

# Credo Technology

# Expect strong 2H ramp in AEC cables, though largely in expectations/valuation

Reiterate Rating: UNDERPERFORM | PO: 21.00 USD | Price: 22.02 USD

# Growing product momentum, but inflection still a year out

Modest FQ3/FQ4 beat/raise, on strong one-time NRE product sales and lumpy IP contribution. For core products (excl. NRE), sales increased +5% YoY in FQ3 and should remain at around this level (\$40-45mn/qtr.) through the first half of FY25E. CRDO's first AEC customer Microsoft contribution remains at just \$10-15mn/qtr run-rate today vs. \$20-30mn/qtr just a year ago, though the company is actively expanding customer footprint with P&L impact expected to commence by F2H'25. Though competition remains fierce (at MRVL/others), optical DSP products are also benefitting from Al and its related increase in bandwidth and should start contributing more by FY26. Overall, CRDO's growth visibility has increased, but we note bulk of the benefits are still 1+ year out. More importantly, we now anticipate opex growth of ~20% YoY for FY23-27E vs. low-teens prior expectation, and FQ4 share count is guided up +21% YoY (follow-on offering), limiting leverage in the model. With the company trading at ~9x EV/S, we believe valuation remains full. We reiterate Underperform, though raise FY25/26E sales up (6-7%) and take our PO to \$21 (from \$18), now on 9x CY25E EV/S from 8x prior on modestly increased FY25 visibility and in line with comps trading 6x-11x.

# Likes: F2H'25 ramps, AI/high-speed networking, cash

1) Second hyperscaler customer for AEC (Amazon) should start ramping by F2H'25, with contribution from third qualified customer also expected to commence by then. 2) As Al drives ever-growing need for bandwidth, CRDO's core competency in high-speed networking (400G/800G AEC and optical DSP products) enhances company positioning. 3) \$400mn+ in net cash (\$2.45/share) increased ~\$170mn QoQ and provides ability to invest in R&D to maintain AEC competitive advantage and grow share in other markets.

# Risks: Margin volatility, competition, concentration

1) Though product gross margin increased to 60.7% in FQ3 (from 52.2% in FQ2) on one-time NRE sales benefit, it could return to low-50% range in FQ4. GM remains volatile, subject to revenue run-rate (can improve with scale and higher DSP mix). 2) We see continued competitive pressure from MRVL/others, particularly in DSPs, as well as with viable, alternative AEC products in back-end networking (and other Al areas). 3) Two large AEC customers combined made up ~47% of sales in FQ3, with a large chiplet customer representing another 23% (particularly risky if customers digest inventory).

Estimates (Apr) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	(0.12)	0.06	0.07	0.32	0.51
GAAP EPS	(0.25)	(0.11)	(0.11)	0.12	0.30
EPS Change (YoY)	40.0%	NM	16.7%	357.1%	59.4%
Consensus EPS (Bloomberg)			0.06	0.39	0.74
DPS	0	0	0	0	0
Valuation (Apr)					
P/E	NM	367.0x	314.6x	68.8x	43.2x
GAAP P/E	NM	NM	NM	183.5x	73.4x
EV / EBITDA*	NM	229.2x	294.2x	59.0x	33.7x
Free Cash Flow Yield*	-1.4%	-1.3%	0.7%	1.0%	2.4%
* For full definitions of <i>IQ</i> method <sup>≤M</sup> measures, see page 10.					

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Refer to important disclosures on page 11 to 13. Analyst Certification on page 9. Price Objective Basis/Risk on page 9.

Timestamp: 27 February 2024 10:12PM EST

#### 27 February 2024

#### Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	18.00	21.00
2024E Rev (m)	191.7	192.7
2025E Rev (m)	286.2	305.7
2026E Rev (m)	383.5	407.4
2024E EPS	0.06	0.07
2025E EPS	0.30	0.32
2026E EPS	0.55	0.51

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## Stock Data

Price	22.02 USD
Price Objective	21.00 USD
Date Established	27-Feb-2024
Investment Opinion	C-3-9
52-Week Range	7.20 USD - 23.60 USD
Mrkt Val (mn) / Shares Out (mn)	3,545 USD / 161.0
Free Float	80.3%
Average Daily Value (mn)	50.53 USD
BofA Ticker / Exchange	CRDO / NAS
Bloomberg / Reuters	CRDO US / CRDO.OQ
ROE (2024E)	2.6%
Net Dbt to Eqty (Apr-2023A)	-31.2%
FSGMeter™	NI A

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".

#### Glossary

See page 4

# **iQ**profile<sup>™</sup> Credo Technology

iQmethod – bus reflormance					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	-3.3%	2.7%	2.7%	9.5%	13.6%
Return on Equity	-4.3%	2.8%	2.6%	10.1%	14.3%
Operating Margin	-19.8%	-10.7%	-17.6%	0.5%	9.3%
Free Cash Flow	(48)	(46)	24	37	84

## *iQ*method <sup>SM</sup> − Quality of Earnings\*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	NM	-2.6x	3.4x	0.9x	1.1x
Asset Replacement Ratio	3.7x	2.8x	1.4x	1.2x	1.1x
Tax Rate	0.4%	NM	NM	NM	NM
Net Debt-to-Equity Ratio	-77.6%	-31.2%	-19.0%	-22.8%	-31.2%
Interest Cover	-36.7x	NA	NA	NA	NA

#### Income Statement Data (Apr)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	106	184	193	306	407
% Change	81.4%	73.0%	4.6%	58.6%	33.3%
Gross Profit	65	108	120	191	259
% Change	68.7%	66.0%	11.1%	59.7%	35.4%
EBITDA	(4)	15	12	59	103
% Change	51.2%	NM	-22.1%	398.5%	75.3%
Net Interest & Other Income	0	3	13	17	17
Net Income (Adjusted)	(10)	10	12	58	95
% Change	26.5%	NM	21.3%	402.9%	63.0%

#### Free Cash Flow Data (Apr)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	(9)	12	18	68	105
Depreciation & Amortization	5	8	11	12	16
Change in Working Capital	(30)	(47)	9	(28)	(19)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	3	3	1	0	0
Capital Expenditure	(18)	(22)	(15)	(15)	(18)
Free Cash Flow	-48	-46	24	37	84
% Change	5.1%	4.5%	NM	54.1%	129.0%
Share / Issue Repurchase	194	0	0	0	0
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	0	0	0	0	0

## Balance Sheet Data (Apr)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	259	109	104	140	225
Trade Receivables	30	50	47	76	85
Other Current Assets	43	170	373	385	397
Property, Plant & Equipment	22	40	46	49	51
Other Non-Current Assets	22	29	38	38	38
Total Assets	376	397	607	688	796
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	26	31	41	54	57
Long-Term Debt	0	0	0	0	0
Other Non-Current Liabilities	15	19	18	18	18
Total Liabilities	42	50	60	73	75
Total Equity	334	348	547	615	721
Total Equity & Liabilities	376	397	607	688	796

<sup>\*</sup> For full definitions of  $\emph{IQ}$  method  $^{\text{SM}}$  measures, see page 10.

# **Company Sector**

Semiconductors

# **Company Description**

Credo provides secure, high-speed connectivity solutions that deliver improved power and cost efficiency as data generation and corresponding bandwidth requirements increase exponentially throughout the data infrastructure market. Credo's connectivity solutions are optimized for optical and electrical Ethernet applications, including the emerging 100G (or Gigabits per second), 200G, 400G and 800G markets.

### **Investment Rationale**

We rate CRDO Underperform. While a current leader in the active electrical cable market, hyperscaler order push-outs create certain concerns across: 1) visibility/uncertainty in early stages of product ramp, 2) risks of delayed technology adoption, and 3) competition developing more competitive solutions amid pause in AEC ramp

#### **Stock Data**

Average Daily Volume 2,294,639

## **Quarterly Earnings Estimates**

	2023	2024
Q1	0.03A	-0.03A
Q2	0.02A	0.01A
Q3	0.05A	0.04A
∩4	-0.044	0.05F



# **Summary of model changes**

# **Exhibit 1: Summary of model changes**

We take up FY24/25/26E sales estimates by 1%/7%/6% versus prior

		Sales (\$mn)		No	n-GAAP EPS (ex. S	BC)
	Old	NEW	delta	Old	NEW	delta
1Q24	\$35	\$35	\$0	(\$0.03)	(\$0.03)	\$0.00
2Q24	\$44	\$44	\$0	\$0.01	\$0.01	\$0.00
3Q24	\$52	\$53	\$1	\$0.03	\$0.04	\$0.01
4Q24E	\$61	\$61	(\$0)	\$0.05	\$0.05	(\$0.00)
FY24E	\$192	\$193	\$1	\$0.06	\$0.07	\$0.01
YoY%	4.1%	4.6%	0.5%	NA	NA	19.7%
	***	4.5.7	(+=)	40.00	40.00	(40.00)
1Q25E	\$64	\$57	(\$7)	\$0.06	\$0.03	(\$0.03)
2Q25E	\$67	\$59	(\$7)	\$0.06	\$0.03	(\$0.03)
3Q25E	\$74	\$90	\$16	\$0.08	\$0.13	\$0.05
4Q25E	\$82	\$99	\$17	\$0.10	\$0.13	\$0.03
FY25E	\$286	\$306	\$19	\$0.30	\$0.32	\$0.02
YoY%	49.3%	58.6%	6.8%	NA	NA	7.3%
1Q26E	\$85	\$95	\$10	\$0.11	\$0.12	\$0.01
2Q26E	\$93	\$97	\$4	\$0.13	\$0.12	(\$0.01)
3Q26E	\$100	\$105	\$5	\$0.14	\$0.13	(\$0.01)
4Q26E	\$106	\$111	\$5	\$0.16	\$0.15	(\$0.01)
FY26E	\$384	\$407	\$24	\$0.55	\$0.51	(\$0.03)
YoY%	34.0%	33.3%	6.2%	83.0%	59.8%	-6.3%

**Source:** BofA Global Research estimates, company reports

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# FQ3 reported vs. expectations

# **Exhibit 2: Summary of FQ3 results**

Sales/EPS modestly above the Street expectations

	3Q23	2Q24				3Q24				
			Guidance	Cons	BofA	New BofA	Delta vs. Street (%, bps)	Delta vs. Street (\$/bps)	QoQ	YoY
Sales (\$mn)	\$54.3	\$44.0	\$52 (\$51-\$53)	\$52.2	\$52.0	\$53.1	1.6%	\$0.8	20.5%	-2.2%
QoQ%	5.6%	25.5%		18.6%	18.2%	20.5%				
Product Sales	\$41.7	\$36.7		\$44.7	\$44.0	\$51.8	15.9%		41.2%	24.3%
IP Licensing/Other	\$12.6	\$7.4		\$7.5	\$8.0	\$1.3	-83.3%		-83.0%	-90.1%
Reported Gross Margin % (Non-GAAP)	59.3%	59.9%	60% (59%-61%)	59.7%	60.0%	62.2%	254	254	235	291
Gross Profit (Non-GAAP)	32.3	26.4			31.2	33.0			25.2%	2.1%
R&D (Non-GAAP)	20.5	21.7			24.1	24.2			11.5%	18.1%
Sales/Marketing (Non-GAAP)	11.9	13.3			13.9	14.2			7.4%	19.2%
Opex Total (Non-GAAP)	25.7	27.1	\$29 (\$28-\$30)		29.0	30.6			12.9%	19.3%
Operating Income (Non-GAAP)	6.7	(0.7)			2.3	2.4			-431.2%	-63.8%
Operating Margin % (Non-GAAP)	12.3%	(1.7%)		4.2%	4.3%	4.6%				
Financial Income	2.5	2.7			2.7	4.3				
Tax expense	(3.2)	0.5			0.1	(2.0)				
Net Income (Non-GAAP)	7.5	1.2			4.5	6.3				
Diluted EPS (Non-GAAP)	\$0.05	\$0.01		\$0.03	\$0.03	\$0.04		\$0.01		
Diluted Shares (Non-GAAP)	160	165			166	171				

 $\textbf{Source:} \ \textbf{BofA Global Research estimates, Bloomberg, visible alpha, company reports}$ 



# FQ4 guidance vs. expectations

# Exhibit 3: Summary of FQ4 outlook vs. expectations

CRDO guidance of \$60.5mn modestly ahead of the Street

	3Q24			4Q24E				
		BofA	Cons	Guidance	New BofA	Delta vs. Street (%, bps)	QoQ	YoY
Sales (\$mn) QoQ%	<b>\$53.1</b> 20.5%	<b>\$60.6</b> 16.4%	<b>\$59.6</b> 14.2%	\$60.5 (\$59-\$62)	<b>\$60.5</b> 14.1%	1.5%	14.1%	88.6%
Product Sales IP Licensing/Other	\$51.8 \$1.3	\$52.4 \$8.2	\$51.3 \$8.2		\$44.2 \$16.3	-13.8% 98.6%		
Reported Gross Margin % (Non-GAAP)	62.2%	60.1%	59.9%	65% (64%-66%)	65.0%	507	277	682
Gross Profit (Non-GAAP)	33.0	36.4			39.3		19.2%	110.8%
R&D (Non-GAAP)	24.2	24.9			28.6		18.0%	33.6%
Sales/Marketing (Non-GAAP)	14.2	15.0			16.4		15.0%	20.6%
Opex Total (Non-GAAP)	30.6	29.8		\$34 (\$33-\$35)	34.0		11.1%	25.2%
Operating Income (Non-GAAP)	2.4	6.6			5.3		120.6%	NA
Operating Margin % (Non-GAAP)	4.6%	10.8%	10.2%		8.8%	(135)		
Financial Income	4.3	2.7			4.3			
Tax expense	(2.0)	0.4			(1.7)			
Net Income (Non-GAAP)	6.3	8.5			8.9		NA	NA
Diluted EPS (Non-GAAP)	\$0.04	\$0.05	\$0.05		\$0.05	-1.5%	33.5%	NA
Diluted Shares (Non-GAAP)	171	167			180		5.0%	NA

**Source:** BofA Global Research estimates, company reports, Bloomberg

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# **Balance Sheet Snapshot**

## **Exhibit 4: Summary of inventory and cash position**

CRDO holds a healthy cash position

(FY year end Dec)	3Q23	4Q23	1Q24	2Q24	3Q24
•	Jan-23	Apr-23	Jul-23	Oct-23	Jan-24
Total Cash	\$233.0	\$217.8	\$237.6	\$240.5	\$409.1
Short-term debt	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Long-term debt	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total debt	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Net Cash	\$233.0	\$217.8	\$237.6	\$240.5	\$409.1
Net Cash/dil. share	\$1.49	\$1.47	\$1.59	\$1.60	\$2.45
DSO	72.4	140.5	72.5	67.6	76.8
DPO	88.6	41.1	51.1	56.3	46.7
Inventory (\$)	\$43.2	\$49.5	\$28.0	\$32.7	\$44.8
Inv Days	208.8	312.1	263.0	184.2	143.1
Cash Conversion days	192.7	411.4	284.4	195.5	173.1
Cash Flow from Ops	(\$2.3)	(\$11.8)	\$24.6	\$5.0	(\$1.0)
Capex	(\$6.9)	(\$3.9)	(\$5.3)	(\$2.0)	(\$5.1)
Free cash flow	(\$9.2)	(\$15.7)	\$19.3	\$3.0	(\$6.1)

 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Global} \ \mathsf{Research} \ \mathsf{estimates}, \mathsf{company} \ \mathsf{reports}, \ \mathsf{Bloomberg}$ 

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## <u>Glossary</u>

AEC: Active Electrical Cable DSP: Digital Signal Processor Al: Artificial Intelligence NRE: Non-recurring engineering MRVL: Marvell Technology

AVGO: Broadcom MSFT: Microsoft

CRDO: Credo Technology

# **Exhibit 5: CRDO – Income Statement (\$mn)**We expect sales to reaccelerate in FY25

	1Q24	2Q24	3Q24	4Q24E	1Q25E	2Q25E	3Q25E	4Q25E	1Q26E	2Q26E	3Q26E	4Q26E	FY24E	FY25E	CY24E	CY25E
Income Statement (\$mn)	Jul-23	Oct-23	Jan-24	Apr-24E	Jul-24E	Oct-24E	Jan-25E	Apr-25E	Jul-25E	Oct-25E	Jan-26E	Apr-26E	Apr-24E	Apr-25E	Dec-24E	Dec-25E
Revenue	\$35.1	\$44.0	\$53.1	\$60.5	\$57.1	\$59.5	\$90.0	\$99.1	\$94.7	\$97.1	\$104.5	\$111.0	\$192.7	\$305.7	\$267.1	\$395.4
QoQ%	9.4%	25.5%	20.5%	14.1%	(5.6%)	4.1%	51.4%	10.0%	(4.4%)	2.5%	7.7%	6.2%				
YoY%	(24.5%)	(14.3%)	(2.2%)	88.6%	62.7%	35.0%	69.7%	63.7%	65.8%	63.3%	16.1%	12.1%	4.6%	58.6%	62.6%	48.0%
Cost of Revenues (Non-GAAP)	14.1	17.7	20.0	21.2	22.0	22.6	33.5	36.4	34.7	35.7	38.1	40.2	73.0	114.5	99.3	144.9
Gross Profit (N-GAAP, ex. SBC)	21.0	26.4	33.0	39.3	35.1	36.9	56.5	62.7	60.0	61.4	66.5	70.8	119.7	191.1	167.8	250.6
R&D Expenses	22.6	21.7	24.2	28.6	28.6	28.9	29.8	33.3	33.8	34.8	36.9	38.0	97.2	120.6	115.8	138.9
QoQ (%)	5.8%	(4.0%)	11.5%	18.0%	0.0%	1.0%	3.0%	12.0%	1.5%	3.0%	6.0%	3.0%				
YoY (%)	35.7%	19.7%	18.1%	33.6%	26.3%	32.9%	22.8%	16.5%	18.3%	20.6%	24.1%	14.1%	26.6%	24.0%	28.7%	19.9%
SG&A Expenses (Non-GAAP)	12.5	13.3	14.2	16.4	16.4	16.6	17.1	18.8	18.6	19.0	19.6	20.1	56.4	69.0	66.5	76.0
QoQ (%)	(7.6%)	5.7%	7.4%	15.0%	0.5%	1.0%	3.0%	10.0%	(1.0%)	2.0%	3.0%	2.5%				
YoY (%)	12.0%	14.9%	19.2%	20.6%	31.1%	25.3%	20.2%	15.0%	13.3%	14.4%	14.4%	6.6%	16.9%	22.3%	24.1%	14.3%
Total Opex (N-GAAP, ex. SBC)	27.4	27.1	30.6	34.0	34.1	34.5	35.9	40.2	40.5	41.9	44.6	45.2	119.1	144.8	138.5	167.3
Op. Income (N-GAAP, ex. SBC)	(6.4)	(0.7)	2.4	5.3	1.0	2.3	20.6	22.4	19.4	19.5	21.9	25.6	0.6	46.4	29.3	83.2
Interest expense, net (Non-GAAP)	2.2	2.7	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	13.4	17.2	17.2	17.2
Pretax income (Non-GAAP)	(4.3)	2.0	6.7	9.6	5.3	6.6	24.9	26.7	23.7	23.8	26.2	29.9	14.0	63.5	46.5	100.4
Income tax provision (GAAP)	(0.5)	0.5	(2.0)	(1.7)	(2.0)	(1.9)	(0.4)	(0.3)	(0.5)	(0.5)	(0.3)	(0.0)	(3.8)	(4.7)	(6.0)	(1.7)
Other tax adjustments	(1.0)	(0.4)	(2.4)	(2.4)	(2.4)	(2.4)	(2.4)	(2.4)	(2.4)	(2.4)	(2.4)	(2.4)	(6.2)	(9.8)	(9.8)	(9.8)
Net Income (N-GAAP, ex. SBC)	(4.7)	1.2	6.3	8.9	4.9	6.1	22.9	24.6	21.8	21.9	24.1	27.5	11.6	58.5	42.8	92.4
Net Income incl. SBC (GAAP)	(11.7)	(6.6)	0.4	(0.3)	(4.3)	(3.1)	13.7	14.4	11.7	11.7	13.9	16.3	(18.2)	20.8	6.1	51.7
Basic EPS (GAAP)	(\$0.08)	(\$0.04)	\$0.00	(\$0.00)	(\$0.03)	(\$0.02)	\$0.08	\$0.09	\$0.07	\$0.07	\$0.08	\$0.10	(\$0.12)	\$0.12	\$0.04	\$0.30
Diluted EPS (GAAP)	(\$0.08)	(\$0.04)	\$0.00	(\$0.00)	(\$0.02)	(\$0.02)	\$0.08	\$0.08	\$0.06	\$0.06	\$0.08	\$0.09	(\$0.11)	\$0.12	\$0.03	\$0.29
Diluted EPS (N-GAAP, ex. SBC)	(\$0.03)	\$0.01	\$0.04	\$0.05	\$0.03	\$0.03	\$0.13	\$0.13	\$0.12	\$0.12	\$0.13	\$0.15	\$0.07	\$0.32	\$0.24	\$0.50
Basic shares (GAAP)	149.3	150.2	157.2	165.1	165.9	166.7	167.5	168.4	169.2	170.1	170.9	171.8	155.4	167.1	166.3	169.7
Diluted shares (GAAP)	149.3	150.2	167.2	175.6	176.4	177.3	178.2	179.1	180.0	180.9	170.9	171.6	160.6	177.8	176.9	180.5
Diluted shares (Non-GAAP)	149.3	164.9	171.4	180.0	180.9	181.8	182.7	183.6	184.5	185.5	186.4	187.3	166.4	182.3	181.4	185.0
Diluted Stiales (Noti-GAAL)	143.5	104.5	17 1.4	100.0	100.9	101.0	102.7	105.0	104.5	0.5.5	100.4	107.5	100.4	102.5	101.4	105.0
Margins (Non-GAAP)%																
GM (w/o dilution, incl. SBC)	59.2%	59.3%	61.4%	63.9%	60.4%	60.9%	62.0%	62.6%	62.6%	62.5%	62.9%	63.1%	62.1%	62.5%	62.8%	63.4%
Operating expense	100.2%	79.5%	72.5%	74.3%	78.9%	76.5%	52.1%	52.6%	55.4%	55.5%	54.0%	52.3%	79.7%	62.0%	68.3%	54.4%
Operating margin	(18.3%)	(1.7%)	4.6%	8.8%	1.8%	3.9%	22.9%	22.6%	20.5%	20.1%	20.9%	23.1%	0.3%	15.2%	11.0%	21.1%
Tax rate	12.6%	22.8%	(30.5%)	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	(27.1%)	(7.3%)	(13.0%)	(1.7%)

**Source:** BofA Global Research estimates, company reports

# Exhibit 6: CRDO – Segment model (\$mn) Product sales will drive long-term growth

	1Q24	2Q24	3Q24	4Q24E	1Q25E	2Q25E	3Q25E	4Q25E	1Q26E	2Q26E	3Q26E	4Q26E	FY24E	FY25E	CY24E	CY25E
Segment Model (\$mn)	Jul-23	Oct-23	Jan-24	Apr-24E	Jul-24E	Oct-24E	Jan-25E	Apr-25E	Jul-25E	Oct-25E	Jan-26E	Apr-26E	Apr-24E	Apr-25E	Dec-24E	Dec-25E
Product Sales	\$32.3	\$36.7	\$51.8	\$44.2	\$47.3	\$50.2	\$80.3	\$89.1	\$84.7	\$86.4	\$93.3	\$98.9	\$165.0	\$266.9	\$222.0	\$353.4
IP Sales	\$2.8	\$7.4	\$1.3	\$16.3	\$9.8	\$9.3	\$9.7	\$9.9	\$10.0	\$10.7	\$11.3	\$12.2	\$27.7	\$38.8	\$45.1	\$42.0
Other	-	-	-	-	-	-	-	-	-	-	-			-		
Total Sales	\$35.1	\$44.0	\$53.1	\$60.5	\$57.1	\$59.5	\$90.0	\$99.1	\$94.7	\$97.1	\$104.5	\$111.0	\$192.7	\$305.7	\$267.1	\$395.4
QoQ %																
Product Sales	22.4%	13.5%	41.2%	(14.6%)	7.0%	6.0%	60.0%	11.0%	(5.0%)	2.0%	8.0%	6.0%				
IP Sales	(51.2%)	165.1%	(83.0%)	1,200.0%	(40.0%)	(5.0%)	5.0%	2.0%	1.0%	7.0%	5.0%	8.0%				
Other	-	=.	-	-	-	-	-	-	-	-	-	-				
Total Sales	9.4%	25.5%	20.5%	14.1%	(5.6%)	4.1%	51.4%	10.0%	(4.4%)	2.5%	7.7%	6.2%				
YoY%																
Product Sales	(10.4%)	(23.7%)	24.3%	67.6%	46.5%	36.8%	55.0%	101.4%	78.8%	72.1%	16.2%	10.9%	8.4%	61.7%	50.8%	59.2%
IP Sales	(73.3%)	124.9%	(90.1%)	186.4%	252.3%	26.3%	678.1%	(39.0%)	2.8%	15.7%	15.7%	22.6%	(13.4%)	40.0%	164.2%	(6.8%)
Other	-	-	-	-		-	-		-	-	-	-	-	-	-	-
Total Sales	(24.5%)	(14.3%)	(2.2%)	88.6%	62.7%	35.0%	69.7%	63.7%	65.8%	63.3%	16.1%	12.1%	4.6%	58.6%	62.6%	48.0%
% of Total																
Product Sales	92.1%	83.3%	97.6%	73.1%	82.9%	84.4%	89.2%	90.0%	89.4%	88.9%	89.2%	89.0%	85.6%	87.3%	83.1%	89.4%
IP Sales	7.9%	16.7%	2.4%	26.9%	17.1%	15.6%	10.8%	10.0%	10.6%	11.1%	10.8%	11.0%	14.4%	12.7%	16.9%	10.6%
Other	7.570	10.7 /0	2.770	20.5 /0	17.170	13.0 /0	10.070	10.0 /0	10.0 /0	11.170	10.0 /0	11.070	1-1-70	12.7 /0	10.5 /0	10.0 /0
Total Sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
i otai Jaies	100.0 /0	100.0 /0	100.0 /0	100.0 /0	100.070	100.0 /0	100.0 /0	100.0 /0	100.070	100.0 /0	100.0 /0	100.070	100.070	100.0 /0	100.0 /0	100.0 /0
Product Only Gross Margin	53.8%															
Product Services/NRE Gross Margin	87.2%															
IP Gross Margin	94.8%															
Total Gross Margin (GAAP)	59.2%															
5	,															

**Source:** BofA Global Research estimates, company reports



# Exhibit 7: CRDO – Balance Sheet (\$mn) CRDO holds a solid net cash position

	1Q24	2Q24	3Q24	4Q24E	1Q25E	2Q25E	3Q25E	4Q25E	1Q26E	2Q26E	3Q26E	4Q26E	FY24E	FY25E	CY24E	CY25E
Balance Sheet (\$mn)	Jul-23	Oct-23	Jan-24	Apr-24E	Jul-24E	Oct-24E	Jan-25E	Apr-25E	Jul-25E	Oct-25E	Jan-26E	Apr-26E	Apr-24E	Apr-25E	Dec-24E	Dec-25E
Assets																
Cash, cash equivalents	127.0	129.0	96.1	103.8	122.8	128.5	123.1	140.5	162.2	183.4	201.8	224.6	103.8	140.5	123.1	201.8
Short-term investments	110.5	111.5	313.1	313.1	313.1	313.1	313.1	313.1	313.1	313.1	313.1	313.1	313.1	313.1	313.1	313.1
Accounts Receivable	28.0	32.7	44.8	46.6	43.9	45.7	69.3	76.2	72.8	74.7	80.4	85.4	46.6	76.2	69.3	80.4
Inventory	40.8	35.8	31.5	33.3	27.3	28.1	41.7	45.2	49.6	51.0	54.4	57.4	33.3	45.2	41.7	54.4
Other current assets	14.3	19.3	26.0	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
Total Current Assets	320.7	328.3	511.4	523.2	533.6	541.9	573.6	601.5	624.2	648.7	676.2	707.0	523.2	601.5	573.6	676.2
Property and equipment	44.5	45.0	44.9	45.5	46.1	46.7	47.6	48.6	49.0	49.5	50.0	50.6	45.5	48.6	47.6	50.0
Right of use assets	14.2	13.5	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
Other long-term assets	16.4	19.0	22.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
Total Assets	395.7	405.8	592.5	606.9	617.8	626.7	659.3	688.2	711.3	736.3	764.4	795.7	606.9	688.2	659.3	764.4
Liabilities & Shareholders Equity																
Accounts Payable	7.9	10.9	10.3	10.9	14.5	14.9	22.1	24.0	22.9	23.5	25.1	26.5	10.9	24.0	22.1	25.1
Current portion of debt outstanding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other current liabilities	20.0	21.5	25.2	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7
Total current liabilities	31.2	37.2	40.2	41.3	44.9	45.3	52.5	54.4	53.3	53.9	55.5	56.9	41.3	54.4	52.5	55.5
Long-term debt outstanding	-	-	-	-	-	-	-	-	-	=	-	-	-	-	-	-
Other long-term liabilities	17.1	19.0	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
Total liabilities	48.3	56.3	58.5	59.6	63.2	63.6	70.8	72.7	71.6	72.2	73.8	75.2	59.6	72.7	70.8	73.8
Total stockholder's equity	347.4	349.5	534.0	547.3	554.6	563.1	588.5	615.5	639.8	664.1	690.6	720.5	547.3	615.5	588.5	690.6
Total liabilities and equity	395.7	405.8	592.5	606.9	617.8	626.7	659.3	688.2	711.3	736.3	764.4	795.7	606.9	688.2	659.3	764.4
Cash and Liquidity Ratios																
Total cash (incl. restricted cash)	237.6	240.5	409.1	416.8	435.8	441.6	436.1	453.5	475.2	496.4	514.9	537.6	416.8	453.5	436.1	514.9
Short-term debt	-	-	-	-	-	-	-	-	-	=	-	-	-	-	-	-
Long-term debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash	237.6	240.5	409.1	416.8	435.8	441.6	436.1	453.5	475.2	496.4	514.9	537.6	416.8	453.5	436.1	514.9
Net Cash/dil. share	\$1.59	\$1.60	\$2.45	\$2.37	\$2.47	\$2.49	\$2.45	\$2.53	\$2.64	\$2.74	\$2.83	\$2.94	\$2.60	\$2.55	\$2.47	\$2.85
Cash conversion ratios																
Days Sales Outstanding (DSO)	72.5	67.6	76.8	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0				
Days Payables Outstanding (DPO)	51.1	56.3	46.7	46.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0				
Inventory Turns	1.4	2.0	2.6	2.6	3.2	3.2	3.2	3.2	2.8	2.8	2.8	2.8				
Days of Inventory (DIO)	263.0	184.2	143.1	143.1	113.1	113.1	113.1	113.1	130.0	130.0	130.0	130.0				
Cash conversion days (DIO+DSO-DPO)	284.4	195.5	173.1	166.3	123.1	123.1	123.1	123.1	140.0	140.0	140.0	140.0				

**Source:** BofA Global Research estimates, company reports

	1Q24	2Q24	3Q24	4Q24E	1Q25E	2Q25E	3Q25E	4Q25E	1Q26E	2Q26E	3Q26E	4Q26E	FY24E	FY25E	CY24E	CY25E
Statement of Cash Flows (\$mn)	Jul-23	Oct-23	Jan-24	Apr-24E	Jul-24E	Oct-24E	Jan-25E	Apr-25E	Jul-25E	Oct-25E	Jan-26E	Apr-26E	· ·			
Net Income (loss)	(\$11.7)	(\$6.6)	\$0.4	(\$0.3)	(\$4.3)	(\$3.1)	\$13.7	\$14.4	\$11.7	\$11.7	\$13.9	\$16.3	(\$18.2)	\$20.8	\$6.1	\$51.7
Adjustments:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	=	-
Stock-based compensation expense	8.0	8.1	9.1	11.6	11.6	11.6	11.6	12.6	12.6	12.6	12.6	13.6	36.8	47.4	46.4	50.4
Depreciation & Amortization	3.0	3.7	2.1	2.4	2.3	2.4	3.6	4.0	3.8	3.9	4.2	4.4	11.2	12.2	10.7	15.8
Other	0.6	0.9	(1.2)	-	-	-	-	-	-	-	-	=	0.3	-	-	=
Changes in op. assets and liabilities:	24.8	(1.1)	(11.4)	(3.0)	12.2	(2.2)	(29.9)	(8.6)	(2.1)	(2.6)	(7.6)	(6.6)	9.2	(28.4)	(22.8)	(20.9)
Accounts receivable	21.6	(4.8)	(12.0)	(1.8)	2.6	(1.8)	(23.5)	(6.9)	3.4	(1.8)	(5.7)	(5.0)	3.0	(29.6)	(24.5)	(11.2)
Inventories	5.0	4.5	4.3	(1.8)	6.0	(0.8)	(13.6)	(3.6)	(4.4)	(1.4)	(3.4)	(3.1)	12.0	(11.9)	(10.2)	(12.7)
Other assets	(2.0)	(7.1)	(6.7)	(0.5)	-	-	-	-	-	-	-	-	(16.3)	-	(0.5)	-
Accounts payable	2.5	3.1	(0.6)	0.6	3.6	0.4	7.2	1.9	(1.1)	0.6	1.6	1.4	5.5	13.1	11.8	3.0
Other Liabilities	(2.4)	3.2	3.7	0.5	-	-	-	-	-	-	-	-	5.0	-	0.5	-
Net cash from operating	24.6	5.0	(1.0)	10.7	21.9	8.7	(1.0)	22.4	25.9	25.6	23.2	27.7	39.3	52.0	40.4	97.1
Capital expenditures	(5.3)	(2.0)	(5.1)	(3.0)	(2.9)	(3.0)	(4.5)	(5.0)	(4.3)	(4.4)	(4.7)	(5.0)	(15.5)	(15.3)	(13.4)	(18.3)
Other	-	-	-	-	-	-	-	-	-	-	-	-	_	-	=	-
Net cash from investing	(6.6)	(3.0)	(5.1)	(3.0)	(2.9)	(3.0)	(4.5)	(5.0)	(4.3)	(4.4)	(4.7)	(5.0)	(17.8)	(15.3)	(13.4)	(18.3)
Repurchase of common shares	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Issuance of common stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repayment of borrowings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds from borrowings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	0.5	0.1	(26.8)	-	-	-	-	-	-	-	-	-	(26.1)	-	-	-
Net cash from financing	0.5	0.1	(26.8)	-	-	-	-	-	-	-	-	-	(26.1)	-	-	-
Effect of exchange rate changes	(0.1)	(0.2)	-	-	-	-	-	-	-	-	-	-	(0.2)	-	-	-
Net cash increase/decrease	18.5	1.9	(32.9)	7.7	19.0	5.8	(5.5)	17.4	21.7	21.2	18.5	22.7	(4.8)	36.7	27.0	78.8
Cash, beginning of period	108.6	127.0	129.0	96.1	103.8	122.8	128.5	123.1	140.5	162.2	183.4	201.8	108.6	103.8	96.1	123.1
Cash, end of period	127.0	129.0	96.1	103.8	122.8	128.5	123.1	140.5	162.2	183.4	201.8	224.6	103.8	140.5	123.1	201.8
FCF Summary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Free Cash Flow (FCF)	\$19.3	\$3.0	(\$6.1)	\$7.7	\$19.0	\$5.8	(\$5.5)	\$17.4	\$21.7	\$21.2	\$18.5	\$22.7	\$23.8	\$36.7	\$27.0	\$78.8
FCF/share	\$0.13	\$0.02	(\$0.04)	\$0.04	\$0.11	\$0.03	(\$0.03)	\$0.09	\$0.12	\$0.11	\$0.10	\$0.12	\$0.14	\$0.20	\$0.15	\$0.43
TTM FCF	(\$9.5)	(\$2.6)	\$0.5	\$23.8	\$23.5	\$26.3	\$27.0	\$36.7	\$39.4	\$54.9	\$78.8	\$84.1	\$0.0	\$0.0	\$0.0	\$0.0
Cash Flow Margins																
CFO	70.1%	11.4%	(1.9%)	17.7%	38.3%	14.7%	(1.1%)	22.6%	27.4%	26.4%	22.2%	25.0%	20.4%	17.0%	15.1%	24.5%
Capex	15.1%	9.0%	9.0%	5.0%	5.0%	5.0%	5.0%	5.0%	4.5%	4.5%	4.5%	4.5%	8.0%	5.0%	5.0%	4.6%
FCF	55.0%	6.7%	(11.5%)	12.7%	33.3%	9.7%	(6.1%)	17.6%	22.9%	21.9%	17.7%	20.5%	12.4%	12.0%	10.1%	19.9%
TTM FCF	(5.5%)	(1.6%)	0.3%	12.4%	11.0%	11.4%	10.1%	12.0%	11.5%	14.4%	19.9%	20.6%	0.0%	0.0%	0.0%	0.0%

**Source:** BofA Global Research estimates, company reports



# Price objective basis & risk

# Credo Technology (CRDO)

Our \$21 PO is based on 9x CY25E EV/S, in line with high margin compute/optical semiconductor peers trading 6x-11x.

Downside risks to our PO are: (1) increased competition from large cap peers Marvell/Broadcom, (2) Delayed adoption of active electrical cable (AEC) products, (3) downturn in spending across hyperscalers and network operators, (4) Inability for CRDO to scale and meet demand from products beginning to ramp, (5) supply chain headwinds limiting available capacity.

Upside risks include: (1) Unforeseen, accelerated AEC engagements, (2) Sudden rebound in ramp for higher margin optical DSP products, (3) prudent opex/margin management to support EPS in downcycle

# **Analyst Certification**

I, Vivek Arya, 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	, , ,			,
REUIRAL	Advanced Committed actions	AEIS	AEIS US	Dulana Ina
	Advanced Energy Industries	ALIS ALGM	ALGM US	Duksan Jang Blake Friedman
	Allegro MicroSystems			
	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



## **US - Semiconductors and Semiconductor Capital Equipment Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Teradyne	TER	TER US	Vivek Arya
	Wolfspeed Inc	WOLF	WOLF US	Vivek Arya

# **IQ**method<sup>™</sup> Measures Definitions

<b>Business Performance</b>	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 3<sup>ss</sup> 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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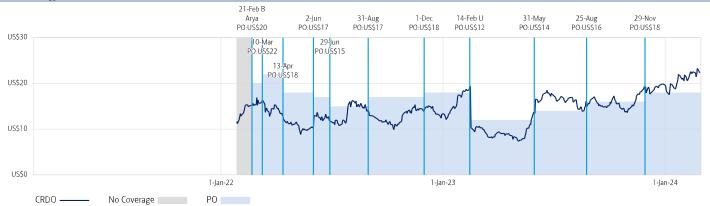
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### Credo Technology (CRDO) Price Chart



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<sup>R2</sup>

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

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