10.8%	10.7%	10.7%
Net Debt-to-Equity Ratio	-21.0%	-14.3%	-28.6%	-44.1%	-53.5%
Interest Cover	38.1x	49.7x	NA	NA	NA

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	920	1,131	1,133	1,231	1,305
% Change	38.9%	22.9%	0.2%	8.7%	6.0%
Gross Profit	402	491	496	549	589
% Change	40.3%	22.3%	1.0%	10.7%	7.2%
EBITDA	224	279	265	303	329
% Change	62.1%	24.4%	-4.9%	14.2%	8.6%
Net Interest & Other Income	(7)	13	0	0	0
Net Income (Adjusted)	183	246	234	265	287
% Change	85.3%	34.5%	-5.1%	13.2%	8.5%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	183	246	226	259	281
Depreciation & Amortization	12	13	12	13	14
Change in Working Capital	(12)	(111)	(23)	28	(8)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	33	9	27	26	27
Capital Expenditure	(11)	(21)	(23)	(25)	(26)
Free Cash Flow	205	136	218	301	289
% Change	44.9%	-33.5%	60.3%	37.6%	-3.9%
Share / Issue Repurchase	(57)	(50)	(40)	(40)	(40)
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	0	0	0	0	0

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	186	167	346	606	855
Trade Receivables	170	218	223	212	222
Other Current Assets	522	695	716	697	701
Property, Plant & Equipment	40	54	42	29	16
Other Non-Current Assets	96	148	148	148	148
Total Assets	1,014	1,282	1,476	1,692	1,942
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	248	285	289	286	292
Long-Term Debt	45	44	44	44	44
Other Non-Current Liabilities	53	88	88	88	88
Total Liabilities	346	417	421	417	424
Total Equity	667	865	1,055	1,275	1,518
Total Equity & Liabilities	1,014	1,282	1,476	1,692	1,942

^{*} For full definitions of \emph{IQ} method $^{\text{SM}}$ measures, see page 12.

Company Sector

Semiconductor Capital Equipment

Company Description

Axcelis Technologies is semiconductor capital equipment (semicap) vendor that designs, manufactures, and services tools into the front-end/wafer fab equipment market. ACLS specializes in ion implantation tools and supplies to semis manufacturers across logic and memory, leading-edge and trailing-edge. Majority of products sell under one unified platform "Purion", now with an installed base of 3,000 tools (incl. legacy tools). ACLS was founded in 1978 and is headquartered in Beverly, MA.

Investment Rationale

We rate Axcelis Neutral. Axcelis is well positioned to benefit from the growing secular demand of semiconductor chips, specifically power devices such as silicon carbide devices. However, concerns around demand in China and slowing EV demand could impact near-term performance.

Stock Data

Average Daily Volume	700,500
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Quarterly Earnings Estimates

	2023	2024
Q1	1.43A	1.34E
Q2	1.86A	1.44E
Q3	1.99A	2.04E
Q4	2.15A	2.33E



Summary of model changes

Exhibit 1: Summary of model changes

We revise FY24E sales/EPS -6%/-13% to \$1.1bn/\$7.15

		Sales (\$mn)			Non-GAAP EPS				
	Old	NEW	delta	Old	NEW	delta			
Mar-23	\$254	\$254	\$0	\$1.43	\$1.43	\$0.00			
Jun-23	\$274	\$274	\$0	\$1.86	\$1.86	\$0.00			
Sep-23	\$292	\$292	\$0	\$1.99	\$1.99	\$0.00			
Dec-23	\$296	\$310	\$14	\$2.00	\$2.15	\$0.15			
FY23	\$1,116	\$1,131	\$14	\$7.27	\$7.43	\$0.15			
YoY%	21.3%	22.9%	1.3%	33.6%	36.4%	2.1%			
Mar-24E	\$299	\$242	(\$57)	\$2.13	\$1.34	(\$0.79)			
Jun-24E	\$300	\$257	(\$43)	\$2.03	\$1.44	(\$0.59)			
Sep-24E	\$302	\$302	\$0	\$2.08	\$2.04	(\$0.04)			
Dec-24E	\$305	\$331	\$26	\$2.01	\$2.33	\$0.32			
FY24E	\$1,206	\$1,133	(\$74)	\$8.25	\$7.15	(\$1.09)			
YoY%	8.1%	0.2%	-6.1%	13.4%	-3.7%	-13.3%			
Mar-25E	\$312	\$305	(\$6)	\$2.18	\$2.05	(\$0.12)			
Jun-25E	\$318	\$299	(\$19)	\$2.18	\$1.89	(\$0.29)			
Sep-25E	\$325	\$310	(\$15)	\$2.35	\$2.12	(\$0.22)			
Dec-25E	\$331	\$316	(\$15)	\$2.37	\$2.15	(\$0.22)			
FY25E	\$1,286	\$1,231	(\$55)	\$9.08	\$8.22	(\$0.86)			
YoY%	6.6%	8.7%	-4.3%	10.0%	14.8%	-9.5%			

Source: BofA Global Research estimates, company reports

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Q4 reported vs expectations

Exhibit 2: Summary of DecQ results

DecQ sales of \$310mn beat Consensus by +5%, with EPS of \$2.15 beating by 13c

	Dec-22	Sep-23				Dec-23			
			Guidance	Consensus	BofA	Reported	Delta vs. Cons	QoQ	YoY
Sales (\$mn)	\$266.1	\$292.3	\$284.9	\$298	\$296.0	\$310.3	4.8%	6.1%	16.6%
QoQ%	16.1%	6.7%	-4.5%	2.0%	1.3%	6.1%			
Systems	203.8	231.5			230.3	241.8	5.0%	4.4%	18.6%
Aftermarket / CS&I	62.2	60.9			65.7	68.5	4.3%	12.6%	10.1%
Gross Margin % (GAAP)	41.2%	44.4%	44.2%	44.9%	45.0%	44.4%	(52)	8	328
Gross Profit (GAAP)	109.5	129.7			133.1	137.9	3.6%	6.3%	25.9%
R&D	22.1	24.1			24.8	24.9	0.4%	3.4%	12.8%
S&M	15.0	16.5			16.8	16.7	(0.8%)	1.2%	10.8%
G&A	16.3	17.4			17.8	17.3	(2.9%)	(1.0%)	5.9%
Opex Total (GAAP)	53.4	58.0			59.4	58.8	(0.9%)	1.4%	10.1%
Operating Income (GAAP)	56.1	71.7	67.7	74.6	73.7	79.1	7.3%	10.3%	40.9%
Operating Margin % (GAAP)	21.1%	24.5%			24.9%	25.5%	58	96	439
Pretax Income (GAAP)	65.8	73.7			73.7	87.4	111.1%	111.1%	85.6%
Tax Rate (GAAP)	13.4%	10.5%			10.5%	18.7%	819	81947.8%	532
Tax expense (GAAP)	8.8	7.7			7.7	16.4	7.6%	8.2%	26.6%
Net Income (GAAP)	57.0	65.9			66.0	71.1	0.1%	(0.4%)	(1.5%)
Diluted EPS (GAAP)	\$1.70	\$1.99	\$1.83	\$2.02	\$2.00	\$2.15	7.6%	8.2%	26.6%
Diluted Shares	33.5	33.2			33.0	33.0	0.1%	(0.4%)	(1.5%)

Source: BofA Global Research estimates, Bloomberg, company reports



Q1 guidance vs expectations

Exhibit 3: Summary of Q1 guidance and outlook

ACLS guided MarQ sales to \$242mn, down -22% QoQ, \$43mn below Consensus

	Dec-23		Mar-24E		
	Actual	BofA	Consensus	Guidance	New BofA
Sales (\$mn)	\$310.3	\$299.0	\$285	\$242.0	\$242.3
QoQ%		1.0%	-4.5%		-21.9%
Systems	241.8	231.3			186.2
Aftermarket / CS&I	68.5	67.7			56.2
0.0					
Gross Margin % (GAAP)	44.4%	44.8%	44.2%	43.5%	43.5%
Gross Profit (GAAP)	137.9	133.9			105.4
R&D	24.9	25.6			26.4
S&M	16.7	15.3			16.4
G&A	17.3	16.2			17.0
Opex Total (GAAP)	58.8	57.0			59.8
Operating Income (GAAP)	79.1	76.8	67.7	45.0	45.6
Operating Margin % (GAAP)	25.5%	25.7%			18.8%
Pretax Income (GAAP)	87.4	78.3			49.3
Tax Rate (GAAP)	18.7%	10.5%			10.5%
Tax expense (GAAP)	16.4	8.2			5.2
Net Income (GAAP)	71.1	70.1			44.1
Diluted EPS (GAAP)	\$2.15	\$2.13	\$1.83	\$1.22	\$1.34
Diluted Shares	33.0	32.9			32.9

Source: BofA Global Research estimates, Bloomberg, company reports

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Balance sheet, cash flow snapshot

Exhibit 4: Summary of cash and inventory position

Net cash/share increased 10% QoQ to \$15.48/share in DecQ

Total cash	Dec-22 \$433	Mar-23 \$451	Jun-23 \$460	Sep-23 \$468	Dec-23 \$513	QoQ 9.7%	YoY 18.5%
ST debt	\$1	1	1	1	\$2	3.1 /0	10.5 /0
LT debt	\$0	-	-	-	\$0		
Total debt	\$1	1	1	1	2		
Net cash	\$432	450	458	466	511	9.7%	18.4%
Net cash / share	\$12.87	\$13.52	\$13.80	\$14.06	\$15.48	10.1%	20.3%
Book value / share	\$19.89	\$21.08	\$22.42	\$24.16	\$26.18	8.4%	31.6%
Days sales outstanding (DSO)	58.2	68.1	53.0	60.0	64.1		
Days payables outstanding (DPO)	36.3	36.8	35.8	33.7	28.8		
Inventory \$	\$242	\$262	\$300	\$312	\$306	-1.8%	26.4%
Inventory turns	2.6	2.3	2.1	2.1	2.2		
Inventory days	141.3	159.4	177.4	175.2	162.2	(12.9)	20.9
Cash conversion days	163.2	190.7	194.6	201.5	197.5		
Cash flow from ops	\$122	\$35	\$33	\$24	\$65	172.5%	-46.5%
Capex	(\$4)	(\$2)	(\$3)	(\$5)	(\$10)	88.6%	162.7%
Free cash flow	\$119	\$32	\$30	\$19	\$55	196.2%	-53.2%

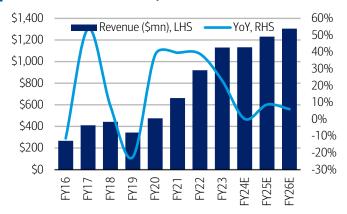
Source: BofA Global Research, Bloomberg, company reports



Key charts

Exhibit 5: ACLS annual revenue and YoY growth

We see revenue to reach \$1.3bn by CY26E

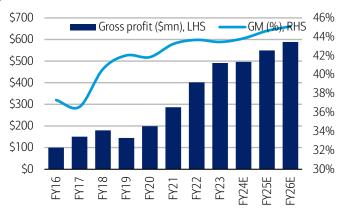


Source: BofA Global Research estimates, company reports

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Exhibit 7: ACLS quarterly gross profit and GM%

GM should remain above 40%

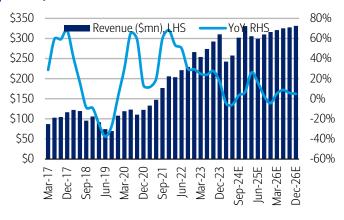


Source: BofA Global Research estimates, company reports

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Exhibit 6: ACLS quarterly revenue and YoY growth

Quarterly revenue should reach \$300mn+ levels

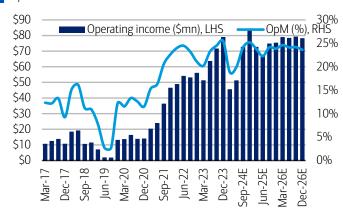


Source: BofA Global Research estimates, company reports

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Exhibit 8: ACLS quarterly operating income and OpM%

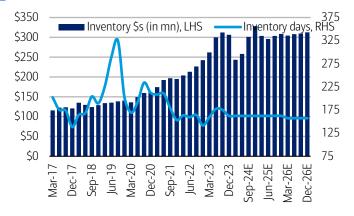
OpM should remain above 20%



Source: BofA Global Research estimates, company reports

Exhibit 9: ACLS quarterly inventory dollars and days

Inventory days should remain stable

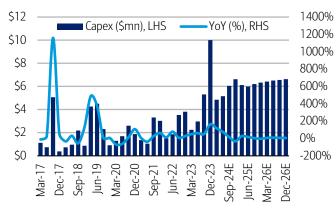


Source: BofA Global Research estimates, company reports

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Exhibit 11: ACLS quarterly capex and YoY growth

Capex as % of sales should remain stable



Source: BofA Global Research estimates, company reports

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WFE: Wafer Fab Equipment AMAT: Applied Materials

ACLS: Axcelis

SMIC: Semiconductor Manufacturing International Corporation

CS&I: Customer Satisfaction and Innovation

TAM: Total Addressable Market

Si: Silicon

SiC: Silicon Carbide

ASP: Average Selling Price

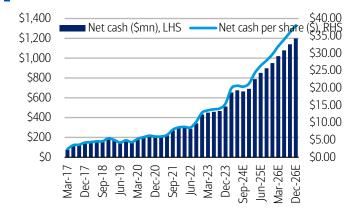
EV: Electric Vehicle LRCX: Lam Research GFS: GlobalFoundries TXN: Texas Instruments AEIS: Advanced Energy

DRAM: Dynamic Random Access Memory

NAND: Not AND

Exhibit 10: ACLS quarterly net cash and net cash per share

Net cash should increase over time

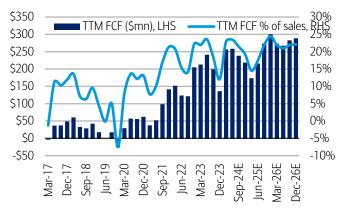


Source: BofA Global Research estimates, company reports

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Exhibit 12: ACLS quarterly TTM FCF and TTM FCF as a % of sales

FCF should grow over time



Source: BofA Global Research estimates, company reports

Exhibit 13: ACLS - Income Statement (\$mn)
We see ACLS reaching \$1.1bn in revenue FY24E, +0% YoY

	Q1	Q2	Q3	Q4	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E	FY23	FY24E	FY25E	FY26E
FY (March)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24E	Jun-24E	Sep-24E	Dec-24E	Mar-25E	Jun-25E	Sep-25E	Dec-25E	Dec-23	Dec-24	Dec-25	Dec-26
Revenues	\$254	\$274	\$292	\$310	\$242	\$257	\$302	\$331	\$305	\$299	\$310	\$316	\$1,131	\$1,133	\$1,231	\$1,305
QoQ	-5%	8%	7%	6%	-22%	6%	17%	10%	-8%	-2%	4%	2%				
YoY	25%	24%	28%	17%	-5%	-6%	3%	7%	26%	16%	3%	-4%	23%	0%	9%	6%
Cost of Sales	150	154	163	172	137	145	169	185	171	166	171	174	639	636	682	717
Gross Profit (GAAP)	104	120	130	138	105	112	133	146	135	133	139	143	491	496	549	589
R&D Expense	24	24	24	25	26	27	26	28	29	30	29	30	97	108	117	125
SG&A Expense	14	16	16	17	16	17	16	17	16	18	17	18	63	66	70	73
Total Opex (GAAP)	53	56	58	59	60	61	60	63	62	66	64	67	226	243	260	274
Total Operating Income (GAAP)	53	65	74	87	49	53	74	85	74	68	76	77	279	261	296	321
Interest/other Income (GAAP)	2	1	2	8	4	2	2	2	2	2	2	2	13	8	6	6
Pretax Income (GAAP)	53	65	74	87	49	53	74	85	74	68	76	77	279	261	296	321
Net Income (GAAP)	48	62	66	71	44	47	67	76	66	61	68	69	246	234	265	287
Diluted EPS (GAAP)	\$1.43	\$1.86	\$1.99	\$2.15	\$1.34	\$1.44	\$2.04	\$2.33	\$2.05	\$1.89	\$2.12	\$2.15	\$7.43	\$7.15	\$8.22	\$9.06
Diluted Shares (GAAP)	33	33	33	33	33	33	33	33	32	32	32	32	33	33	32	32
Margin Analysis (GAAP)																
Gross Margin	40.9%	43.7%	44.4%	44.4%	43.5%	43.6%	43.9%	44.2%	44.1%	44.4%	44.9%	45.1%	43.5%	43.8%	44.6%	45.1%
R&D (GAAP)	9.4%	8.8%	8.2%	8.0%	10.9%	10.6%	8.7%	8.5%	9.4%	10.0%	9.3%	9.4%	8.6%	9.5%	9.5%	9.5%
SG&A (GAAP)	5.6%	5.7%	5.6%	5.4%	6.8%	6.4%	5.4%	5.2%	5.3%	6.0%	5.6%	5.8%	5.6%	5.9%	5.7%	5.6%
Opex	20.7%	20.4%	19.8%	19.0%	24.7%	23.7%	19.8%	19.0%	20.3%	22.1%	20.8%	21.2%	19.9%	21.5%	21.1%	21.0%
Operating Margin	20.2%	23.3%	24.5%	25.5%	18.8%	19.9%	24.1%	25.2%	23.8%	22.3%	24.1%	23.9%	23.5%	22.3%	23.5%	24.1%
Tax rate	9.8%	4.7%	10.5%	18.7%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	11.6%	10.5%	10.5%	10.5%
Net Income	18.8%	22.5%	22.6%	22.9%	18.2%	18.4%	22.0%	23.0%	21.8%	20.4%	22.0%	21.8%	21.8%	20.6%	21.5%	22.0%

Source: BofA Global Research estimates, Company report

Exhibit 14: ACLS - Segment Model (\$mn)
We expect ACLS Systems sales to grow -1% in 2024

	Q1	Q2	Q3	Q4	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E	FY23	FY24E	FY25E	FY26E
FY (March)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24E	Jun-24E	Sep-24E	Dec-24E	Mar-25E	Jun-25E	Sep-25E	Dec-25E	Dec-23	Dec-24	Dec-25	Dec-26
Systems	195	215	231	242	186	197	233	256	236	231	240	245	884	872	952	1,011
Aftermarket / CS&I	59	59	61	69	56	60	69	75	70	68	70	71	247	260	279	294
Total Revenue	254	274	292	310	242	257	302	331	305	299	310	316	1,131	1,133	1,231	1,305
QoQ Change %																
Systems	-4%	10%	8%	4%	-23%	6%	18%	10%	-8%	-2%	4%	2%				
Aftermarket / CS&I	-5%	0%	4%	13%	-18%	7%	15%	8%	-7%	-2%	2%	2%				
Total Revenue	-5%	8%	7%	6%	-22%	6%	17%	10%	-8%	-2%	4%	2%				
YoY Change %																
Systems	29%	30%	35%	19%	-5%	-8%	1%	6%	27%	17%	3%	-4%	28%	-1%	9%	6%
Aftermarket / CS&I	14%	5%	5%	10%	-4%	2%	14%	9%	24%	14%	1%	-5%	8%	5%	7%	5%
Total Revenue	25%	24%	28%	17%	-5%	-6%	3%	7%	26%	16%	3%	-4%	23%	0%	9%	6%
% of Sales																
Systems	77%	79%	79%	78%	77%	77%	77%	77%	77%	77%	77%	77%	78%	77%	77%	77%
Aftermarket / CS&I	23%	21%	21%	22%	23%	23%	23%	23%	23%	23%	23%	23%	22%	23%	23%	23%
Total Revenue	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: BofA Global Research estimates, Company report



Exhibit 15: ACLS - Balance Sheet (\$mn)ACLS net cash per share looks to increase in 2024

D(M 1)	Q1	Q2	Q3	Q4	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E	FY23	FY24E	FY25E	FY26E
FY (March) Assets	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24E	Jun-24E	Sep-24E	Dec-24E	Mar-25E	Jun-25E	Sep-25E	Dec-25E	Dec-23	Dec-24	Dec-25	Dec-26
Cash & Equivalents	164	133	142	167	310	332	320	346	444	507	553	606	167	346	606	855
Accounts receivable	190	159	192	218	163	168	203	223	204	200	208	212	218	223	212	222
Inventory	262	300	312	306	243	258	301	328	304	296	304	309	306	328	309	313
Total current assets	934	950	1,015	1,080	1,105	1,146	1,212	1,285	1,340	1,391	1,453	1,515	1,080	1,285	1,515	1,778
			,	,	,	,	,	,	,-	,	,	,-	,	,	,-	,
PP&E	41	43	47	54	51	48	46	42	39	36	33	29	54	42	29	16
Deferred income taxes	35	39	44	53	53	53	53	53	53	53	53	53	53	53	53	53
Total Assets	1,080	1,122	1,202	1,282	1,303	1,342	1,406	1,476	1,527	1,575	1,634	1,692	1,282	1,476	1,692	1,942
Liabilities & Equity		C1	CO	Γ.4	12	10	F2	Ε0.	Г4	F2	Γ.4		54	Ε0.		C1
Accounts payable Deferred Income	60 157	61 139	60 148	54 165	43 165	46 165	53 165	58 165	54 165	53 165	54 165	55 165	165	58 165	55 165	61 165
Current portion of l-t debt	157	139	140	2	2	2	2	2	2	2	2	2	2	2	2	2
Total current liabilities	268	248	261	2 8 5	274	277	284	289	2 85	283	285	286	285	289	286	292
rotal current habilities	200	240	201	203	2/4	2//	204	203	203	203	203	200	203	203	200	232
LT debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other long-term liabilities	110	129	140	132	132	132	132	132	132	132	132	132	132	132	132	132
Total shareholders' equity	702	744	801	865	897	934	990	1,055	1,110	1,160	1,217	1,275	865	1,055	1,275	1,518
Total Liab. & Stock Equity	1,080	1,122	1,202	1,282	1,303	1,342	1,406	1,476	1,527	1,575	1,634	1,692	1,282	1,476	1,692	1,942
6 1 11: 11: 5 :																
Cash and Liquidity Ratios Total Cash	451	460	468	513	656	677	666	691	789	853	899	0.53	513	691	952	1,201
Short-term debt	45 I 1	400	400	213	2	2	2	2	789	853	899	952 2	2	2	952	1,201
Long-term debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total debt	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
Net Cash	450	458	466	511	654	676	664	690	788	851	897	950	511	690	950	1.199
Net Cash/dil. share	\$13.52	\$13.80	\$14.06	\$15.48	\$19.88	\$20.61	\$20.34	\$21.20	\$24.31	\$26.38	\$27.91	\$29.67	\$15.42	\$21.08	\$29.50	\$37.80
				·								•				
Cash conversion ratios																
Days Sales Outstanding (DSO)	68.1	53.0	60.0	64.1	61.3	59.6	61.3	61.6	60.9	60.9	61.2	61.1	64.1	61.6	61.1	61.1
Payable Days (DPO)	36.8	35.8	33.7	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	30.8
Inventory Turns	2.3	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
Inventory Days (DIO)	159.4	177.4	175.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	157.2
Cash Conversion Days	190.7	194.6	201.5	197.5	194.7	193.0	194.7	195.0	194.4	194.3	194.6	194.6	197.5	195.0	194.6	187.5

Source: BofA Global Research estimates, Company report

Exhibit 16: ACLS - Cash Flow Statement (\$mn) ACLS had \$4+ in FCF per share in CY23

	Q1	Q2	Q3	Q4	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E	FY23	FY24E	FY25E	FY26E
FY (March)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24E	Jun-24E	Sep-24E	Dec-24E	Mar-25E	Jun-25E	Sep-25E	Dec-25E	Dec-23	Dec-24	Dec-25	Dec-26
Operating Activities																
Net income	48	62	66	71	44	47	67	76	66	61	68	69	246	234	265	287
Depreciation and Amortization	3	3	3	3	3	3	3	3	3	3	3	3	13	12	13	14
Stock Compensation Expenses	3	5	5	5	4	4	5	5	5	5	5	5	18	19	20	21
Change In:																
Accounts receivable	(21)	29	(35)	(26)	55	(5)	(35)	(20)	19	4	(8)	(4)	(52)	(5)	11	(10)
Inventories	(21)	(42)	(16)	6	63	(15)	(43)	(27)	25	8	(8)	(5)	(74)	(22)	20	(4)
Accounts payable	(23)	5	9	(6)	(11)	3	8	5	(4)	(1)	1	1	(15)	4	(3)	6
Deferred Income	47	(19)	20	16	0	0	0	0	0	0	0	0	64	0	0	0
Cash From Operations	35	33	24	65	158	37	5	42	114	80	62	69	157	241	325	315
Investing Activities																
•	(2)	(2)	(୮)	(10)	(5)	(=)	(C)	(7)	(C)	(C)	(C)	(C)	(21)	(22)	(25)	(20)
PP&E Expenditures Other	(2) (31)	(3) (37)	(5) 4	(10) (18)	(5) 0	(5) 0	(6) 0	(7) 0	(6) 0	(6) 0	(6) 0	(6) 0	(21) (82)	(23)	(25) 0	(26) 0
Cash From Investing	(31)	(37) (40)	(1)	(18) (28)	(5)	(5)	(6)	(7)	(6)	(6)	(6)	(6)	(102)	(23)	(25)	(26)
Cash From investing	(33)	(40)	(1)	(26)	(5)	(5)	(0)	(7)	(0)	(6)	(0)	(6)	(102)	(23)	(23)	(26)
Financing Activities																
Stock Repurchases	(12)	(13)	(12)	(13)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(50)	(40)	(40)	(40)
Exercise of stock options	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dividend Paid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debt Issuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debt Repayment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cash From Financing	(17)	(23)	(13)	(13)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(66)	(40)	(40)	(40)
Net Change in Cash/Eqv.	(21)	(32)	10	25	143	22	(11)	26	98	64	46	53	(18)	178	261	249
Cash/Eqv. at beginning of period	186	164	133	142	167	310	332	320	346	444	507	553	186	167	346	606
Cash/Eqv. at end of period	164	133	142	167	310	332	320	346	444	507	553	606	167	346	606	855
casil/Eqv. at ellu of periou	104	133	142	107	310	332	320	340	777	307	333	000	107	340	000	033
Free Cash Flow	32	30	19	55	153	32	(1)	36	108	74	56	63	136	218	301	289
FCF/share	\$0.97	\$0.90	\$0.56	\$1.68	\$4.64	\$0.96	(\$0.04)	\$1.09	\$3.33	\$2.28	\$1.74	\$1.96	\$4.11	\$6.68	\$9.33	\$9.10
TTM FCF	213	241	199	136	257	259	238	218	174	216	273	301				
TTM FCF/Dil Share	\$6.40	\$7.27	\$6.01	\$4.12	\$7.80	\$7.89	\$7.30	\$6.72	\$5.36	\$6.69	\$8.50	\$9.38				

Source: BofA Global Research estimates, Company reports



Price objective basis & risk

Axcelis Technologies (ACLS)

We assign a \$135 PO, which is based on 15x our CY25E non-GAAP EPS, adjusted for net cash. This is toward the lower range of peers trading at 11x-26x and is justified, in our view, given concerns around near-term auto/EV demand.

Downside risks: 1) potential expansion of restrictions of tool shipments from US to China which would impact its trailing-edge portfolio, 2) strong competition from larger players such as AMAT, 3) historically cyclical nature of semiconductor capital spending.

Analyst Certification

I, Duksan Jang, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

US - Semiconductors and Semiconductor Capital Equipment Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Advanced Micro Devices, Inc	AMD	AMD US	Vivek Arya
	Analog Devices Inc.	ADI	ADI US	Vivek Arya
	Applied Materials, Inc.	AMAT	AMAT US	Vivek Arya
	Arm Holdings	ARM	ARM US	Vivek Arya
	Broadcom Inc	AVGO	AVGO US	Vivek Arya
	Cadence	CDNS	CDNS US	Vivek Arya
	Camtek	CAMT	CAMT US	Vivek Arya
	KLA Corporation	KLAC	KLAC US	Vivek Arya
	Lam Research Corp.	LRCX	LRCX US	Vivek Arya
	M/A-Com	MTSI	MTSI US	Vivek Arya
	Marvell Technology Group Ltd.	MRVL	MRVL US	Vivek Arya
	Microchip	MCHP	MCHP US	Vivek Arya
	Micron Technology, Inc	MU	MU US	Vivek Arya
	Nova	NVMI	NVMI US	Vivek Arya
	NVIDIA Corporation	NVDA	NVDA US	Vivek Arya
	NXP Semiconductors NV	NXPI	NXPI US	Vivek Arya
	onsemi	ON	ON US	Vivek Arya
	Synopsys	SNPS	SNPS US	Vivek Arya
NEUTRAL	, ,			,
	Advanced Energy Industries	AEIS	AEIS US	Duksan Jang
	Allegro MicroSystems	ALGM	ALGM US	Blake Friedman
	Axcelis Technologies	ACLS	ACLS US	Duksan Jang
	Coherent Corp	COHR	COHR US	Vivek Arya
	GlobalFoundries	GFS	GFS US	Vivek Arya
	Intel	INTC	INTC US	Vivek Arya
	Lattice Semiconductor	LSCC	LSCC US	Blake Friedman
	Texas Instruments Inc.	TXN	TXN US	Vivek Arya
UNDERPERFORM				
	Ambarella	AMBA	AMBA US	Vivek Arya
	Credo Technology	CRDO	CRDO US	Vivek Arya
	Lumentum Holdings	LITE	LITE US	Vivek Arya
	Qorvo Inc.	QRVO	QRVO US	Vivek Arya
	Skyworks Solutions, Inc.	SWKS	SWKS US	Vivek Arya
	Teradyne	TER	TER US	Vivek Arya
	Wolfspeed Inc	WOLF	WOLF US	Vivek Arya
	·			,



IQmethod[™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt - Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
	Other LT Liabilities	

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

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Important Disclosures

Axcelis Technologies (ACLS) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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

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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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
nderperform	N/A	≥ 20%

R2Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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