

Roku, Inc.

Delivered a strong Q on all metrics, even as the ad market sees an uneven recovery

Reiterate Rating: BUY | PO: 100.00 USD | Price: 76.70 USD

Another strong Q, guidance commentary conservative

Roku delivered another strong quarter and beat our / Street expectations across all key metrics. Our thesis continues to play out: Roku's scale makes it an attractive platform for advertisers who will, over time, shift their dollars to connected TV (CTV). The 4Q report and 1Q guide reflect several positives: 1) Roku recently expanded retail availability of Roku-branded TVs at Costco and Amazon, 2) engagement on the platform continued to grow with streaming hours on The Roku Channel (TRC) growing 63% y/y, and streaming hours per account per day growing to 4.1 hours, 3) Roku made strong progress expanding relationships with third-party platforms, including retail media networks, demand side platforms (DSPs), and other partners, 4) the active account base reached 80mn (grew about 10mn in 2023, which is a record except for 2020 when growth was partly driven by stay-at-home as a result of the pandemic), and 5) Roku continued to expand its TV licensing program in International markets. Reiterate Buy.

M&E weakness continues to pressure gross margins

Commentary on 1Q platform gross margins was cautious as Roku faces difficult y/y growth rate comparisons in streaming services distribution and a challenging media & entertainment (M&E) spending environment for the rest of the year. Management guided 1Q platform revenues to grow similar to F4Q. Roku guided 1Q rev of \$850mn, and gross profit of \$370mn, which are higher than our prior ests, and break-even level of adjusted EBITDA which is about in-line with our est. Mgmt. expects to deliver positive adjusted EBITDA for full year FY24.

Relationship with Walmart remains strong

Mgmt. noted Roku continues to have a strong relationship with Walmart. A recent article in the Wall Street Journal suggest that Walmart is considering an acquisition of Vizio. In our opinion, Roku could have an opportunity to gain share at other retailers if Walmart were to purchase Vizio and limit its distribution. Roku continues to provide the operating system for Walmart's ONN brand TVs.

Adjusting estimates; PO to \$100 (from \$114)

Our F24E rev and EPS move to \$4bn/(\$1.74) vs. our prior estimate of \$4.0bn/(\$1.84). Our PO moves to \$100 (from \$114) based on 3x (prior 4x) C24E EV/Sales. We use a slightly lower multiple on slightly lower platform margin vs. our expectations

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	(3.59)	(5.02)	(1.74)	(1.59)	(0.28)
EPS Change (YoY)	NM	-39.8%	65.3%	8.6%	82.4%
Consensus EPS (Bloomberg)			(1.93)	(0.90)	(0.22)
DPS	0	0	0	0	0
Valuation (Dec)					
EV / EBITDA*	NM	NM	74.8x	46.3x	23.5x
Free Cash Flow Yield*	-1.6%	1.8%	-1.6%	1.1%	-2.9%
* For full definitions of \emph{IQ} method $^{\text{SM}}$ measures, see page 9.					

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Refer to important disclosures on page 10 to 12. Analyst Certification on page 8. Price Objective Basis/Risk on page 8.

Timestamp: 16 February 2024 09:58AM EST

16 February 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	114.00	100.00
2024E Rev (m)	3,999.3	3,999.4
2025E Rev (m)	4,620.6	4,642.2
2026E Rev (m)	NA	5,144.5
2024E EPS	-1.84	-1.74
2025E EPS	-1.69	-1.59
2026E EPS	NA	-0.28

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Stock Data

Price	76.70 USD
Price Objective	100.00 USD
Date Established	16-Feb-2024
Investment Opinion	C-1-9
52-Week Range	51.62 USD - 108.84 USD
Mrkt Val (mn) / Shares Out	9.594 USD / 125.1
(mn)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Free Float	99.5%
Average Daily Value (mn)	423.78 USD
BofA Ticker / Exchange	ROKU / NAS
Bloomberg / Reuters	ROKU US / ROKU.OQ
ROE (2024E)	-10.6%
Net Dbt to Egty (Dec-2023A)	-87.1%
ESGMeter™	Medium

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

iQprofile[™]Roku, Inc.

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(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Return on Capital Employed	-14.1%	-22.3%	-10.0%	-8.9%	-3.3%
Return on Equity	-18.3%	-28.6%	-10.6%	-9.3%	-1.5%
Operating Margin	-17.0%	-22.7%	-8.6%	-6.9%	-2.5%
Free Cash Flow	(150)	173	(154)	103	(276
i Q method [™] – Quality of Earnings*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Cash Realization Ratio	NM	NM	NM	NM	NN
Asset Replacement Ratio	3.3x	1.2x	1.1x	1.3x	1.5
Tax Rate	NM	NM	1.5%	1.5%	1.5%
Net Debt-to-Equity Ratio	-71.1%	-87.1%	-77.8%	-76.1%	-57.9%
Interest Cover	NM	NM	NA	NA	-47.3
Income Statement Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Sales	3,127	3,485	3,999	4,642	5,145
% Change	13.1%	11.4%	14.8%	16.1%	10.8%
Gross Profit	1,441	1,523	1,787	2,186	2,382
% Change	2.3%	5.7%	17.4%	22.3%	9.0%
EBITDA	(84)	4	104	168	330
% Change	NM	NM	NM	61.6%	97.1%
Net Interest & Other Income	39	93	87	80	86
Net Income (Adjusted)	(494)	(711)	(253)	(237)	(43
% Change	NM	-43.8%	64.4%	6.2%	81.9%
Free Cash Flow Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Net Income from Cont Operations (GAAP)	(498)	(710)	(252)	(238)	(42
Depreciation & Amortization	49	70	61	62	59
Change in Working Capital	(181)	21	(280)	(66)	(606
Deferred Taxation Charge	NA	NA	NA	NA	N/
Other Adjustments, Net	642	874	385	426	400
Capital Expenditure	(162)	(83)	(68)	(81)	(87
Free Cash Flow	-150	173	-154	103	-276
% Change	NM	NM	NM	NM	NM
Share / Issue Repurchase	18	19	0	0	(
Cost of Dividends Paid	0	0	0	0	(
Change in Debt	(10)	(80)	0	0	(
Balance Sheet Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Cash & Equivalents	1,962	2,026	1,913	2,016	1,74
Trade Receivables	761	816	1,033	1,093	1,796
Other Current Assets	242	231	343	349	448
Property, Plant & Equipment	335	265	271	290	318
Other Non-Current Assets	1,113	924	924	924	924
Total Assets	4,413	4,262	4,485	4,673	5,227
Short-Term Debt	80	0	0	0	(
Other Current Liabilities	1,003	1,276	1,320	1,316	1,508
Long-Term Debt	0	0	0	0	(
Other Non-Current Liabilities	98	74	77	82	8!
Total Liabilities	1,766	1,935	1,984	1,984	2,180
					2 000
Total Equity Total Equity & Liabilities	2,647 4,413	2,326 4,262	2,460 4,444	2,648 4,632	3,006 5,186

Company Sector

IT Hardware

Company Description

Roku is a key player in the growing over-the-top (OTT), or video streaming services market. Through the sale of streaming players and offering the Roku TV operating system on select smart TVs, Roku offers users a way to access various applications, primarily streaming services. Roku's strategy focuses on acquiring active accounts and then monetizing them primarily through advertising revenues.

Investment Rationale

Our Buy rating is based on 1) assumption of the scatter Ad market strengthening as the macro improves and Roku continuing to outperform given the scale of the platform and targeting capabilities, 2) new partnerships with media networks and DSPs can improve access to advertisers, 3) launch of Roku branded TVs in the U.S. and International expansion should help drive higher subscriber-growth, 4) smart home initiatives, shoppable ads can drive new revenue streams, and 4) positive EBITDA in F24

Stock Data

Average Daily Volume

Quarterly Earnings Estimates

	2023	2024
Q1	-1.38A	-0.62E
Q2	-0.76A	-0.49E
Q3	-2.33A	-0.40E
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5,525,210

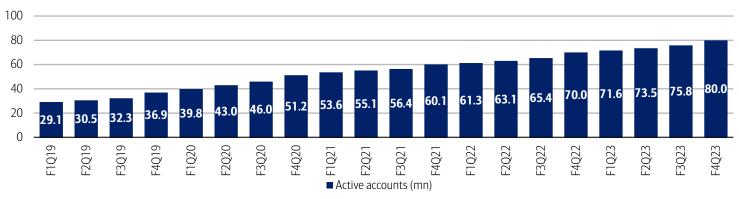
Takeaways from the quarter

- Total revenue in 4Q was up +13.5% y/y to \$984.4mn. Platform revenues grew 13.3% y/y to \$828.9mn.
- Roku added 4.2mn incremental active accounts in 4Q to reach 80.0mn total. This
 was above our/Street estimates.
- On a reported basis, Platform gross margins increased +720bps q/q to 55.3%.
- Reported Device gross margins were negative in F4Q and came in at -13.2%.
- We model Device gross margins to remain negative over the next several quarters.
 We view the Roku Devices as loss leaders which are designed to help grow Roku's installed base. We would rather have Roku absorb the current higher component prices and shipping costs, and report lower devices gross margin, if it helps grow the installed base and perhaps helps penetrate international markets. We model Device gross margins to be -5% for C1Q.
- Streaming hours increased by 21% y/y in 4Q23 to 29.1bn. Viewing hours on traditional TV in the US fell 15% YoY to 7.5 hours per day. Global viewing hours per active account per day in 4Q were 4.1 hours, vs. 3.9 hours in the prior quarter.
- ARPU (Average Revenue Per User) on a trailing twelve-month basis declined 4% y/y to \$39.92.
- Guidance for 1Q24: Management continues to provide a single estimate for each metric instead of a range:
 - Total net revenue: \$850mn, above our/Street prior estimate of \$815mn/\$835mn
 - o Total gross profit: \$370mn, implying gross margin of 43.5%
 - o Adjusted EBITDA: +0mn, break-even
- Coming out of past economic downturns advertisers have returned to spending
 quickly, in order to support revenue growth for their companies. In 4Q23, Roku
 continued to see strong performance in video advertising. In our opinion, this is due
 to the large scale of the platform and its first party data and targeting capabilities
 which makes it attractive to advertisers.
- The Roku Channel (TRC) remains a top-10 TV streaming App comparable to the engagement of peers Paramount+, Peacock, and Max. In F4Q, streaming hours on TRC grew +63% y/y.
- The Roku operating system (OS) was again the No. 1 selling smart TV OS in the U.S. for fifth year in a row. In F4Q, overall TV unit sales in the U.S. were down YoY due to increased LCD panel prices leading to smaller TV price discounts for consumers. Despite the overall unit sales decline, the company saw net adds of 4.2mn. Active account base in the U.S. is bigger than the subscribers of the six largest traditional pay-tv providers combined.
- Roku faces touch y/y growth rate compares in content distribution and M&E.
- We expect Media & Entertainment (M&E) spending to remain pressured.



Figure 1: Roku active accounts by quarter

Active accounts reached 80.0mn in F4Q23



Source: Company reports, BofA Global Research estimates

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Figure 2: Roku active account additions, by year

We now model active accounts growing 7.9mn in 2024 to reach 87.8mn. We model growth of 7.9mn in 2025 to reach 95.8mn active accounts

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Source: Company reports, BofA Global Research estimates

Figure 3: Roku total net revenue and y/y growth

This figure shows Roku's total net revenue by year.

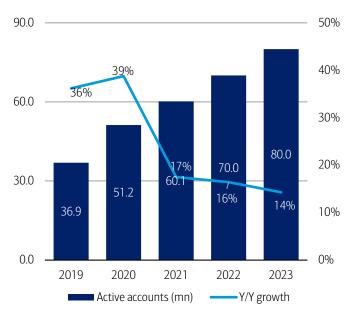


Source: Company reports, BofA Global Research estimates

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Figure 5: Roku Active Accounts and y/y growth

This figure shows Roku's Active Accounts by year

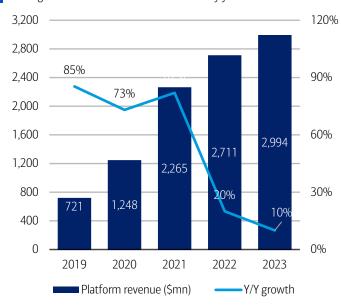


Source: Company reports, BofA Global Research estimates

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Figure 4: Roku Platform revenue and y/y growth

This figure shows Roku's Platform revenue by year



Source: Company reports, BofA Global Research estimates

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Figure 6: Roku ARPU and y/y growth

This figure shows Roku's ARPU and y/y growth



Source: Company reports, BofA Global Research estimates



Model

Figure 8: Roku Income StatementWe model \$4bn of revenue and (\$1.74) in EPS for Roku in 2024E

(\$ in 000 except EPS)		2023A				20:	24E						
(, , , , , , , , , , , , , , , , , , ,	1Q23A	2Q23A	3Q23A	4Q23A	1Q24E	2Q24E	3Q24E	4Q24E	2022A	2023A	2024E	2025E	2026E
Income Statement													
Sales	\$740,990	\$847,186	\$912,018	\$984,425	\$851,836	\$926,461	\$1,029,187	\$1,191,891	\$3,126,656	\$3,484,619	\$3,999,375	\$4,642,246	\$5,144,532
COGS	\$403,393	\$468,915	\$543,195	\$546,501	\$482,592	\$508,773	\$564,666	\$656,292	\$1,685,479	\$1,962,004	\$2,212,323	\$2,456,277	\$2,762,898
Gross Profit	\$337,597	\$378,271	\$368,823	\$437,924	\$369,244	\$417,689	\$464,521	\$535,599	\$1,441,177	\$1,522,615	\$1,787,053	\$2,185,969	\$2,381,635
R&D	\$220,085	\$192,387	\$282,201	\$183,801	\$206,144	\$222,351	\$236,713	\$226,459	\$788,913	\$878,474	\$891,667	\$998,517	\$1,059,774
S&M	\$233,919	\$227,192	\$307,694	\$264,554	\$204,441	\$213,086	\$226,421	\$262,216	\$838,419	\$1,033,359	\$906,164	\$951,660	\$1,008,328
G&A Total Operating Expenses	\$96,053 \$550,057	\$84,652 \$504,231	\$128,717 \$718,612	\$93,737 \$542,092	\$68,147 \$478,732	\$74,117 \$509,554	\$82,335 \$545,469	\$107,270 \$595,945	\$344,678 \$1,972,010	\$403,159 \$2,314,992	\$331,869 \$2,129,700	\$557,070 \$2,507,247	\$442,430 \$2,510,532
Operating Income	(\$212,460)	(\$125,960)	(\$349,789)	(\$104,168)	(\$109,488)	(\$91,865)	(\$80,948)	(\$60,346)	(\$530,833)	(\$792,377)	(\$342,648)	(\$321,278)	(\$128,897)
Interest Expense Other Income	(\$681) \$23,101	(\$4) \$19,999	(\$10) \$22,912	(\$35) \$27,665	\$0 \$19,592	\$0 \$19,456	\$0 \$21,613	\$0 \$26,222	(\$5,161) \$43,766	(\$ 730) \$93,677	\$0 \$86,882	\$0 \$79,847	(\$2,727) \$88,486
Pretax Earnings	(\$190,040)	(\$105,965)	(\$326,887)	(\$76,538)	(\$89,896)	(\$72,409)	(\$59,335)	(\$34,125)	(\$492,228)	(\$699,430)	(\$255,765)	(\$241,431)	(\$43,138)
T	\$3,564	Ć1 C20	62.104	Ć1 7F2 00	(\$1.240.44)	(¢1,00¢,14)	(\$890.03)	/CE11.07\	ĆE 722	¢10.121	(¢2.02C)	(\$2.C21)	/CC 47\
Taxes Tax rate	-1.9%	\$1,630 -1.5%	\$3,184 -1.0%	\$1,753.00 -2.3%	(\$1,348.44) 1.5%	(\$1,086.14) 1.5%	1.5%	(\$511.87) 1.5%	\$5,722 -1.2%	\$10,131 -1.4%	(\$3,836) 1.5%	(\$3,621) 1.5%	(\$647) 1.5%
Net Income	(\$193,604)	(\$107,595)	(\$330,071)	(\$78,291)	(\$88,547)	(\$71,323)	(\$58,445)	(\$33,613)	(\$497,950)	(\$709,561)	(\$251,929)	(\$237,810)	(\$42,491)
Basic EPS	(\$1.38)	(\$0.76)	(\$2.33)	(\$0.55)	(\$0.62)	(\$0.49)	(\$0.40)	(\$0.23)	(\$3.59)	(\$5.02)	(\$1.74)	(\$1.59)	(\$0.28)
Diluted EPS	(\$1.38)	(\$0.76)	(\$2.33) (\$2.33)	(\$0.55)	(\$0.62)	(\$0.49) (\$ 0.49)	(\$0.40) (\$0.40)	(\$0.23) (\$0.23)	(\$3.59)	(\$5.02)	(\$1.74) (\$1.74)	(\$1.59) (\$1.59)	(\$0.28)
B. J. Cl	1 40 222	1.41.000	141077	142011	1 42 052	144075	145.005	145.055	127.554	141.554	1.45.457	140005	152.212
Basic Shares Outstanding Diluted Shares Outstanding	140,333 140,333	141,033 141,033	141,877 141,877	143,011 143,011	143,962 143,962	144,975 144,975	146,025 146,025	146,865 146,865	137,654 137,654	141,564 141,564	145,457 145,457	149,335 149,335	153,312 153,312
Shace Shares odestanding	1 10,555	111,033	111,077	1 15,511	113,302	111,373	110,023	1 10,000	137,031	111,501	1 13,137	1 13,333	133,312
Adjusted EBITDA													
Net Income Other (Income) Evpense Net	(\$193,604)	(\$107,595)	(\$330,071)	(\$78,291)	(\$88,547)	(\$71,323)	(\$58,445)	(\$33,613)	(\$497,950)	(\$709,561)	(\$251,929)	(\$237,810)	(\$42,491)
Other (Income) Expense, Net Stock-Based Compensation	(\$22,420) \$96,472	(\$19,995) \$89,579	(\$22,902) \$91,305	(\$27,630) \$92,774	(\$19,592) \$95,123	(\$19,456) \$101,256	(\$21,613) \$104,994	(<mark>\$26,222)</mark> \$84,026	(\$38,605) \$359,931	(\$92,947) \$370,130	(\$86,882) \$385,399	(\$79,847) \$426,470	(\$85,759) \$399,950
Depreciation and Amortization	\$15,636	\$18,545	\$18,866	\$17,400	\$14,841	\$15,159	\$15,306	\$15,605	\$48,651	\$70,447	\$60,910	\$62,348	\$59,240
Income Tax Expense	\$3,564	\$1,630	\$3,184	\$1,753	(\$1,348)	(\$1,086)	(\$890)	(\$512)	\$5,722	\$10,131	(\$3,836)	(\$3,621)	(\$647)
Adjusted EBITDA	(\$69,082)	(\$17,790)	\$43,430	\$47,737	\$476	\$24,550	\$39,352	\$39,284	(\$84,111)	\$4,295	\$103,662	\$167,540	\$330,292
Stock-Based Compensation													
Cost of Player Revenue	\$804	\$812	\$810	\$1,335	\$1,040	\$812	\$831	\$1,253	\$2,107	\$3,761	\$3,935	\$4,290	\$4,547
Cost of Platform Revenue	\$339	\$349	\$368	\$422	\$382	\$386	\$421	\$533	\$1,562	\$1,478	\$1,722	\$2,022	\$2,253
R&D	\$38,663	\$34,824	\$37,314	\$37,188	\$41,229	\$46,694	\$56,811	\$45,292	\$147,653	\$147,989	\$190,026	\$178,332	\$182,769
S&M	\$34,139	\$31,225	\$34,421	\$30,577	\$34,755	\$34,094	\$36,227	\$26,222	\$123,946	\$130,362	\$131,298	\$160,877	\$153,563
G&A Stock-Based Compensation	\$22,527 \$96,472	\$22,369 \$89,579	\$18,392 \$91,305	\$23,252 \$92,774	\$17,718 \$95,123	\$19,270 \$101,256	\$10,704 \$104,994	\$10,727 \$84,026	\$84,663 \$359,931	\$86,540 \$370,130	\$58,419 \$385,399	\$80,948 \$426,470	\$56,818 \$399,950
SBC component as % of Cost of Player Revenue	0.8%	0.8%	0.6%	0.9%	0.8%	0.8%	0.6%	0.9%	0.5%	0.8%	0.8%	0.8%	0.8%
Cost of Platform Revenue	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%
R&D exp	17.6%	18.1%	13.2%	20.2%	20.0%	21.0%	24.0%	20.0%	18.7%	16.8%	21.3%	17.9%	17.2%
S&M exp	14.6%	13.7%	11.2%	11.6%	17.0%	16.0%	16.0%	10.0%	14.8%	12.6%	14.5%	16.9%	15.2%
G&A exp	23.5%	26.4%	14.3%	24.8%	26.0%	26.0%	13.0%	10.0%	24.6%	21.5%	17.6%	14.5%	12.8%
As % of Sales													
Player sales	14.4%	12.2%	13.7%	15.8%	16.1%	11.2%	12.5%	12.2%	13.3%	14.1%	12.9%	12.1%	11.6%
Platform sales	85.6%	87.8%	86.3%	84.2%	83.9%	88.8%	87.5%	87.8%	86.7%	85.9%	87.1%	87.9%	88.4%
COGS %	54.4%	55.3%	59.6%	55.5%	56.7%	54.9%	54.9%	55.1%	53.9%	56.3%	55.3%	52.9%	53.7%
Gross Margin %	45.6%	44.7%	40.4%	44.5%	43.3%	45.1%	45.1%	44.9%	46.1%	43.7%	44.7%	47.1%	46.3%
R&D %	29.7%	22.7%	30.9%	18.7%	24.2%	24.0%	23.0%	19.0%	25.2%	25.2%	22.3%	21.5%	20.6%
Sales and Marketing %	31.6%	26.8%	33.7%	26.9%	24.0%	23.0%	22.0%	22.0%	26.8%	29.7%	22.7%	20.5%	19.6%
G&A %	13.0%	10.0%	14.1%	9.5%	8.0%	8.0%	8.0%	9.0%	11.0%	11.6%	8.3%	12.0%	8.6%
Operating Margin %	-28.7%	-14.9%	-38.4%	-10.6%	-12.9%	-9.9%	-7.9%	-5.1%	-17.0%	-22.7%	-8.6%	-6.9%	-2.5%
Adj. EBITDA Margin %	-9.3%	-2.1%	4.8%	4.8%	0.1%	2.6%	3.8%	3.3%	-2.7%	0.1%	2.6%	3.6%	6.4%
Interest Expense %	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	0.0%	0.0%	-0.1%
Other Income %	3.1%	2.4%	2.5%	2.8%	2.3%	2.1%	2.1%	2.2%	1.4%	2.7%	2.2%	1.7%	1.7%
Pretax Margin %	-25.6%	-12.5%	-35.8%	-7.8%	-10.6%	-7.8%	-5.8%	-2.9%	-15.7%	-20.1%	-6.4%	-5.2%	-0.8%
Taxes %	0.5%	0.2%	0.3%	0.2%	-0.2%	-0.1%	-0.1%	0.0%	0.2%	0.3%	-0.1%	-0.1%	0.0%
Net Margin %	-26.1%	-12.7%	-36.2%	-8.0%	-10.4%	-7.7%	-5.7%	-2.8%	-15.9%	-20.4%	-6.3%	-5.1%	-0.8%

Source: Company reports, BofA Global Research estimates



Figure 9: Roku segment detailsWe model \$515mn of Devices revenue and about \$3.5bn of Platform revenue for Roku in 2024E

(\$ in 000 except EPS)		2023A				202	4F						
(3 III ooo except Li 3)	1Q23A	2Q23A	3Q23A	4Q23A	1Q24E	2Q24E	3Q24E	4Q24E	2022A	2023A	2024E	2025E	2026E
Revenue Breakdown					.,								
Devices Segment													
Sales	\$106,372	\$103,351	\$125,233	\$155,558	\$137,560	\$103,341	\$128,489	\$145,976	\$415,195	\$490,514	\$515,365	\$561,748	\$595,453
YoY change	18.2%	8.6%	32.9%	14.6%	29.3%	0.0%	2.6%	-6.2%	-13.4%	18.1%	5.1%	9.0%	6.0%
% of total sales	14.4%	12.2%	13.7%	15.8%	16.1%	11.2%	12.5%	12.2%	13.3%	14.1%	12.9%	12.1%	11.6%
COGS	\$102,806	\$120,905	\$134,641	\$176,106	\$144,025	\$113,675	\$141,338	\$175,171	\$505,800	\$534,458	\$574,209	\$589,463	\$624,831
YoY change	-0.3%	5.9%	23.4%	-1.8%	40.1%	-6.0%	5.0%	-0.5%	-4.9%	5.7%	7.4%	2.7%	6.0%
% of player sales Gross Profit	96.6% \$3,566	117.0% (\$17,554)	107.5% (\$9,408)	113.2% (\$20,548)	104.7% (\$6,465)	110.0% (\$10,334)	110.0% (\$12,849)	120.0% (\$29,195)	121.8% (\$90,605)	109.0% (\$43,944)	111.4% (\$58,843)	104.9% (\$27,714)	104.9% (\$29,377)
YoY change	-127.2%	(4،5c,715) 7.6%-	-36.9%	-52.9%	-281.3%	-41.1%	36.6%	42.1%	72.9%	-51.5%	33.9%	-52.9%	6.0%
Gross Margin	3.4%	-17.0%	-7.5%	-13.2%	-4.7%	-10.0%	-10.0%	-20.0%	72.570	31.370	33.3 %	32.3 70	0.0 70
YoY growth components													
Player rev y/y growth	\$16,372	\$8,151	\$31,033	\$19,763	\$31,188	(\$10)	\$3,256	(\$9,582)	(\$64,464)	\$75,319	\$24,851	\$46,383	\$33,705
Player rev y/y growth %	18.2%	8.6%	32.9%	14.6%	29.3%	0.0%	2.6%	-6.2%	-13.4%	18.1%	5.1%	9.0%	6.0%
Volume y/y growth %	0%	0%	-20%	-25%	6%	1%	8%	2%	-14.5%	-13.7%	3.9%	9.0%	6.0%
ASP y/y growth %	18%	9%	66%	53%	22%	-1%	-5%	-8%	1.2%	36.8%	1.1%	0.0%	0.0%
Vol/ASP breakdown													
Player Volume	2,693	2,547	2,129	3,625	2,854	2,572	2,299	3,697	12,734	10,993	11,423	12,451	13,198
ASP	\$40	\$41	\$59	\$43	\$48	\$40	\$56	\$39	\$33	\$45	\$45	\$45	\$45
Implied rev	\$106,372	\$103,351	\$125,233	\$155,558	\$137,560	\$103,341	\$128,489	\$145,976	\$415,195	\$490,514	\$515,365	\$561,748	\$595,453
Active accounts	-		_		=	=	_	-	_	_	_	-	
Active accounts (in 000s)	71,615	73,477	75,810	79,989	81,079	82,810	84,482	87,843	70,013	79,989	87,843	95,767	102,966
Net q/q adds in active accounts (in 000s)	1,602	1,862	2,333	4,179	1,090	1,731	1,672	3,361	9,864	9,977	7,854	7,924	7,199
Active accounts growth drivers													
Streaming players sales	2,693	2,547	2,129	3,625	2,854	2,572	2,299	3,697	12,734	10,993	11,423	12,451	13,198
Conversion to active account adds	21%	29%	40%	44%	21%	37%	40%	50%	32%	34%	38%	35%	30%
Streaming players adds to active accounts	565	726	852	1,595	599	952	920	1,849	4,071	3,738	4,320	4,358	3,960
Licensing partner relationships adding to active accts Active accounts growth drivers %	1,037	1,136	1,482	2,585	490	779	752	1,513	5,794	6,239	3,534	3,566	3,240
Streaming players adds %	35%	39%	36%	38%	55%	55%	55%	55%	41%	37%	55%	55%	55%
<u>Licensing partner relationships</u>	65%	61%	64%	62%	45%	45%	45%	45%	59%	63%	45%	45%	45%
Platform Segment													
Sales (in \$000)	\$634,618	\$743,835	\$786,785	\$828,867	\$714,276	\$823,120	\$900,698	\$1,045,915	\$2,711,461	\$2,994,105	\$3,484,010	\$4,080,498	\$4,549,079
YoY change	-1.4%	11.1%	17.9%	13.3%	12.6%	10.7%	14.5%	26.2%	18.7%	10.4%	16.4%	17.1%	11.5%
% of total sales	85.6%	87.8%	86.3%	84.2%	83.9%	88.8%	87.5%	87.8%	86.7%	85.9%	87.1%	87.9%	88.4%
Seasonality	21.2%	24.8%	26.3%	27.7%	20.5%	23.6%	25.9%	30.0%					
COGS	\$300,587	\$348,010	\$408,554	\$370,395	\$338,567	\$395,098	\$423,328	\$481,121	\$1,179,679	\$1,427,546	\$1,638,114	\$1,866,814	\$2,138,067
YoY change	13.1%	17.9%	38.3%	14.6%	12.6%	13.5%	3.6%	29.9%	43.2%	21.0%	14.8%	14.0%	14.5%
% of total sales	47.4%	46.8%	51.9%	44.7%	47.4%	48.0%	47.0%	46.0%	43.5%	47.7%	47.0%	45.7%	47.0%
Gross Profit	\$334,031	\$395,825	\$378,231	\$458,472	\$375,709	\$428,023	\$477,370	\$564,794	\$1,531,782	\$1,566,559	\$1,845,896	\$2,213,683	\$2,411,012
YoY change Gross Margin	-11.6% 52.6%	5.8% 53.2%	1.8% 48.1%	12.4% 55.3%	12.5% 52.6%	8.1% 52.0%	26.2% 53.0%	23.2% 54.0%	4.8% 56.5%	2.3% 52.3%	17.8% 53.0%	19.9% 54.3%	8.9% 53.0%
Key Performance Indicators													
Hours streamed (in mn)	25,139	25,088	26,663	29,058	29,678	30,682	31,817	32,933	87,475	105,949	125,110	141,309	156,613
Active accounts (in 000s)	71,615	73,477	75,810	79,989	81,079	82,810	84,482	87,843	70,013	79,989	87,843	95,767	102,966
ARPU for the preceding four fiscal quarters	\$40.67	\$40.67	\$41.03	\$39.92	\$40.26	\$40.35	\$40.76	\$41.52	\$41.66	\$39.92	\$41.52	\$44.45	\$45.78
YoY growth													
Hours streamed (in mn)	20.0%	21.0%	22.0%	21.4%	18.1%	22.3%	19.3%	13.3%	19.3%	21.1%	18.1%	12.9%	10.8%
Active accounts (in 000s)	16.9%	16.5%	16.0%	14.3%	13.2%	12.7%	11.4%	9.8%	16.4%	14.3%	9.8%	9.0%	7.5%
ARPU for the preceding four fiscal quarters	-5.1%	-7.5%	-6.9%	-4.2%	-1.0%	-0.8%	-0.7%	4.0%	1.5%	-4.2%	4.0%	7.1%	3.0%
Hours streamed per active account	2.9%	3.7%	5.0%	5.5%	3.8%	8.3%	6.5%	2.5%	3.3%	4.3%	5.2%	2.4%	2.4%
YoY growth components		,				A		40	، بديم	A ·	A · ·	A	
Platform revenue YoY growth Advertising and content distribution License arrangements fees	(\$9,082)	\$74,535	\$119,585	\$97,606	\$79,658	\$79,285	\$113,913	\$217,048	\$426,536	\$282,644	\$489,905	\$596,488	\$468,582
Hours streamed breakdown													
Hours streamed per active account	355.0	345.8	357.2	373.0	368.5	374.4	380.4	382.2	1,372.4	1,431.1	1,505.5	1,542.0	1,578.5
y/y % growth	2.9%	3.7%	5.0%	5.5%	3.8%	8.3%	6.5%	2.5%	3.3%	4.3%	5.2%	2.4%	2.4%
Days in quarter	90	91	92	92	90	91	92	92	365	365	365	365	365
Hours streamed per day per account	3.9	3.8	3.9	4.1	4.1	4.1	4.1	4.2	3.8	3.9	4.1	4.2	4.3
Revenue per hour streamed	\$0.025	\$0.030	\$0.030	\$0.029	\$0.024	\$0.027	\$0.028	\$0.032	\$31.0	\$28.3	\$27.8	\$28.9	\$29.0
Revenue per active account	\$8.9	\$10.1	\$10.4	\$10.4	\$8.8	\$9.9	\$10.7	\$11.9	\$38.7	\$37.4	\$39.7	\$42.6	\$44.2

Source: Company reports, BofA Global Research estimates



Price objective basis & risk

Roku, Inc. (ROKU)

Our \$100 price objective is based on 3x EV/our 2024 revenue estimate, which is lower than the median 7x of long-term range 2-16x. We believe this multiple is justified as it balances near-term supply chain and advertising related headwinds against long-term secular shift of advertising dollars from linear TV to connected TV. We compare Roku's valuation to peers and other high revenue growth companies that are trading at a similar multiple, or higher. Roku continues to execute strong and while the scatter ad market remains weak in the near-term, Roku continues to outpace the market given its scale which makes it attractive to advertisers. In the long-term, we expect Roku revenues to benefit from active account growth driven by geographic expansion into international markets, and increasing content.

Upside risks to our PO: a quicker-than-expected recovery in the macro and advertisers resuming spending more quickly than expected, faster than expected adoption of the new Roku branded TVs and smart home products, and active account growth faster than expected driven by International expansion.

Downside risks to our PO: a more protracted recession, if viewership were to shift away from ad supported content, protracted inflation which can keep TV prices high, lower viewership hours as lockdowns abate and people return to work/school, competition in streaming devices and smart TVs, TV OEM partners shifting away from the Roku TV OS or demanding revenue share agreements.

Analyst Certification

I, Ruplu Bhattacharya, 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 - IT Hardware and Technology Supply Chain Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Amphenol	APH	APH US	Wamsi Mohan
	Apple Inc.	AAPL	AAPL US	Wamsi Mohan
	Corning Inc.	GLW	GLW US	Wamsi Mohan
	Dell Technologies Inc.	DELL	DELL US	Wamsi Mohan
	Flex Ltd.	FLEX	FLEX US	Ruplu Bhattacharya
	HP Inc.	HPQ	HPQ US	Wamsi Mohan
	International Business Machines Corp.	IBM	IBM US	Wamsi Mohan
	Jabil Inc.	JBL	JBL US	Ruplu Bhattacharya
	Nutanix Inc	NTNX	NTNX US	Wamsi Mohan
	Roku, Inc.	ROKU	ROKU US	Ruplu Bhattacharya
	Seagate Technology	STX	STX US	Wamsi Mohan
	Super Micro Computer Inc.	SMCI	SMCI US	Ruplu Bhattacharya
	TD Synnex Corp	SNX	SNX US	Ruplu Bhattacharya
	TE Connectivity Ltd.	TEL	TEL US	Wamsi Mohan
	Western Digital Corporation	WDC	WDC US	Wamsi Mohan
NEUTRAL				
	Arrow Electronics Inc.	ARW	ARW US	Ruplu Bhattacharya
	Avnet Inc.	AVT	AVT US	Ruplu Bhattacharya
	CDW Corp	CDW	CDW US	Ruplu Bhattacharya
	Concentrix Corporation	CNXC	CNXC US	Ruplu Bhattacharya
	Hewlett-Packard Enterprise	HPE	HPE US	Wamsi Mohan
	Pure Storage	PSTG	PSTG US	Wamsi Mohan
	Sensata Technologies Holdings Plc	ST	ST US	Wamsi Mohan



US - IT Hardware and Technology Supply Chain Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Teradata Corporation	TDC	TDC US	Wamsi Mohan
UNDERPERFORM				
	DigitalOcean	DOCN	DOCN US	Wamsi Mohan
	NetApp Inc.	NTAP	NTAP US	Wamsi Mohan
	Sanmina Corporation	SANM	SANM US	Ruplu Bhattacharya
	Vishay Intertechnology, Inc.	VSH	VSH US	Ruplu Bhattacharya
	Vizio	VZIO	VZIO US	Wamsi Mohan

*IQ*method[™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) \times (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

Manethod 3³¹ is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

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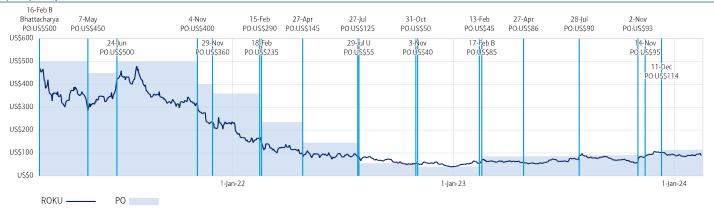
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Disclosures

Important Disclosures

Roku, Inc. (ROKU) 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%	≤ /0%
Neutral	≥ 0%	≤ 30%
Underperform	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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