

CyberArk

Solid outperformance; CYBR remains one our top picks for 2024

Reiterate Rating: BUY | PO: 300.00 USD | Price: 261.60 USD

Solid end to the year, healthy CY24 outlook. Reit. Buy

CyberArk's growth continues to be notably durable versus other cybersecurity vendors, underscored by continued robust demand for identity security and upsell of new products. ARR (annual recurring revenue)/revenue growth was 36%/32%, respectively, 200bps/800bps above Street expectations, and revenue growth guidance of 24% exceeded the Street's 23%. Strong top-line growth drove healthy margin expansion, with GM/OM increasing 210bps/1,300bps YoY to 85%16%. We believe CY24 will be a strong year for CyberArk with FY ARR/rev guidance of 26%/24% growth, above Street expectations of 25%/23%. CyberArk continues to be one of our top picks for 2024 and we reiterate our Buy and increase our PO to \$300 from \$255 based on 11x CY25EV/Sales versus 9x prior.

Continued strong performance across the board

We highlight several positive key trends: Customer growth continued to accelerate, with 340 new logos added in 4Q versus 230 last quarter. Customers are also adopting more of platform outside of PAM (privileged access management) products; new logos are increasingly landing in 2+ solutions, larger customers are landing with 5+ solutions, and net retention continues to trend above 120%. Management also highlighted the strength of the pipeline heading into CY24, and we flag that CyberArk has one of the best visibility into pipeline in the cybersecurity space, giving us confidence in our estimates.

Striking the right balance of growth and profitability

CyberArk ended CY23 with revenue growth of 27% and OpEx growth of 15%, highlighting the sustainability of the operating model. CY23 FCF margin of 7% marked the company's return to profitability post transition to SaaS (software as a service), and the company's FCF guide of \$90mn implies +300bps margin expansion for CY24. In our view, continued top-line performance and cost optimization should position the company to achieve and even surpass its mid-term target of \$200mn in FCF by 2025.

CyberArk continues to be an underappreciated stock

Despite solid performance, CyberArk trades at 10x Ev/Sales versus Palo Alto, Zscaler, and Crowdstrike, which trade at 15-18x. We believe a combination of factors will narrow the valuation gap in 2024, and focus on the impressive financial outperformance, growing opportunities in the PAM market, and continued acquisition of new customers.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	0.33	(0.44)	1.18	1.83	3.26
GAAP EPS	(2.12)	(3.21)	(1.55)	(0.74)	0.36
EPS Change (YoY)	-83.9%	NM	NM	55.1%	78.1%
Consensus EPS (Bloomberg)			0.78	1.69	3.22
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	736.9x	NM	206.1x	132.9x	74.6x
GAAP P/E	NM	NM	NM	NM	675.5x
EV / EBITDA*	157.7x	NM	150.6x	88.1x	40.0x
Free Cash Flow Yield*	0.8%	0.5%	0.7%	1.4%	2.8%
* For full definitions of <i>IQ</i> method SM measures, see page 8.					

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Refer to important disclosures on page 8 to 11. Analyst Certification on page 7. Price
Objective Basis/Risk on page 7.

Timestamp: 08 February 2024 04:17PM EST

08 February 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	255.00	300.00

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Stock Data

Price

Price Objective	300.00 USD
Date Established	8-Feb-2024
Investment Opinion	C-1-9
52-Week Range	120.11 USD - 245.84 USD
Mrkt Val (mn) / Shares Out	8,401 USD / 32.1
(mn)	
Free Float	100.0%
Average Daily Value (mn)	141.57 USD
BofA Ticker / Exchange	CYBR / NAS
Bloomberg / Reuters	CYBR US / CYBR.OQ
ROE (2023E)	7.1%
Net Dbt to Eqty (Dec-2022A)	-95.6%
ESGMeter™	High

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'.

261.60 USD

iQprofile[™] CyberArk

** – Bus Performance*					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	1.9%	-0.3%	6.9%	9.6%	13.7%
Return on Equity	1.9%	-2.5%	7.1%	10.3%	15.9%
Operating Margin	4.8%	-3.8%	4.4%	9.0%	15.6%
Free Cash Flow	66	37	51	108	216

*iQ*method SM − Quality of Earnings*

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash Realization Ratio	5.6x	NM	1.1x	1.3x	1.4x
Asset Replacement Ratio	0.4x	0.6x	0.3x	-3.2x	-3.5x
Tax Rate	8.1%	4.9%	NM	22.0%	22.0%
Net Debt-to-Equity Ratio	-76.6%	-95.6%	-80.6%	-81.7%	-87.3%
Interest Cover	NA	NA	NA	NA	NA

Income Statement Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Sales	503	592	752	930	1,164
% Change	8.3%	17.7%	27.1%	23.6%	25.2%
Gross Profit	426	487	623	776	978
% Change	6.6%	14.4%	27.8%	24.7%	26.0%
EBITDA	46	(2)	48	82	180
% Change	-58.5%	NM	NM	70.9%	120.1%
Net Interest & Other Income	5	18	54	36	19
Net Income (Adjusted)	13	(18)	52	88	160
% Change	-83.5%	NM	NM	68.5%	82.8%

Free Cash Flow Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Income from Cont Operations (GAAP)	(86)	(130)	(68)	(35)	18
Depreciation & Amortization	22	20	15	(2)	(2)
Change in Working Capital	(57)	(41)	(113)	(49)	(127)
Deferred Taxation Charge	(12)	(16)	(8)	0	0
Other Adjustments, Net	208	215	231	199	333
Capital Expenditure	(9)	(13)	(5)	(5)	(6)
Free Cash Flow	66	37	51	108	216
% Change	-33.9%	-43.5%	37.8%	111.0%	99.9%
Share / Issue Repurchase	0	0	0	0	0
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	0	0	0	0	0

Balance Sheet Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	557	648	639	747	963
Trade Receivables	NA	NA	NA	NA	NA
Other Current Assets	505	449	572	625	748
Property, Plant & Equipment	20	23	16	23	29
Other Non-Current Assets	611	698	794	795	796
Total Assets	1,693	1,819	2,022	2,190	2,537
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	340	452	1,125	1,150	1,287
Long-Term Debt	0	0	0	0	0
Other Non-Current Liabilities	627	689	105	126	146
Total Liabilities	967	1,141	1,230	1,275	1,433
Total Equity	727	678	792	915	1,103
Total Equity & Liabilities	1,693	1,819	2,022	2,190	2,537

^{*} For full definitions of $\emph{\textbf{IQ}}\textit{method}^{\text{SM}}$ measures, see page 8.

Company Sector

Cyber Security

Company Description

CyberArk is a pioneer of a new layer of IT security solutions that protect orgs. from cyber-attackers that have evaded the network perimeter. CyberArk's solutions secure organizations critical assets dubbed privileged accounts, which are the keys to databases, industrial control systems, servers and applications, all which house sensitive data. CyberArk's software is focused on protecting these accounts, which are highly targeted in cyber-attacks to disrupt networks and/or steal sensitive info.

Investment Rationale

We have a positive view for CyberArk as we see revenue growth reacceleration and resilient market tailwinds. Strong margins and relatively high growth also make the valuation attractive, even when considering the execution risks and perpetual licensing model.

Stock Data

verage Daily Vo	olume	541,178

Quarterly Earnings Estimates

	2022	2023
Q1	-0.30A	-0.17A
Q2	-0.27A	0.03A
Q3	-0.06A	0.42A
Q4	0.17A	0.81E



Financial highlights

Exhibit 1: Actual vs estimated results

CyberArk 4Q results beat across the board

A vs. E	Q4	Q1	Q2	Q3	Q4A	Q4E			
	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Dec-23	delta	QoQ	YoY
License revenue	103,030	96,602	111,257	126,935	158,266	146,356	11,910	24.7%	53.6%
y/y	19.5%	54.5%	44.4%	44.2%	53.6%	42.1%			
Maintenance & services	66,121	65,103	64,586	64,301	64,838	65,164	-326	0.8%	-1.9%
y/y	2.3%	-1.5%	-0.8%	-0.4%	0.8%	1.3%			
Total Revenues	169,151	161,705	175,843	191,236	223,104	211,520	11,584	17%	32%
y/y	11.8%	26.8%	23.5%	25.3%	31.9%	25.0%			
License Gross Profit (Non-GAAP)	88,355	80,445	93,305	105,012	137,802	121,079	16,723	31%	56%
Service Gross Profit (Non-GAAP)	51,853	51,048	49,958	53,139	51,937	53,852	-1,915	-2%	0%
Total Gross Profit (Non-GAAP)	140,208	131,493	143,263	158,151	189,739	174,931	14,808	20%	35%
R&D	44,162	45,518	46,472	43,866	46,131	48,253	-2,122	5%	4%
S&M	76,900	84,696	87,360	82,920	91,670	89,554	2,116	11%	19%
G&A	15,047	13,865	15,311	14,488	17,189	15,647	1,542	19%	14%
Total opex (Non-GAAP)	136,109	144,079	149,143	141,274	154,990	153,453	1,537	10%	14%
Operating income (Non-GAAP)	4,099	-12,586	-5,880	16,877	34,749	21,478	13,271	106%	748%
y/y	-74.9%	6.6%	-44.9%	-522.8%	747.7%	424.0%			
Financial income (expense), net	9,909	10,354	12,630	12,922	17,841	12,922	4,919	38%	80%
Income (loss) before taxes on income	14,008	-2,232	6,750	29,799	52,590	34,400	18,190	76%	275%
Non-GAAP Net income (loss)	7,150	-6,946	1,280	19,609	38,062	22,637	15,425	94%	432%
Diluted sharecount	40,924	41,168	41,599	46,642	47,107	47,108	-1	1%	15%
Diluted EPS (Non-GAAP)	\$0.17	-\$0.17	\$0.03	\$0.42	\$0.81	\$0.48	\$0.33	92%	362%
y/y	-38.2%	-44.5%	-111.6%	-832.4%	362.5%	175.0%			
Margin Analysis								<u>bps</u>	<u>bps</u>
License Gross Profit (Non-GAAP)	85.8%	83.3%	83.9%	82.7%	87.1%	82.7%	434 bps	434 bps	131 bps
Service Gross Profit (Non-GAAP)	78.4%	78.4%	77.4%	82.6%	80.1%	82.6%	-254 bps	-254 bps	168 bps
Gross Margin (Non-GAAP)	82.9%	81.3%	81.5%	82.7%	85.0%	82.7%	234 bps	235 bps	216 bps
Operating Margin (Non-GAAP)	2.4%	-7.8%	-3.3%	8.8%	15.6%	10.2%	542 bps	675 bps	1315 bps
Tax rate (Non-GAAP)	49.0%	-211.2%	81.0%	34.2%	27.6%	34.2%	-657 bps	-657 bps	-2133 bps
Net Margin (Non-GAAP)	4.2%	-4.3%	0.7%	10.3%	17.1%	10.7%	636 bps	681 bps	1283 bps
Billings (Implied)	201,504	169,088	178,672	195,601	280,681	195,601	85,080	85080 bps	39%

Source: BofA Global Research estimates, company report

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Exhibit 2: Summary of model changesWe tweak our model based on updated guidance

	Sales			EPS		GAAP EPS			
=	Old	New	Delta	Old	New	Delta	Old	New	Delta
FY23									
Q1	161,705	161,705	0.0	-\$0.17	-\$0.17	0.00	-\$0.85	-\$0.85	0.00
Q2	175,843	175,843	0.0	\$0.03	\$0.03	0.00	-\$0.62	-\$0.62	0.00
Q3	191,236	191,236	0.0	\$0.42	\$0.42	0.00	-\$0.35	-\$0.35	0.00
Q4	211,520	223,104	11,583.8	\$0.48	\$0.81	0.33	-\$0.15	\$0.19	0.34
Total	740,304	751,888	11,583.8	\$0.83	\$1.18	0.35	-\$1.92	-\$1.55	0.37
FY24									
Q1E	206,759	215,280	8,521.5	\$0.20	\$0.31	0.12	-\$0.49	-\$0.25	0.24
Q2E	220,236	222,244	2,007.4	\$0.29	\$0.35	0.05	-\$0.42	-\$0.29	0.13
Q3E	231,367	233,710	2,342.3	\$0.41	\$0.46	0.04	-\$0.33	-\$0.22	0.11
Q4E	258,915	258,458	(456.9)	\$0.62	\$0.71	0.09	-\$0.15	\$0.01	0.16
Total	917,277	929,691	12,414.2	\$1.53	\$1.83	0.30	-\$1.38	-\$0.74	0.64
FY25									
Q1E	256,566	252,788	(3,778.4)	\$0.53	\$0.40	(0.13)	-\$0.23	-\$0.29	(0.06)
Q2E	270,673	270,427	(245.7)	\$0.63	\$0.55	(0.07)	-\$0.15	-\$0.15	(0.00)
Q3E	282,906	293,150	10,243.5	\$0.80	\$0.83	0.03	-\$0.01	\$0.10	0.10
Q4E	314,787	347,952	33,165.1	\$1.09	\$1.47	0.38	\$0.25	\$0.69	0.44
Total	1,124,932	1,164,317	39,384.5	\$3.05	\$3.26	0.21	-\$0.12	\$0.36	0.49

Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

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Exhibit 3: Income statement
Updated summary of key financia

	May 22				Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E			
	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25	FY2023E	FY2024E	FY2025E
License revenue	96,602	111,257	126,935	158,266	154,309	162,025	173,367	197,638	193,685	212,085	234,354	285,912	493,060	687,339	926,037
Maintenance and professional services	65,103	64,586	64,301	64,838	60,971	60,219	60,343	60,820	59,103	58,342	58,796	62,040	258,828	242,353	238,280
Total Revenues 16	161,705	175,843	191,236	223,104	215,280	222,244	233,710	258,458	252,788	270,427	293,150	347,952	751,888	929,691	1,164,317
YoY Growth	26.8%	23.5%	25.3%	31.9%	33.1%	26.4%	22.2%	15.8%	17.4%	21.7%	25.4%	34.6%	27.1%	23.6%	25.2%
Cost of sales (Non-GAAP)	30,212	32,580	33,085	33,365	37,583	37,579	39,762	38,404	44,606	45,491	45,390	50,531	129,242	153,329	186,019
Gross Profits (Non-GAAP)	131,493	143,263	158,151	189,739	177,697	184,665	193,947	220,054	208,182	224,937	247,759	297,420	622,646	776,363	978,298
Gross Margins (Non-GAAP)	81.3%	81.5%	82.7%	85.0%	82.5%	83.1%	83.0%	85.1%	82.4%	83.2%	84.5%	85.5%	82.8%	83.5%	84.0%
R&D	45,518	46,472	43,866	46,131	49,130	50,112	51,114	53,159	54,754	56,944	58,083	60,987	181,987	203,515	230,767
S&M	84,696	87,360	82,920	91,670	99,920	102,918	103,947	109,144	113,510	117,483	122,182	129,513	346,646	415,930	482,689
G&A	13,865	15,311	14,488	17,189	17,533	18,234	18,234	19,510	19,706	20,691	21,105	21,738	60,853	73,511	83,239
	144,079	149,143	141,274	154,990	166,583	171,264	173,296	181,814	187,969	195,118	201,370	212,238	589,486	692,956	796,695
	-12,586	-5.880	16,877	34,749	11.115	13.401	20,652	38.240	20,212	29,819	46.390	85,182	33.160	83,407	181,603
Operating margin (Non-GAAP)	-7.8%	-3.3%	8.8%	15.6%	5.2%	6.0%	8.8%	14.8%	8.0%	11.0%	15.8%	24.5%	4.4%	9.0%	15.6%
	10,354	12,630	12,922	17,841	13,841	9,841	7,841	4,841	4,841	4,841	4,841	4,841	53,747	36,364	19,364
Taxes (Non-GAAP)	4.714	5,470	10,190	14,528	9,982	6,740	6,696	8,702	5,762	7,452	10,400	17,104	34,902	32,120	40,718
Net Income (Non-GAAP)	-6,946	1,280	19,609	38,062	14,973	16,501	21,797	34,378	19,291	27,208	40,831	72,919	52,005	87,650	160,249
Net income (Non-GAAL)	-0,540	1,200	13,003	30,002	14,575	10,501	21,737	34,376	13,231	27,200	40,051	72,313	52,005	07,030	100,243
EPS (Non-GAAP)	-\$0.17	\$0.03	\$0.42	\$0.81	\$0.31	\$0.35	\$0.46	\$0.71	\$0.40	\$0.55	\$0.83	\$1.47	\$1.18	\$1.83	\$3.26
EPS (GAAP)	-\$0.85	-\$0.62	-\$0.35	\$0.19	-\$0.25	-\$0.29	-\$0.22	\$0.01	-\$0.29	-\$0.15	\$0.10	\$0.69	-\$1.55	-\$0.74	\$0.36
, ,	41,168	41,599	46,642	47,107	47,814	47,336	47,762	48,239	48,674	49,160	49,308	49,752	44,129	47,788	49,223
Silaced Silai ecodine	,	,555	10,012	.,,,	.,,,,,,,,	17,550	.,, 02	10,233	10,07	.5,.00	13,500	13,7 32	11,123	17,700	13,223
Operating Cash Flow	5,821	-10,868	14,353	46,898	22,559	14,539	16,992	59,394	33,531	21,594	29,956	136,892	56,204	113,485	221,974
OCF Margin	3.6%	-6.2%	7.5%	21.0%	10.5%	6.5%	7.3%	23.0%	13.3%	8.0%	10.2%	39.3%	7.5%	12.2%	19.1%
Free Cash Flow	4,046	-12,615	13,622	46,203	20,642	12,652	16,203	58,644	31,461	19,556	29,104	136,081	51,256	108,141	216,202
FCF margin	2.5%	-7.2%	7.1%	20.7%	9.6%	5.7%	6.9%	22.7%	12.4%	7.2%	9.9%	39.1%	6.8%	11.6%	18.6%
Cash and cash equivalent 9	913,752	905,134	906,196	993,421	1,014,063	1,026,716	1,042,918	1,101,562	1,133,023	1,152,580	1,181,683	1,317,765	993,421	1,101,562	1,317,765
Margin Analysis:	J 13,7 JZ	303,131	300,130	333,121	1,011,005	1,020,710	1,0 12,5 10	1,101,302	1,155,025	1,132,300	1,101,005	1,517,705	333, 121	1,101,502	1,517,705
	81.3%	81.5%	82.7%	85.0%	82.5%	83.1%	83.0%	85.1%	82.4%	83.2%	84.5%	85.5%	82.8%	83.5%	84.0%
R&D	28.1%	26.4%	22.9%	20.7%	22.8%	22.5%	21.9%	20.6%	21.7%	21.1%	19.8%	17.5%	24.2%	21.9%	19.8%
S&M	52.4%	49.7%	43.4%	41.1%	46.4%	46.3%	44.5%	42.2%	44.9%	43.4%	41.7%	37.2%	46.1%	44.7%	41.5%
G&A	8.6%	8.7%	7.6%	7.7%	8.1%	8.2%	7.8%	7.5%	7.8%	7.7%	7.2%	6.2%	8.1%	7.9%	7.1%
OPEX (Non-GAAP)	89.1%	84.8%	73.9%	69.5%	77.4%	77.1%	74.1%	70.3%	74.4%	7.7%	68.7%	61.0%	78.4%	74.5%	68.4%
,	-7.8%	-3.3%	8.8%	15.6%	5.2%	6.0%	8.8%	14.8%	8.0%	11.0%	15.8%	24.5%	4.4%	9.0%	15.6%
Operating Margin (Non-GAAP) Tax rate (Non-GAAP) -2	-7.0%	-3.5% 81.0%	34.2%	27.6%	40.0%	29.0%	23.5%	20.2%	23.0%	21.5%	20.3%	19.0%	40.2%	26.8%	20.3%
, , ,	-4.3%		10.3%												
Net Margin (Non-GAAP)	-4.3%	0.7%	10.5%	17.1%	7.0%	7.4%	9.3%	13.3%	7.6%	10.1%	13.9%	21.0%	6.9%	9.4%	13.8%
YoY%Chg	E 4 E 0/	4.4.40/	44.20/	F2.C0/	E0.70/	4F C0/	26.60/	24.00/	25 50/	20.00/	25.20/	44.70/	40.10/	20.40/	2470/
License revenue	54.5%	44.4%	44.2%	53.6%	59.7%	45.6%	36.6%	24.9%	25.5%	30.9%	35.2%	44.7%	49.1%	39.4%	34.7%
Maintenance and professional services	0.1%	-1.1%	-0.5%	-1.9%	-6.3%	-6.8%	-6.2%	-6.2%	-3.1%	-3.1%	-2.6%	2.0%	-0.9%	-6.4%	-1.7%
Total revenues	26.8%	23.5%	25.3%	31.9%	33.1%	26.4%	22.2%	15.8%	17.4%	21.7%	25.4%	34.6%	27.1%	23.6%	25.2%
OPEX	24.3%	16.9%	8.7%	13.9%	15.6%	14.8%	22.7%	17.3%	12.8%	13.9%	16.2%	16.7%	15.7%	17.6%	15.0%
Operating Income	6.6%	-44.9%	-522.8%	747.7%	-188.3%	-327.9%	22.4%	10.0%	81.9%	122.5%	124.6%	122.8%	-248.1%	151.5%	117.7%
, , ,	-44.5%	-111.6%	-832.4%	362.5%	-285.6%	1032.9%	8.6%	-11.8%	26.6%	58.8%	81.5%	105.7%	-366.6%	55.6%	77.5%
QoQ%Chg															
License revenue	-6.2%	15.2%	14.1%	24.7%	-2.5%	5.0%	7.0%	14.0%	-2.0%	9.5%	10.5%	22.0%			
Maintenance and professional services	-1.5%	-0.8%	-0.4%	0.8%	-6.0%	-1.2%	0.2%	0.8%	-2.8%	-1.3%	0.8%	5.5%			
Total revenues	-4.4%	8.7%	8.8%	16.7%	-3.5%	3.2%	5.2%	10.6%	-2.2%	7.0%	8.4%	18.7%		1	
OPEX (Non-GAAP)	5.9%	3.5%	-5.3%	9.7%	7.5%	2.8%	1.2%	4.9%	3.4%	3.8%	3.2%	5.4%			
Operating Income (Non-GAAP)	-407.1%	-53.3%	-387.0%	105.9%	-68.0%	20.6%	54.1%	85.2%	-47.1%	47.5%	55.6%	83.6%		1	
EPS (Non-GAAP)	-196.6%	-118.2%	1266.3%	92.2%	-61.2%	11.3%	30.9%	56.2%	-44.4%	39.6%	49.6%	77.0%			

Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Price objective basis & risk

CyberArk (CYBR)

Our PO of \$300 is based on roughly 12x 2025E EV/Sales. This is near the middle of SaaS security peers at 10-18x. CyberArk's transition to SaaS is gaining additional momentum, which should support the multiple.

Upside risks to our price objective are difficulties in sizing the market given its newness and low market awareness, stronger conversion of qualified customers that are currently in the pipeline, and higher average deal sizes from rising license attach rates.

Downside risks are FX risk exposure (40% international exposure), difficulties sizing the market, and competition from large, well-established operators.

Analyst Certification

I, Tal Liani, 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 - Telecom and Data Networking Equipment Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Akamai	AKAM	AKAM US	Madeline Brooks
	Amdocs	DOX	DOX US	Tal Liani
	Arista Networks	ANET	ANET US	Tal Liani
	Check Point Software Technologies	CHKP	CHKP US	Tal Liani
	Ciena	CIEN	CIEN US	Tal Liani
	CrowdStrike Holdings Inc.	CRWD	CRWD US	Tal Liani
	CyberArk	CYBR	CYBR US	Tal Liani
	Fastly	FSLY	FSLY US	Madeline Brooks
	Fortinet	FTNT	FTNT US	Tal Liani
	Gen Digital, Inc.	GEN	GEN US	Jonathan Eisenson
	InterDigital, Inc.	IDCC	IDCC US	Tal Liani
	Motorola Solutions	MSI	MSI US	Tomer Zilberman
	Qualcomm	QCOM	QCOM US	Tal Liani
	Zscaler	ZS	ZS US	Tal Liani
NEUTRAL				
	Cellebrite	CLBT	CLBT US	Tal Liani
	Cisco Systems	CSCO	CSCO US	Tal Liani
	Palo Alto Networks	PANW	PANW US	Tal Liani
	SentinelOne, Inc.	S	SUS	Tal Liani
UNDERPERFORM				
ONDER! ER! ORM	Cloudflare	NET	NET US	Madeline Brooks
	CommScope	COMM	COMM US	Tal Liani
	F5 Inc	FFIV	FFIV US	Tal Liani
	Okta Inc	OKTA	OKTA US	Madeline Brooks
	SecureWorks	SCWX	SCWX US	Tal Liani
	Secureworks	SCWX	SCMX 02	Tai Liani



*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	

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Basic EBIT + Depreciation + Amortization

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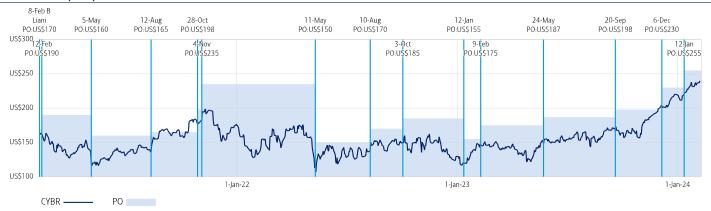
Enterprise Value

Disclosures

EV / EBITDA

Important Disclosures

CyberArk Software (CYBR) Price Chart



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

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

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	57	51.82%	Buy	43	75.44%
Hold	27	24.55%	Hold	17	62.96%
Sell	26	23.64%	Sell	12	46.15%

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%

 Underperform
 N/A
 ≥ 20%

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