

Arrow Electronics Inc.

Recurring revenue mix, future operating leverage bright spots in weak macro

Reiterate Rating: NEUTRAL | PO: 125.00 USD | Price: 114.87 USD

Operating environment challenging, but some positives

Management is effectively coping with excess inventory throughout the supply chain, which is causing softer demand in its components business, as well as a mixed IT spending environment in its ECS business. In components the industry-wide inventory correction seems to be taking longer than expected when compared to prior cycles. There is continued softness for components in many industrial markets. Some positive trends: 1) book-to-bill ratios have stabilized, with the IP&E portfolio trending closer to parity, 2) pricing is generally holding up, 3) demand creation pipeline is growing, 4) ARW is seeing more order rescheduling vs. cancellations, and 5) ARW was able to reduce its own inventory by \$600mn q/q in F4Q23. Reiterate Neutral as l-t mix shift to software and services, is balanced by n-t rev risk from weaker macro, inventory correction, and some order rescheduling.

ECS – recurring revenue mix continues to grow

As ARW sells more cloud, software and services, and as the transition of software continues from perpetual to subscription-based licensing models, the recurring piece of total ECS mix is approaching a third. This part is more predictable, sticky and affords accretive contribution margins. Over time, with higher sales of infrastructure software and cloud-related solutions and services, given the netted-down nature of these sales, investor focus will shift more to gross profit dollar growth vs. reported sales growth.

Near-term sub-seasonal, investments focus on long-term

F1Q24 revenues were guided to decline about 20% y/y at the mid-point, and we model a gradual improvement over the remaining quarters with overall F24 revenues declining double-digits y/y. Lower revenues cause negative operating leverage in the near-term, but as revenues recover, ARW should see positive operating leverage. Investments focus on demand-creation, value-added services, e-selling motion, and transition to IT-as-a-service in the ECS business.

Adjusting estimates; PO moves to \$125 (from \$148)

Our F24 revenue/EPS move to \$29.3bn/\$12.00, from \$31.0bn/\$15.01, respectively. Our PO moves to \$125, from \$148, on 10x (unchanged) C24e EPS of \$12.00 (prior \$15.01).

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	22.34	17.12	12.00	16.07	17.10
GAAP EPS	21.76	15.84	9.34	13.36	14.39
EPS Change (YoY)	44.1%	-23.4%	-29.9%	33.9%	6.4%
Consensus EPS (Bloomberg)			12.41	16.13	19.66
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	5.1x	6.7x	9.6x	7.1x	6.7x
GAAP P/E	5.3x	7.3x	12.3x	8.6x	8.0x
EV / EBITDA*	4.5x	5.8x	7.7x	6.4x	6.1x
Free Cash Flow Yield*	-1.8%	10.1%	4.4%	3.6%	3.8%

* For full definitions of *IQmethod™* measures, see page 11.

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Timestamp: 21 February 2024 09:27AM EST

21 February 2024

Equity

Key Changes

(US\$)	Previous	Current
Price Obj.	148.00	125.00
2024E Rev (m)	31,009.8	29,336.2
2025E Rev (m)	32,554.8	32,039.7
2026E Rev (m)	NA	33,533.7
2024E EPS	15.01	12.00
2025E EPS	16.23	16.07
2026E EPS	NA	17.10

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Stock Data

Price	114.87 USD
Price Objective	125.00 USD
Date Established	21-Feb-2024
Investment Opinion	B-2-9
52-Week Range	108.51 USD - 147.42 USD
Mkt Val (mn) / Shares Out (mn)	6,182 USD / 53.8
Free Float	99.2%
Average Daily Value (mn)	68.39 USD
BofA Ticker / Exchange	ARW / NYS
Bloomberg / Reuters	ARW US / ARW.N
ROE (2024E)	10.9%
Net Dbt to Eqty (Dec-2023A)	61.1%
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".

Abbreviations at the end of the note W

iQprofileSM Arrow Electronics Inc.

iQmethodSM – Bus Performance*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	17.8%	12.6%	8.9%	10.3%	10.1%
Return on Equity	27.1%	17.2%	10.9%	13.3%	12.6%
Operating Margin	5.8%	4.9%	4.1%	4.6%	4.6%
Free Cash Flow	(112)	622	273	224	234

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	0x	0.7x	0.6x	0.4x	0.4x
Asset Replacement Ratio	0.4x	0.5x	0.4x	0.4x	0.4x
Tax Rate	23.8%	22.0%	24.0%	24.0%	24.0%
Net Debt-to-Equity Ratio	64.1%	61.1%	58.7%	49.3%	41.2%
Interest Cover	11.9x	4.8x	3.7x	4.6x	4.8x

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	37,124	33,107	29,336	32,040	33,534
% Change	7.7%	-10.8%	-11.4%	9.2%	4.7%
Gross Profit	4,837	4,149	3,682	4,053	4,276
% Change	15.1%	-14.2%	-11.3%	10.1%	5.5%
EBITDA	2,313	1,777	1,345	1,619	1,690
% Change	28.2%	-23.1%	-24.3%	20.3%	4.4%
Net Interest & Other Income	(171)	(331)	(315)	(314)	(312)
Net Income (Adjusted)	1,465	977	645	852	906
% Change	28.8%	-33.3%	-33.9%	32.0%	6.4%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	1,498	1,009	668	876	932
Depreciation & Amortization	187	181	196	190	190
Change in Working Capital	(1,684)	(336)	(367)	(562)	(605)
Deferred Taxation Charge	(13)	(94)	(11)	(9)	(11)
Other Adjustments, Net	(21)	(54)	(131)	(188)	(188)
Capital Expenditure	(79)	(83)	(82)	(83)	(84)
Free Cash Flow	-112	622	273	224	234
% Change	NM	NM	-56.1%	-18.0%	4.4%
Share / Issue Repurchase	(1,049)	(770)	(275)	0	0
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	1,142	33	0	0	0

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	177	218	210	427	655
Trade Receivables	12,323	12,238	11,244	11,921	12,596
Other Current Assets	5,841	5,871	5,841	6,326	6,854
Property, Plant & Equipment	596	531	466	408	352
Other Non-Current Assets	2,826	2,868	2,862	2,914	2,965
Total Assets	21,763	21,726	20,623	21,997	23,421
Short-Term Debt	590	1,654	1,654	1,654	1,654
Other Current Liabilities	11,800	11,534	10,143	10,743	11,340
Long-Term Debt	3,183	2,154	2,154	2,154	2,154
Other Non-Current Liabilities	579	507	497	488	477
Total Liabilities	16,152	15,849	14,447	15,039	15,625
Total Equity	5,611	5,877	6,127	6,859	7,648
Total Equity & Liabilities	21,763	21,726	20,574	21,898	23,273

* For full definitions of iQmethodSM measures, see page 11.

Company Sector

IT Hardware

Company Description

Arrow Electronics is a worldwide provider of products, services, and solutions to industrial and commercial users of electronic components and enterprise computing solutions. The company has over 800 suppliers and 175,000 customers which include OEMs, contract manufacturers and commercial customers in 90 countries. Arrow Electronics operates in two business segments - Global Components and Global Enterprise Computing Solutions (ECS) - which account for 70% and 30%, respectively, of sales.

Investment Rationale

We are Neutral as investment positives including 1) better business mix, 2) single global ERP system which increases efficiency, 3) strong FCF during economic downturns (counter-cyclical), 4) strong balance sheet, and 5) significant online presence which provides competitive advantage, are balanced by investment risks including N/T revenue risk from weak macro impacted by COVID-19, slowdown in enterprise spend in 2H20 and lower than expected margins on incremental revenue from Texas Instruments

Stock Data

Average Daily Volume 595,397

Quarterly Earnings Estimates

	2023	2024
Q1	4.60A	2.30E
Q2	4.37A	2.60E
Q3	4.14A	3.18E
Q4	3.98A	3.94E

Takeaways from the F4Q23 earnings call

- In F4Q23, in components, in Europe and the Americas, customers continue to moderate their supply and are reluctant to place new orders. Management expects continued softness in industrial markets, offset by relative strength in verticals such as aerospace/defense and medical.
- In Asia, the overall macro remains weak, but ARW saw some sequential growth in segments like data center compute, and to a lesser, extent, transportation
- In ECS, ARW saw a higher mix of infrastructure software, cloud solutions and related services vs. the year ago quarter. Over time, this mix should drive a growing portfolio of recurring revenue as well as better contribution margins for the overall business.
- In ECS, in F4Q23, in Europe ARW saw y/y growth in billings as well as gross profit dollar growth in a mixed IT spending environment. ARW saw weakness in storage and compute, which was offset by strength in infrastructure software & networking. For the full year 2023, ECS billings were flat y/y reflecting growth in Europe, offset by a decline in North America due to a softer IT market.
- In ECS, in North America, ARW saw a muted IT spending environment, where storage, compute and cybersecurity were soft, which was partially offset by strength in infrastructure software and networking. ARW is in the process of optimizing its customer mix and supplier line card in this region to better serve the midmarket.
- As per management, long-term growth drivers for ARW include electrification of everything, renewable energy, autonomous vehicles and artificial intelligence.
- In 2023, ARW continued to invest in areas that can drive revenue growth and margins. In demand creation, ARW added engineering resources which helped demand creation revenues to outpace the rest of the portfolio. ARW's engineering services have been gaining traction in the renewable energy, automotive and medical devices verticals. In 2023, engineering services revenues grew meaningfully. In supply chain services, ARW expanded its customer base and further penetrated the datacenter and automotive verticals. Management sees the opportunity to extend this offering to other verticals and OEMs.
- In our opinion, supply chain services, over time, can be a meaningful contributor to earnings. ARW has integrated its systems with customers and suppliers and sees supply/demand signals which prompts when to place orders with the customer's direct suppliers. ARW manages the inventory and ships to the various customer plants around the world. In addition, ARW provides a software product so the customer has visibility and decision making capability and transparency into their electronics supply chain. This service has a higher margin, and, over time, it can be an important contributor to earnings.
- In our opinion, pricing likely remains stable. Lead times have normalized, and price premium due to parts shortages has normalized to pre-pandemic levels. On average, we do not expect ARW to see prices increasing further; however, we do not expect a significant step down in pricing, either. The supply chain is more expensive vs. 3-years ago. Input costs are higher and it costs more to make and ship things around the world. Historically, the electronics industry has seen price declines y/y, but ARW also benefits from mix as new product introductions are at a higher price.
- In F4Q23 Global component sales declined 12% y/y given by softness in the Asia market and reduced shortage market activity in the Americas, partially offset by growth in Europe.



- Component revenues in the Americas declined 23% y/y. The y/y decline was a result of normalizing of the shortage market business, offset by strength in aerospace & defense and medical.
- Component revenues in Europe, Middle/East declined 14% y/y and 15% q/q. ARW saw q/q weakness in most verticals and softness in Industrial.
- Component revenues in Asia Pacific declined 15% y/y. ARW saw continued macro softness across the region with relative strength in Datacenter and Transportation
- In F4Q23, ECS sales declined 11% y/y. Sales from Europe/Middle East declined 2% y/y, however, ARW did see y/y billings and gross profit growth with healthy demand for infrastructure software and networking. In the Americas, revenues declined 18% y/y on softness in cyber security, storage and compute.
- Non-GAAP Return on Working Capital (ROWC) was 19.8% in the fourth quarter, down 990 basis points year on year. The decrease in ROWC related primarily to lower operating income in global components, in addition to higher working capital levels.
- Non-GAAP Return on Invested Capital (ROIC) was 12.0% in the fourth quarter, down 580 basis points year on year. The decrease in ROIC related primarily to lower operating income in global components.

Some facts about Arrow Electronics

- ARW has two reporting segments, global components and global enterprise computing solutions (ECS). The company sells components to OEMs and contract manufacturers (CMs). It sells enterprise computing solutions to value added resellers (VARs) and managed service providers (MSPs).
- For 2023 about 77% of sales were from components and 23% from ECS. Within the global components business for 2023, net sales of approximately 79% consisted of semiconductor products and related services; approximately 14% consisted of IP&E products, such as capacitors, resistors, potentiometers, power supplies, relays, switches, and connectors; approximately 5% consisted of computing and memory; and approximately 2% consisted of other products and services.
- ARW maintains over 180 sales facilities and 39 distribution and value-added centers, serving over 85 countries.
- In components, the company sells semiconductor and interconnect, passive and electromechanical ("IP&E") technologies.
- The company also provides value added services, including demand creation, integration services, and supply-chain services.
- Demand creation: ARW's demand creation efforts are intended to promote the future sale of suppliers' products through registered engineered designs and schematics showing the use of suppliers' components in customers' future products. ARW provides these services, primarily through the efforts of field application engineers ("FAEs") which generally leads to longer and more profitable relationships that benefit the company as well as the company's suppliers and customers. In addition to demand creation, ARW engages with customers in a variety of design engineering services, including software development, product design and integrated circuit design.
- Integration services: ARW provides product lifecycle solutions for customers. Services include design engineering from prototyping to volume production

readiness, worldwide logistics and fulfillment capabilities, and scalable manufacturing and customer support.

- Supply chain services: These include procurement, logistics, warehousing, financial management, and insights from data analytics. This affords a fee-based revenue opportunity.
- ARW's global ECS portfolio includes datacenter, cloud, security, and analytics solutions. ARW also supports customers through ArrowSphere, a software and cloud marketplace and management platform. By making software and cloud-based solutions available through ArrowSphere, suppliers benefit from greater subscription adoption, consumption, and utilization.
- Within the global ECS business for 2023, net sales of approximately 28% consisted of storage, 20% consisted of security, 17% consisted of software applications, 14% consisted of compute, 6% consisted of data intelligence, 7% consisted of networking, and 8% consisted of other products and services.
- No single customer accounted for more than 2% of ARW's 2023 consolidated sales. One supplier accounted for approximately 10% of the company's consolidated sales in 2023
- As of Dec 31, 2023, the company had 22,100 employees with 6,500 in the Americas, 7,600 in EMEA, and 8,000 in Asia/Pacific
- As of Dec 31, 2023 \$576.2mn remained in the company's buyback authorization
- Capital allocation priorities include: 1) investment for organic growth, 2) M&A, and 3) returning cash to shareholders.



Charts

Figure 1: Components and Enterprise Computing Solutions (ECS) segment y/y growth in constant currency, by quarter

Constant currency revenue declined y/y across all regions in F4Q23

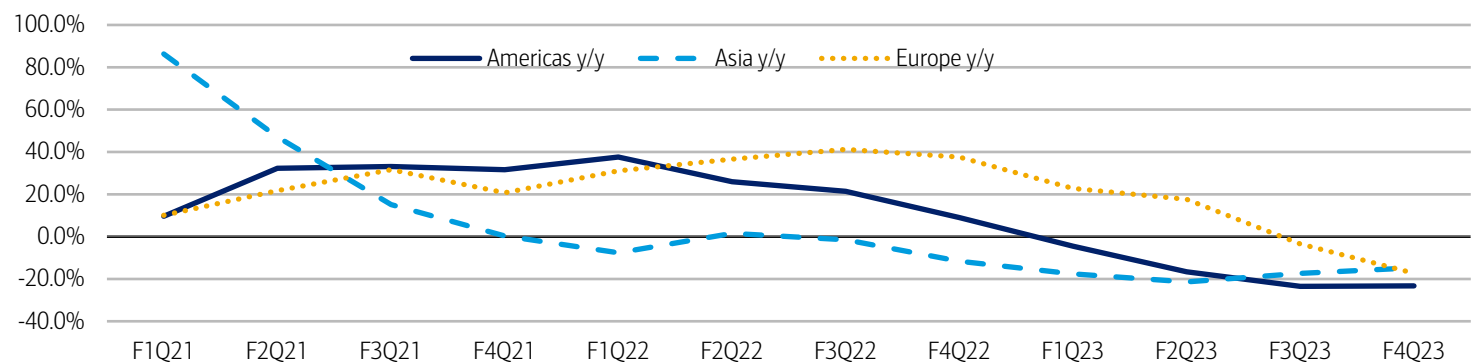
in constant currency	F1Q21	F2Q21	F3Q21	F4Q21	F21	F1Q22	F2Q22	F3Q22	F4Q22	F22	F1Q23	F2Q23	F3Q23	F4Q23	F23
Components Global y/y	37.6%	36.2%	24.0%	13.5%	26.9%	13.5%	16.2%	15.0%	6.1%	12.7%	-2.8%	-10.2%	-15.6%	-18.4%	-11.7%
Americas y/y	9.6%	32.3%	33.1%	31.6%	26.6%	37.6%	25.9%	21.4%	9.0%	22.7%	-4.5%	-16.6%	-23.5%	-23.3%	-17.1%
Asia y/y	86.3%	47.1%	15.1%	0.3%	30.7%	-7.6%	1.5%	-1.5%	-11.6%	-4.7%	-17.6%	-21.4%	-17.4%	-14.7%	-18.0%
Europe y/y	10.1%	21.7%	31.6%	20.7%	20.6%	31.1%	36.6%	41.2%	37.6%	36.5%	22.8%	17.6%	-3.5%	-17.3%	4.1%
ECS Global y/y	2.1%	-1.0%	-2.8%	-6.4%	-2.3%	-0.9%	7.9%	10.3%	12.1%	7.5%	3.4%	-8.4%	-12.6%	-13.1%	-8.3%
Americas y/y	0.9%	-6.1%	-5.9%	-8.8%	-5.3%	-8.8%	0.1%	3.0%	4.3%	-0.1%	-4.0%	-13.3%	-17.5%	-18.4%	-13.8%
Europe y/y	3.9%	7.7%	3.1%	-2.7%	2.5%	11.4%	21.0%	25.3%	24.0%	20.3%	13.3%	-1.9%	-4.9%	-6.5%	-0.7%

Source: ARW company reports

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Figure 2: Components segment y/y growth in constant currency, by region

In Components, revenue across all three regions declined in constant currency, with Asia declining the least

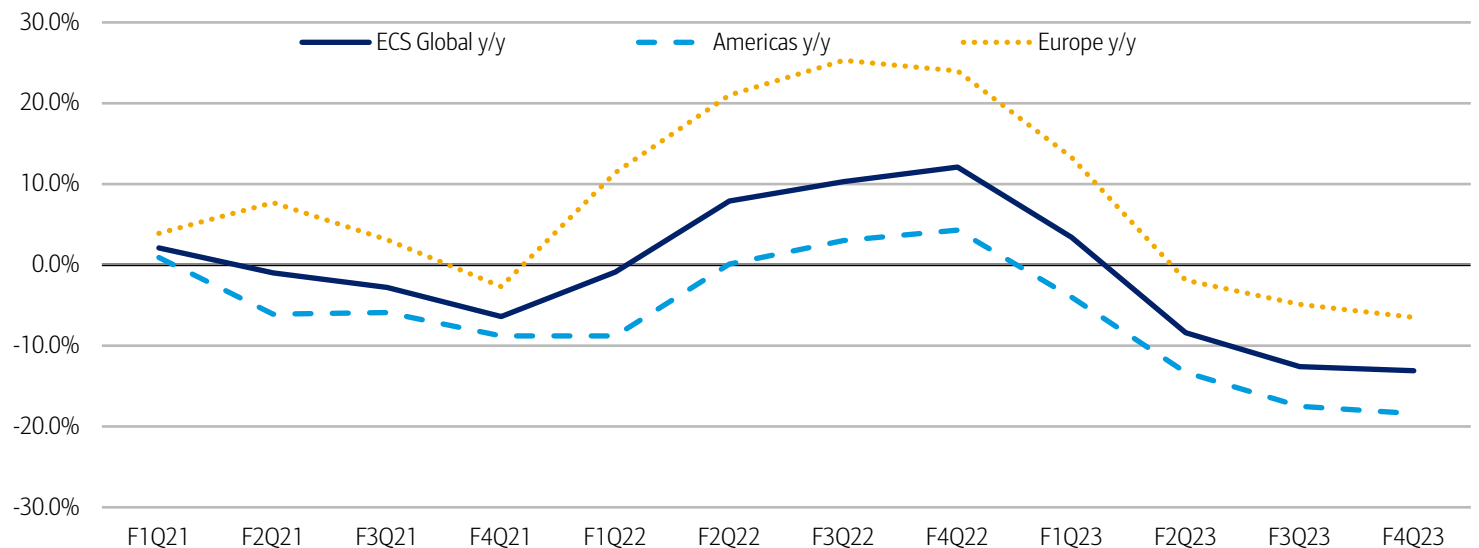


Source: ARW company reports

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Figure 3: ECS segment y/y growth in constant currency – overall global, vs for the Americas and Europe regions

In ECS, Europe has seen lower y/y decline compared to the Americas region



Source: ARW company reports

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Figure 4: ARW reported non-GAAP Return on Working Capital (ROWC), and Return on Invested Capital (ROIC), by quarter

ARW's ROWC in F4Q was 19.8% and ROIC was 12.0%

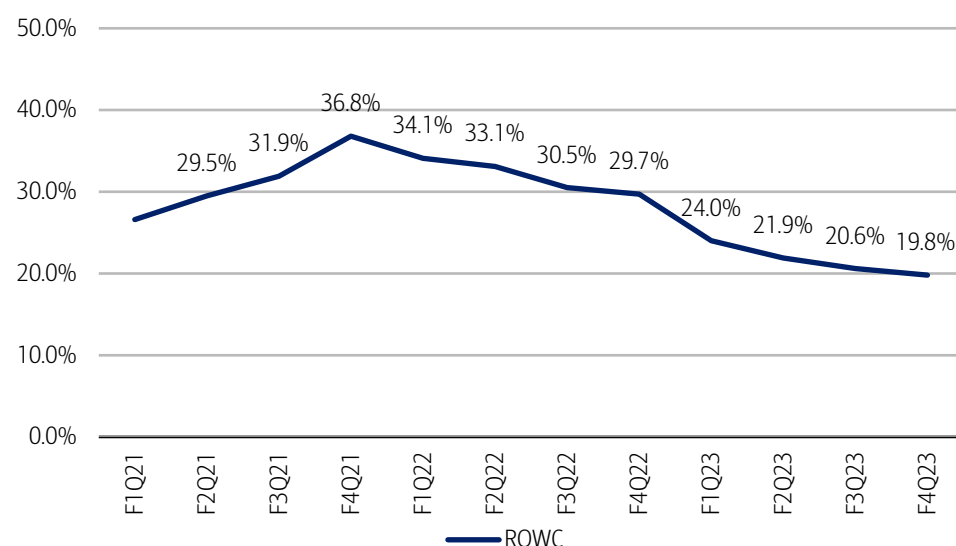
Non-GAAP	F1Q21	F2Q21	F3Q21	F4Q21	F1Q22	F2Q22	F3Q22	F4Q22	F1Q23	F2Q23	F3Q23	F4Q23
ROWC	26.6%	29.5%	31.9%	36.8%	34.1%	33.1%	30.5%	29.7%	24.0%	21.9%	20.6%	19.8%
ROIC	13.6%	15.1%	17.5%	21.5%	20.2%	19.7%	18.1%	17.8%	14.6%	13.4%	12.6%	12.0%

Source: ARW company reports

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Figure 5: ARW reported non-GAAP Return on Working Capital (ROWC), by quarter

ARW reported non-GAAP ROWC of 19.8% for F4Q23 which declined 80 bps q/q, and 990bps y/y

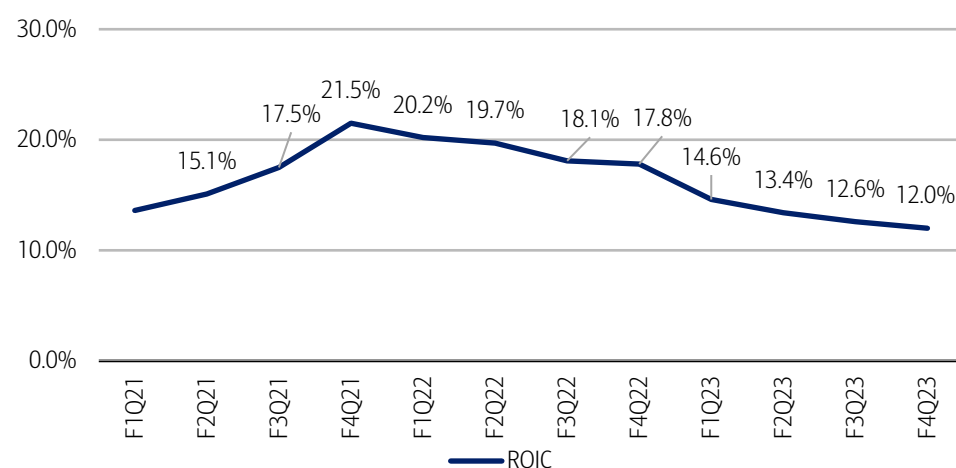


Source: ARW company reports

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Figure 6: ARW reported non-GAAP Return on Invested Capital (ROIC), by quarter

ARW reported non-GAAP ROIC of 12.0% for F4Q23 which declined 60 bps q/q, and 580bps y/y



Source: ARW company reports

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Abbreviations

ECS: Enterprise Computing Solutions segment
Components: ARW's other core reporting segment
N-t: Near-Term
L-t: Long-term
IP&E: Interconnect Passives & Electromechanical
OM: Operating Margin

Model

Figure 7: ARW Income Statement

We model F24 revenue/EPS of \$29.3bn/\$12.00

(\$ Millions Except Per Share Data)

	F2023				F2024E								
	3/23	6/23	9/23	12/23	3/24E	6/24E	9/24E	12/24E	2022	2023	2024E	2025E	2026E
Income Statement													
Revenue	\$8,736.4	\$8,514.5	\$8,007.0	\$7,849.2	\$7,009.9	\$7,140.5	\$7,460.7	\$7,725.2	\$37,124.4	\$33,107.1	\$29,336.2	\$32,039.7	\$33,533.7
Components	\$6,855.8	\$6,682.9	\$6,245.2	\$5,636.0	\$5,269.8	\$5,268.9	\$5,559.6	\$5,333.5	\$28,788.0	\$25,419.9	\$21,431.8	\$23,932.5	\$26,070.5
ECS	\$1,880.6	\$1,831.6	\$1,761.8	\$2,213.1	\$1,740.0	\$1,871.6	\$1,901.1	\$2,391.7	\$8,336.4	\$7,687.2	\$7,904.4	\$8,107.1	\$7,463.2
Cost of Goods	7,622.6	7,448.5	7,027.4	6,859.6	6,133.6	6,247.9	6,520.7	6,751.8	32,287.8	28,958.1	25,654.0	27,986.3	29,257.9
Gross Profit	1,113.8	1,066.0	979.6	989.6	876.2	892.6	940.0	973.4	4,836.6	4,149.0	3,682.2	4,053.3	4,275.8
Operating Expense	681.1	655.6	600.3	625.7	628.3	628.1	634.7	617.7	2,719.7	2,562.7	2,508.8	2,609.2	2,761.9
SG&A	622.9	608.4	557.0	583.3	585.6	585.3	591.5	574.3	2,524.1	2,371.6	2,336.7	2,434.4	2,585.7
Depreciation/Amortization	38.7	38.4	37.1	35.7	35.7	35.7	35.7	35.7	152.7	149.9	142.7	142.7	142.7
Operating Income (pre-SBC expense)	452.2	419.3	385.5	370.5	255.0	271.6	312.8	363.4	2,159.9	1,627.5	1,202.8	1,476.2	1,547.4
Stock-based Comp. (SBC) Expense	19.5	8.9	6.2	6.7	7.0	7.1	7.5	7.7	42.9	41.2	29.3	32.0	33.5
Operating Income (incl. SBC expense)	432.7	410.5	379.3	363.8	247.9	264.5	305.4	355.7	2,116.9	1,586.3	1,173.4	1,444.2	1,513.9
Equity Earnings/(Loss)	(0.1)	3.1	1.4	2.0	(0.1)	3.1	1.4	2.0	7.7	6.4	6.4	6.4	6.4
Interest Expense (Income)	80.5	85.6	83.0	83.3	80.4	80.4	80.3	80.3	189.2	332.5	321.4	320.3	318.2
Pretax Income	371.6	336.8	303.8	289.3	174.5	194.3	233.9	285.1	1,978.4	1,301.4	887.8	1,162.3	1,235.6
Taxes	81.1	78.0	64.3	63.0	41.9	46.6	56.1	68.4	471.7	286.3	213.1	279.0	296.5
Minority Interest	1.7	1.4	1.5	1.8	1.8	1.8	1.8	1.8	8.8	6.4	7.2	7.2	7.2
Net Income, Cont. Ops.	288.8	257.4	238.0	224.5	130.8	145.8	176.0	214.9	1,497.9	1,008.7	667.5	876.2	931.9
Adjusted Earnings (Options Adj.)	273.6	250.6	233.1	219.2	125.5	140.4	170.3	209.0	1,465.2	976.6	645.2	851.8	906.4
EPS, Cont. Ops.	\$4.86	\$4.49	\$4.23	\$4.08	\$2.40	\$2.70	\$3.29	\$4.05	\$22.84	\$17.65	\$12.44	\$16.53	\$17.58
Adjusted EPS (Options Adj.)	\$4.60	\$4.37	\$4.14	\$3.98	\$2.30	\$2.60	\$3.18	\$3.94	\$22.34	\$17.12	\$12.00	\$16.07	\$17.10
Diluted Shares Outstdg. (MM)	59.5	57.4	56.3	55.0	54.5	54.0	53.5	53.0	65.6	57.0	53.8	53.0	53.0
Income Statement (Cont'd)													
% Growth Rates	(4%)	(10%)	(14%)	(16%)	(20%)	(16%)	(7%)	(2%)	8%	(11%)	(11%)	9%	5%
Revenues (Y/Y)	(4%)	(10%)	(14%)	(16%)	(20%)	(16%)	(7%)	(2%)	8%	(11%)	(11%)	9%	5%
Operating Income (Yr-Yr)	(17%)	(25%)	(26%)	(32%)	(43%)	(36%)	(19%)	(2%)	31%	(25%)	(26%)	23%	5%
Diluted Shares (Y/Y)	(13%)	(14%)	(13%)	(11%)	(8%)	(6%)	(5%)	(4%)	0%	0%	0%	0%	0%
Revenues (Q/Q)	(6%)	(3%)	(6%)	(2%)	(11%)	2%	4%	4%					
Revenues PF & CC (Q/Q)	0%	0%	0%	0%	0%	0%	0%	0%					
SG&A (Q/Q)	(1%)	(2%)	(8%)	5%	0%	(0%)	1%	(3%)					
Operating Income (Q-Q)	(19%)	(5%)	(8%)	(4%)	(32%)	7%	15%	16%					
Op. EPS (Q/Q)	(16%)	(8%)	(6%)	(3%)	(41%)	13%	22%	23%					
Diluted Shares (Q/Q)	(4%)	(4%)	(2%)	(2%)	(1%)	(1%)	(1%)	(1%)					
% of Revenues													
Gross Profit	12.7	12.5	12.2	12.6	12.5	12.5	12.6	12.6	13.0	12.5	12.6	12.7	12.8
Operating Expense	7.8	7.7	7.5	8.0	9.0	8.8	8.5	8.0	7.3	7.7	8.6	8.1	8.2
SG&A	7.1	7.1	7.0	7.4	8.4	8.2	7.9	7.4	6.8	7.2	8.0	7.6	7.7
Depreciation & Amortization	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.4
EBIT (pre-SBC Expense)	5.2	4.9	4.8	4.7	3.6	3.8	4.2	4.7	5.8	4.9	4.1	4.6	4.6
Stock-based Compensation	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Operating Income (post-SBC Expense)	5.0	4.8	4.7	4.6	3.5	3.7	4.1	4.6	5.7	4.8	4.0	4.5	4.5
Pretax Income	4.3	4.0	3.8	3.7	2.5	2.7	3.1	3.7	5.3	3.9	3.0	3.6	3.7
Tax Rate	22%	23%	21%	22%	24%	24%	24%	24%	24%	22%	24%	24%	24%
Net Income (operating, pre-options)	3.3	3.0	3.0	2.9	1.9	2.0	2.4	2.8	4.0	3.0	2.3	2.7	2.8
Net Income (operating, post-options)	3.1	2.9	2.9	2.8	1.8	2.0	2.3	2.7	3.9	2.9	2.2	2.7	2.7

Source: Company reports, BofA Global Research estimates

BofA GLOBAL RESEARCH



Price objective basis & risk

Arrow Electronics Inc. (ARW)

Our PO of \$125 is based on 10x our C24 EPS estimate. Our target multiple is slightly higher than the median 8x of the long-term range 5x-11x. Arrow is a cyclical stock and in our opinion, this multiple is justified and effectively balances near-term risks with longer-term opportunities.

Downside risks to our price objective are: (1) increased slowdown of the semiconductor cycle, which would slow organic growth and deteriorate segment margin due to volume leverage, (2) faster shift of IT spending towards public clouds instead of traditional IT infrastructure, (3) slowdown in software spending at commercial/enterprise customers, (4) lower than expected margins in incremental business from Texas Instruments and Maxim, and (5) mis-executions with any future M&A.

Upside risks: (1) strong pickup in the semi cycle driven by Internet of Things (IoT), (2) greater than expected margin accretion from high margin demand creation business, (3) strength in IT spending and higher mix of software sales, and (4) further buybacks.

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
	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

US - IT Hardware and Technology Supply Chain Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
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iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization

Shareholders' Equity

Sales

N/A

N/A

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Other LT Liabilities

Enterprise Value

Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

Market Cap = Current Share Price × Current Basic Shares

Sales

Basic EBIT + Depreciation + Amortization

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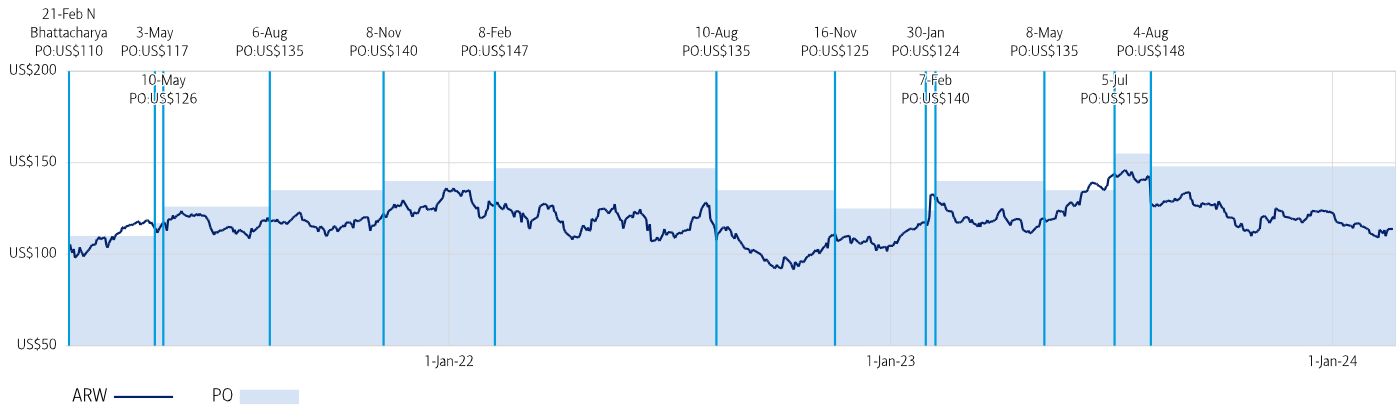
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Disclosures

Important Disclosures

Arrow Electronics (ARW) 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%
Underperform	N/A	≥ 20%

^{R2} Ratings 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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