EQUITY RESEARCH REPORT

Author –

Yash Landge

Executive Summary

The recommendation for Intel is SELL with a price target of $17.76, representing a 39.4% downside from the closing price of $29.34 on November 25, 2022. 70% weightage was given to intrinsic valuation and 30% weightage to relative valuation while coming up with the target. Intel's main revenue comes from the Client Computing Group. Their biggest sales come from the PC and tablets market. Our recommendation is supported by

1) The current decline in the PC and tablets market. The client computing group contributes to 51% of Intel's total revenue.

2) The imposed ban by the U.S. government on the export of goods to China. The imposed ban can affect the company's revenue by 10%.

3) The intense competition Intel is facing from its competitors, especially TSMC and AMD.

4) The assumption of the expected decline in revenue over the next 4 years is due to macroeconomic factors which is explained in the thesis below.

Business Description/ Company Overview

Intel is an American Multinational corporation and technology company that focuses on semiconductor chip manufacturing and offers end-to-end solutions, scaling from edge computing to 5g networks, the cloud, and the emerging fields of AI and autonomous driving. They are headquartered in Santa Clara, California, with a market cap of $121.09 billion. The company boasts a workforce of over 120,000 employees and ranks as the world's largest semiconductor company by revenue. Intel has operations in 7 segments – Autonomous driving, 5g Networks, Client connectivity, Cloud computing, IoT, Client computing, and AI and Analytics. Overall, Intel has a total of 73.7% of the market share of laptops, and CPU test benchmarks.

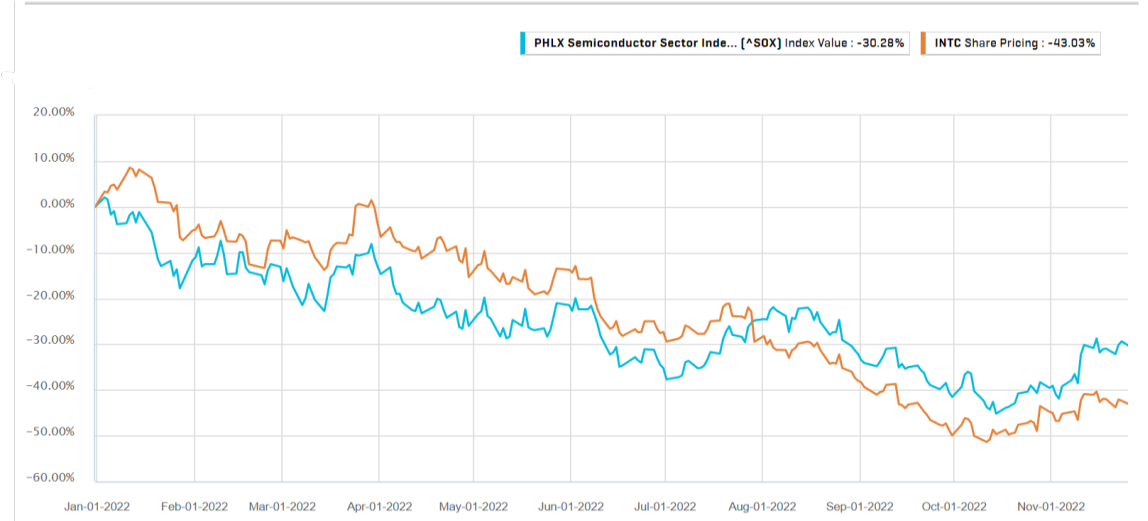
Stats	Value
Company Name	Intel
Ticker	INTC
Sector/Industry	Semiconductor
Last closing share price (as of 11/23/22)	29.34
12-Month Target Price	17.76 (39.4% downside)
Recommendation	Sell
52-week high/low	56.28/24.59
P/E Multiple	15.74
Beta (5Y)	0.71
Shares outstanding (in millions)	4,127
Market Cap (in billions)	121.09
Debt to equity	0.226

Industry Overview

The Semiconductor industry has a total market capitalization of $2.88 trillion as per GICS classification. Currently, around 12% of the semiconductors in the world are manufactured in the USA and almost half of this production comes from Intel.
The semiconductor industry is known for its cyclicality. Chip shortages and a decline in demand have been the key issues in the industry. From the rapid surge for electronics during the pandemic, the semiconductor industry is now witnessing a downturn. PC and smartphone products account for 50% of all chip demand. Demand for PCs, smartphones, and video gaming equipment has seen a decline

due to challenging macroeconomic conditions, high inflation, and rising interest rates. The pandemic saw manufacturers stockpiling chips to manage the high demand. The excessive stockpiling is now further creating downward pressure on the semiconductor industry due to low demand for electronics, and manufacturers are using their existing supplies of chips instead of purchasing new ones. It is believed that the PC demand is expected to fall by 17% against a projected decline of 11%. Also it is projected that the markets for PCs and tablets are further expected to decline by 2.3% in 2023.
Intel's CEO, Patrick P Gelsinger in the earnings call claimed that the company expects the economic uncertainty to continue in 2023.

The PHLX semiconductor index has declined 30.28% YTD whereas Intel's share price has declined by 43.03% YTD.



Source: Capital IQ

To grapple with the current industry downturn, companies are now taking steps to cut down costs. Semiconductor firms are implementing hiring freezes. Intel plans to lay off employees to reduce costs by as much as $10 Billion by 2025. Major mobile chips maker Qualcomm also plans to cut down on hiring.

Companies such as Micron and AMD have already reported lower financial results this year. The newly implemented restrictions on exports to China have further created pressure on industry member companies as the restrictions will further reduce the revenues companies earn, by exporting to China. For Intel, the revenue is expected to get affected by approximately 10%.

Chip manufacturers expect the demand in the industry to ultimately get back to normal levels in the long term. Taking the long-term perspective into consideration, companies are going ahead with their expansion plans. Intel is investing in a $20 Billion manufacturing campus in Ohio. Micron aims to spend $100 Million on a manufacturing facility. Samsung has also announced investments of about $16 Billion between 2021-2024. President Biden also signed a $280 Billion CHIPS act recently in a major boost to U.S. semiconductor manufacturing.

Competitive Positioning

Intel operates in a distinctly competitive market in many segments. In the processor segment, the main competitor for Intel is Advanced Micro Devices (AMD) and Qualcomm Inc which operate on ARM architectures. The new competitor in this segment is Apple, which launched M1 Max, M1 Pro, and M2 chips recently. The competition is going to be more intense in the coming years, especially from AMD whose market share has been increasing aggressively compared to other companies in the segment (Sales growth has been high for AMD in the last few years). Intel is losing its market because of mistakes committed in the last decade. Intel has been slow to adapt to the changing requirements and it is believed that Intel's adaptation to new changes for introducing 3nm chips and 2nm chips in early 2025 and 2027 respectively will also be slow since the company is still trying to come up with production and outsourcing plans and is not solid with the release dates. Intel has been losing its market share to Taiwan Semiconductor Manufacturing Company which released its 7nm chips for sale and has a plan to move to 3nm chips in the coming few years. The below data shows Intel's competitors with respect to market capitalization and sales growth.

Equity Valuation | CDS Spreads | Op Stats | Profitability

	Name (BICS Best Fit)	Sales Growth
	Median	26.85%
101)	INTEL CORP	2.49%
102)	QUALCOMM INC	42.65%
103)	BROADCOM INC	14.91%
104)	LATTICE SEMICONDUCTOR CORP	26.27%
105)	NVIDIA CORP	61.40%
106)	ADVANCED MICRO DEVICES	68.33%
107)	MICROCHIP TECHNOLOGY INC	25.42%
108)	MARVELL TECHNOLOGY INC	50.30%
109)	TEXAS INSTRUMENTS INC	26.85%
110)	MICRON TECHNOLOGY INC	11.02%
111)	ANALOG DEVICES INC	30.61%

	Name (BICS Best Fit)	Mkt Cap (USD)
	Median	94.36B
101)	INTEL CORP	111.64B
102)	QUALCOMM INC	130.26B
103)	BROADCOM INC	184.98B
104)	LATTICE SEMICONDUCTOR CORP	6.85B
105)	NVIDIA CORP	310.83B
106)	ADVANCED MICRO DEVICES	94.36B
107)	MICROCHIP TECHNOLOGY INC	34.23B
108)	MARVELL TECHNOLOGY INC	32.71B
109)	TEXAS INSTRUMENTS INC	146.49B
110)	MICRON TECHNOLOGY INC	61.04B
111)	ANALOG DEVICES INC	74.12B

Intel's main competitor in the US is AMD, which operates in the Datacentre segment which includes CPUs, Datacentre, GPU and other Datacentre products. The other segment is the Client Segment which includes desktops and notebook PC processors and chipsets. Apart from this, AMD also operates in the Gaming Segment and Embedded segments. AMD's revenue was highest from Data Centre and Gaming segments which were $1.6 billion, and the Embedded segment had a $1.3 billion revenue which saw a 1,549% YoY growth compared to Intel which earned $4.2 billion in Datacentre and AI group - 27% lower than last year and earned $8.1 billion in their highest earning segment, Client Computing Group, 17% down compared to last year. Even though the revenue is higher for Intel, the Y/Y growth for AMD is a serious concern for Intel in the long run.

Industry Key Drivers

The demand for Personal computers hits a 20-year low. Because of this decline, chip demand is plunging rapidly in the short run. Even though the demand for chips is plunging now, the need for chips is expected to increase during the next ten years. The automotive (especially electric vehicle), data storage, and communications industries are expected to account for over 70% of growth. Intel includes planned growth in the client, Datacentre, network, and edge markets based on increasingly competitive roadmaps. In the auto market, the company remains on track and took its spin-off company, Mobileye, public, and is using the proceeds of the IPO to build more chip factories. Intel

remains the majority owner of Mobileye. The market for autonomous driving is expected to grow by around 13.38% per year from 2022 to 2030. This structure gives Intel multiple engines for growth and inherent flexibility in how it invests.

Even with a 6 to 8 percent average annual growth of the industry up to 2030, it would take the industry to $1 trillion in revenue. The annual growth is based on trends that include remote working, the growth of AI, and soaring demand for electric vehicles. Most of the growth can be attributed to three industries: automotive, computation and data storage, and wireless. The strongest-growing segment is likely to be automotive, where we could see a tripling of demand, fuelled by applications such as autonomous driving and e-mobility. In 2030, the cost of semiconductor content in an SAE Level 4 automobile with an electric drivetrain might be around $4,000 compared to $500 for an SAE Level 1 car with an internal combustion engine.

In the next five years, Application Specific Chips, which include ASSPs and ASICs, would contribute to the largest growth rate in revenue for both Wireless Communication and Computing categories. In addition, Optoelectronics revenue is expected to grow significantly during the next five years. In wired communications, Intel's $2.4 billion sales (9% market share) are second only to switch silicon heavyweight Broadcom.

Foundries like TSMC and Samsung are projected to benefit the most until 2025. With a market share of over 50% in the foundry sector, TSMC is expected to have revenue growth of 10% to 15% between 2020 and 25. Intel's July 26 event laid out its processing technology and packaging roadmap including name changes, a schedule to overtake TSMC by 2024/2025, and ground-breaking technologies in 1H24. Annual CAPEX might need to rise from $19.4 billion now beyond the $25 billion area if Intel wants the combined entity to be competitive vs. TSMC.

In addition, as chip demand increases, the demand for assembly and testing services will rise, which will result in significant revenue growth for OSAT companies in 2023. Larger IDMs and fabless businesses like Intel (INTC), Texas Instrument (TXN), Nvidia (NVDA), and Advanced Micro Devices (AMD) may experience a cyclical boom because of chip scarcity.

Long-term demand for the semiconductor business is increasing because of technological advancements including 5G wireless, artificial intelligence, the Internet of Things, cloud computing, and machine learning. Going forward, further government financing and incentives will be essential for its explosive expansion. Intel DCG develops workload-optimized platforms for computing, storage, and network functions. The industry also experienced significant growth in adjacencies driven by 5G networking deployment. There are significant opportunities in the cloud, networking, and AI. Because of these innovations, the Datacentre market TAM2 is expected to grow to approximately $119 billion by 2025.

Financial Statements and Proformas Summary

Intel's reported revenue in the year 2022 (up to Q3) was $49 billion. Revenue decreased by -20% YoY in the 3rd quarter of 2022, majorly because of a plunge in demand in Client Computing Group (CCG). The market saw a dip in demand for PC's and laptops majorly due to the fact that excess products were sold during the pandemic. CCG revenue saw a decrease of 17%, Datacentre and AI group (DCAI) saw a decrease of 27%, and NEX revenue increased by 14%. Q3 2022 results were impacted by an uncertain macroeconomic environment that continues to deteriorate, persistent inflation, and higher interest rates, which we believe impacts our target semiconductor markets. CCG revenue was down on lower

Notebook volume in the consumer and education market segments, though Notebook ASPs were higher due to a resulting change in product mix. DCAI Server volume decreased, led by enterprise customers, and due to customers tempering purchases to reduce existing inventories in a softening Datacentre market. Server ASPs decreased due to a higher mix of revenue from hyper-scale customers within a competitive environment. NEX revenue increased primarily due to increased demand for 5G products, higher Ethernet demand, and ASPs, and accelerated demand for Edge products, partially offset by lower demand for Network Xeon.

Gross Margin in 2022 was 42.6% as per the Q3 earnings report. Lower gross margin was from lower revenue and higher unit costs. Operating Income in the year 2022 up to Q3 was $3466 million decreased by 76%. Lower operating expenses were driven by a decrease in CCG sales, and DCAI as mentioned above. Mobileye was the only segment that saw a positive increase of 11% from last year.

Assumptions for the proformas are based on the current macroeconomic environment for the semiconductor industry being tumultuous. Although Intel has initiated a $10 billion cost-cutting, with inflation, and high-interest rates, and less demand for PCs and laptops, which led to a negative 18% growth rate YoY from 2022 to 2023. In line with this bleak projection for next year, Intel has made fairly unrealistic plans of producing its 3nm chips by late 2024 or early 2025 which might boost its chip sales due to the nature of its advancement. If say, the company is able to produce the chips as per the plan, its revenue is expected to grow decently by an upscale of 5% from the previous year. Also, considering the potential output from the new plant that Intel is investing in New Albany, Ohio as well as the 2nm chips that are going to be developed by 2027. We also anticipate an economic recovery of the semiconductor industry and improvements in the supply chain and therefore projected a high growth rate of 14% YoY from 2026 to 2027. Intel is also considering a $2 billion cost-cutting in R&D expenses in 2027. But overall, despite having plans to come up with 3nm and 2nm chips, the plans for design, production, and outsourcing are still in ambiguity. Therefore, the company might face challenges competing with an innovation-demanding market. Following the percent of sales method for the balance sheet and the cash flow statement by taking into consideration of PP&E separate costs and some cost cut downs in the next 4 years.

DCF Valuation

Using the proforma assumptions, it projected a series of unlevered free cash flows and valued Intel by discounting these cash flows and adding a terminal value to the company using the Gordan Growth Model. In this perpetuity approach, the long-term growth rate is 3.0% by considering the US economic growth rate, inflation, Intel's international exposure, and global strategies. The model yielded a projected share price of $18.12. To arrive at the final share price, the Enterprise value came to be $86,014 million, and by considering the number of outstanding shares to be 4,127 million. Considering the current market price of Intel to be $29.34, the DCF valuation drives to provide a sell rating to the company.

Relative Valuation

To calculate the relative valuation of Intel, Intel's 3 closest competitors, AMD, NVIDIA, and Qualcomm are considered. Compared the company with its competitors using three different multiples, Price/Earnings, Price/Earning-to-Growth, and EV/EBITDA. Using all these multiples our mean valuation for Intel using the P/E multiple was $16.91. The PEG multiple gives a value of $12.36. Giving more weightage to the P/E multiple, based on relative valuation we calculated a mean of $16.91, and therefore considering the current market price of Intel to be 29.34, it is a sell rating for Intel.

Investment Thesis

Based on the proforma analysis, SELL recommendation is suitable for Intel based on the following factors.

The current decline in the PC and tablets market. The client computing group contributes to 51% of Intel's total revenue. The semiconductor industry currently is facing turmoil due to less demand in personal computer space. Although the electric automobiles sector is upcoming, intel's core business is the client computing group. During the pandemic, the company saw a huge upscale in its revenue due to a surge in demand for laptops and personal computers due to a sudden need for online education and work-from-home modes. Looking at the current market scenario, the semiconductor industry is coming down to pre-pandemic levels and the company is losing profit.

The imposed ban by the U.S. government on the export of goods to China. The imposed ban can affect the company's revenue by 10%. The CHIPS Act by President Biden affected the semiconductor industry by a humungous amount. Intel's revenue from China was around 21% in the last fiscal year, out of which due to the act, certain chips are exempted from exports. Therefore, around 10% of its revenue is directly hit by the congress act.

Intel is planning to design and produce 3nm chips by late 2024 or early 2025, 2nm chips in 2027, and manufacture semiconductors for Taiwan's MediaTek, but the details of design and production are still in ambiguity.

Intel's performance in comparison to the PHLX semiconductor index has been low. The index declined by 30.28% YTD whereas Intel's stock has declined by 43.03% YTD.

Intel's revenue dropped by 20% from 2021 to 2022 due to factors concerning lower demand, inflation, higher interest rates, and a continuously deteriorating macroeconomic environment. Based on the projections of Intel for the next 5 years, FCF is uneven due to the cost-cutting changes the company has undertaken. The $10 billion cost-cutting saves the company from a lot of turmoil, but still, NOPAT values are coming down based on the DCF model. Although there is an increase in 2027 due to the release of 2nm chips, the design, sourcing, and production plans are still in ambiguity.

Given the market sentiment and the potential of the public to gain confidence in Intel's ability to execute its core business operations, it can be believed that Intel will be an under-performer relative to its peers over the next 5 years, which drives our underweight rating on INTC. It is important to note that INTC might have a good come-back based on its investments in advanced chips, but at a very slow pace.

Business Risks

Currency Exchange Rate Risks

Intel is potentially exposed to adverse as well as beneficial movements in currency exchange rates. A major portion of Intel's revenue occurs in U.S. dollars, expenses may be paid in local currencies. Appreciation in the U.S. dollar can increase the real cost to the customers of our products in those markets outside the U.S. where Intel sells in dollars, and a depreciated dollar can increase the cost of expenses as well as overseas capital expenditures. The European Union euro, the Israeli shekel, the Malaysian ringgit, the Japanese yen, and the Chinese yuan are the foreign currencies used for operational costs and capital purchases. The company is also conducting certain investing and financing activities in local currencies. Intel's hedging programs reduce, but do not eliminate the impact of currency exchange rate movements; therefore, changes in exchange rates could harm the results of operations and financial conditions.

Political Risks

In the coming future, if there's the slightest possibility that China attacks and takes control of Taiwan, the main source of semiconductor industry manufacturing will be taken control by China and the country can use this opportunity to shut down the supply of semiconductor chips from Taiwan Semiconductor Industry (TSMC) to US major companies like Apple and AMD. This catastrophe can result in a huge decline in the semiconductor industry, which impacts all the other major industries of the US and might potentially reduce the US GDP by 5-10% and send the entire US economy into a depression.

Risk to Investment Thesis

Based on the proformas and investment thesis there can be ambiguity risks associated with assumptions, i.e., if Intel is able to produce the 3 nm chips and the 2 nm chips before the actual release year, 2027, then their revenue might increase which in turn will create more value and can drive the intrinsic to a buy. Also, if inflation comes down quickly, it will increase their product sales. Intel can grab the market share from AMD if AMD loses its outsourcing from TSMC. The revival of the semiconductor industry can be a valuable addition to Intel because it can create vast opportunities for the introduction of automation chips, which is Mobileye's forte, where Intel holds the majority of ownership.

Economic, Social, and Corporate Governance (ESG) Regulations

The most commonly used minerals in consumer electronics originate from so-called "conflict" minerals: tin, tantalum, tungsten, and gold (abbreviated 3TG). Unfortunately, some of the largest deposits of these minerals are located in the Democratic Republic of Congo (DRC), a nation in which armed insurgent groups terrorize the locals and exploit the local population to benefit from these resources. As a result, Intel has recently committed to a Responsible Minerals Initiative (RMI) in which they hope to work with miners and smelters who meet certain criteria in order to not only enhance their supply chain but also improve the lives of the people who live in the regions where the minerals are located. Intel's goal is to protect human rights in the process of extracting the minerals necessary for creating their semiconductors (i.e., responsibly sourced minerals). While well-intentioned and admirable, Intel is one of a handful of companies (others being Apple, Samsung, and Nokia) to have sourced smuggled minerals from the DRC. A 2021 report from Global Witness, an international NGO specializing in natural resource exploitation, highlighted Intel's reticence to acknowledge the risks of

using smuggled minerals. This is despite Intel having monitored their Rwanda supply chains since 2011 and having been repeatedly warned about sourcing smuggled irresponsibly obtained minerals. An April 2022 press release revealed that Intel, alongside the likes of Apple and Tesla, uses a due diligence scheme developed by the ITSCI (International Tin Supply Chain Initiative) that launders minerals sourced from mines that use child labour. Furthermore, while Intel has been successful in finding smelters that meet their auditing criteria, little is known about their progress in protecting human rights and improving the quality of life of the residents in such troubled areas, as Intel has not been forthcoming and transparent about these issues.

Intel also hopes to go green by constructing “green,” eco-friendly buildings intended to minimize energy consumption and water usage and encourage recycling. Despite being ranked highly in sustainability by multiple institutions and NGOs, Intel’s energy usage increased by 48% from 2017 to 2020, and its carbon footprint has increased by more than a third since 2000, despite the company’s claims otherwise. Therefore, it remains to be seen how Intel plans to keep up with its competition as it develops more complex chips while also hoping to decrease its carbon emissions.

Intel’s workforce is highly diverse, as are those of its peers, but it ranks slightly lower than its peers in terms of the percentage of all employees who are women. Intel’s 27% is slightly lower than AMD’s 30%, and Qualcomm, Texas Instruments, and NVidia figures are either 28 or 29%. However, it ranks higher in the percentage of women who are in executive roles, at 40%, compared to its competition, whose figures are between 29% and 37%. This advantage may be due to Intel’s size and global presence, and its competition is likely to catch up, as they too are just as committed to including more women in executive roles. Intel’s combined ESG risk is lower than most of its competitors but higher than that of Qualcomm and NVidia.

Appendix

DCF Model

Discounted Cash Flow Valuation			
$ and shares in millions, except per share data	DD-MM-YYYY		
Most recent fiscal year end	31-12-2021	Discount rate (WACC)	7.5%
End of first fiscal year	31-12-2022	Share price (Public Co)	$29.34
Most recent quarter end date	Oct-22	Share price date	11-23-2020
Valuation date	12-2-22	Midyear adjustment?	0
Portion of year 1 cash flows in forecast	8.1%		

Unlevered Free Cash Flows

	Actual	Forecasts					
Fiscal year ended	12-31-21	12-31-22	12-31-23	12-31-24	12-31-25	12-31-26	12-31-27
Revenue	79,024	63,219	64,800	68,751	74,283	80,604	90,087
% growth		-20%	3%	6%	8%	9%	12%
EBITDA	29,409	13,007	16,332	17,625	18,763	16,584	23,526
% margin	37.2%	20.6%	25.2%	25.6%	25.3%	20.6%	26.1%
EBIT	19,456	5,042	8,168	8,963	9,404	6,428	12,175
% margin	24.6%	8.0%	12.6%	13.0%	12.7%	8.0%	13.5%
Tax on EBIT	2,577	625	1,013	1,111	1,166	797	1,510
Tax rate	13.2%	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%
NOPAT (aka EBIAT)	**16,879**	**4,416**	**7,155**	**7,851**	**8,238**	**5,631**	**10,665**
Depreciation & amortization	9,953	7,966	8,165	8,663	9,360	10,156	11,351
Changes in net working capital	7,761	(15,842)	360	901	1,261	1,441	2,162
Capital expenditures	(20,329)	(13,530)	(13,868)	(14,714)	(15,898)	(17,251)	(19,280)
Unlevered free cash flows (UFCF)		**(16,990)**	**1,812**	**2,701**	**2,961**	**(22)**	**4,898**
Net working capital (WC Assets - WC liabilities)	30,256	14,414	14,774	15,675	16,936	18,378	20,540
as % of revenue	38.3%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%

Present value of UFCF on Dec 02, 2022 valuation date

		Val date	Yr 1 - Stub	Year 2	Year 3	Year 4	Year 5	Year 6
Date for discounting cash flows		02-12-2022	31-12-2022	31-12-2023	31-12-2024	31-12-2025	31-12-2026	31-12-2027
Unlevered free cash flows (UFCF) stub adj	8.1%		(1,369)	1,812	2,701	2,961	(22)	4,898
Present value of of unlevered free cash flows			**(1,361)**	**1,676**	**2,323**	**2,369**	**(17)**	**3,392**

Terminal value - growth in perpetuity approach	
Long term growth rate	3.0%
2027 FCF x (1+g)	5,045
Terminal value in 2026	1,12,115
Present value of terminal value	77,631
Present value of stage 1 cash flows	8,382
Total enterprise value (TEV)	**86,014**

Terminal value as % of TEV	*90.3%*
Stage 1 cash flows as % of TEV	*9.7%*
Implied TV exit EBITDA multiple	*4.8x*

Net debt	
Source doc	Q3 2022 10Q
Source date	14-11-2022
Gross debt and equivalents	
Debt	39,523
Convertible debt	0
Preferred stock	0
Noncontrolling (minority) interests	0
Nonoperating assets	
Cash	28,413
Equity investments	0
Net debt	**11,110**

Shares outstanding			
	Source doc	Date	Shares
Basic shares	Q3 2022 10Q	10-01-2022	4,127.000
Restricted stock / RSUs	Q3 2022 10Q	12-31-2021	7.000
Options / warrants			0.000
Convertible debt			0.000
Convertible preferred stock			0.000
Net diluted shares outstanding			**4,134.000**

Valuation	
	Perpetuity
Enterprise value	86,014
Net debt	*11,110*
Equity value	74,904
Shares outstanding	4,134
Equity value per share	**$18.12**

Relative Valuation

x **Relative Valuation**

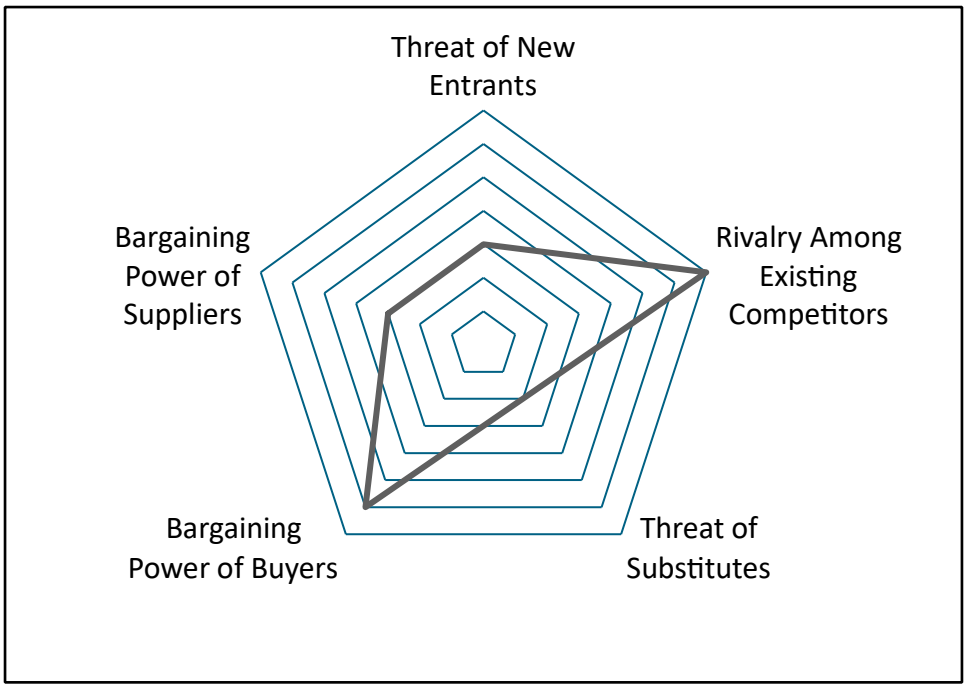
Share Price	$ 29.34
Share Price Date	11-23-2022
Net Income (2022)	$ 2,788.70
Common Shares Outstandi	4,127.0
EPS	$ 0.68
EBITDA	$ 13,007
Net Debt	$ 11,110
Annual EPS growth rate(%)	-86%

Peer Firm	P/E NTM	PEG	EV/EBITDA
AMD	22.78x	0.68x	16.88x
NVIDIA	40.03x	2.26x	43.12x
Qualcomm	12.28x	0.86x	10.12x
Mean	25.03x	1.27x	23.37x
Median	22.78x	0.86x	16.88x
Maximum	40.03x	2.26x	43.12x
Minimum	12.28x	0.68x	10.12x

Intel	P/E	PEG	EV/EBITDA
Mean	$ 16.91	$ (73.23)	$ 76.36
Median	$ 15.39	$ (49.72)	$ 55.89
Maximum	$ 27.05	$ (130.66)	$138.59
Minimum	$ 8.30	$ (39.31)	$ 34.59

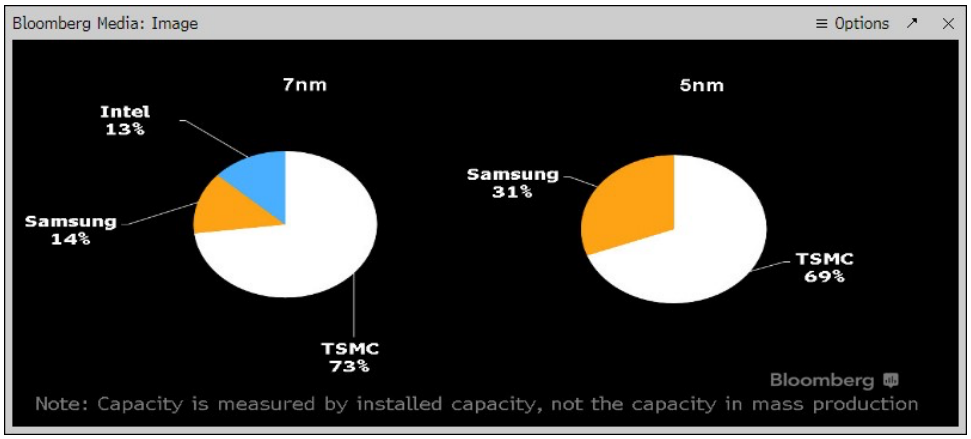
		Implied Value	Weightage
Mean of P/E	Relative Valuation	$ 16.91	30%
DCF	Intrinsic Value	$ 18.12	70%
	Weighted Valuatio		$ 17.76

Porter's Five Forces Analysis for Intel



Threat of new entrants (Medium): The threat is medium as the new entrants will find it difficult to set up and compete against Intel, but existing tech companies are setting up new plants to produce semiconductor chips like Apple and Tesla.

Rivalry among existing competitors (High): The rivalry among competitors in the semiconductor industry is high. Intel has high competition with AMD and Samsung in the manufacturing of semiconductors. International firms such as TSMC and SMIC are also competing with Intel on a global level. Intel has been lagging behind Samsung and TSMC in the manufacturing of 7nm chips and 5nm chips. The competition will only intensify as companies will start developing the 3nm chips.



Bargaining power of Suppliers (Moderately Low): In the case of Intel, the bargaining power of suppliers is moderately low because of different factors. First and foremost, the reason is the number of suppliers, there are many suppliers who provide the same raw material. Intel, a large corporation with enormous financial strength, helps to have an upper hand against the suppliers.

Bargaining Power of Customers (Moderately High): In recent times, the bargaining power of buyers has increased exponentially. Customers now are more informed and have a number of options to choose from. The company providing cheaper and better products is preferred by the customers. As the competition in the semiconductor industry has become so intense, there has been an increase in the bargaining power of customers. As a result, companies must spend more on marketing and research & development of the products.

Threat of Substitutes (Moderately Low): Threats of being substituted for Intel are moderately low. Firms such as AMD and Taiwan Semiconductor Manufacturing Company are the strongest competitors for Intel and have been capturing Intel's market share. But matching the product portfolio and overall capabilities of Intel is quite difficult for the competitors.

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