Intel Stock Analysis – Like Apple in 2016 at \$90!

Intel stock analysis content

- Intel's stock price action overview
- Intel's business cycle and current situation in the sector are the headwinds temporary or structural for Intel?
- Intel's stock fundamentals PE ratio of 10 for a tech company
- Intel stock dividend and buyback yields
- Intel stock valuation model
- Intel stock investment conclusion investing in great businesses with tailwinds

Executive summary

- A boring big tech stock growing at 7% per year, doing buybacks and rewarding shareholders
- Yes, it will lose market share to all the competition out there, from TMSC 3nm, to Apple's own products etc.
- \$20 billion in free cash flows, similar earnings, high margins, high investments in R&D, interesting acquisitions
- Buybacks are likely to double earnings per share over the next 10 years even if earnings stay flat.
- The dividend has been constantly increased and will likely continue to be increased.
- Valuation models offer double digit long-term returns.
- The risk is more bad news over the next years and that is why the sentiment is very bad now.
- The strategy is simple: clearly differentiate between noise and long-term possible fundamentals. When and if there are better opportunities, adjust portfolio weights.

Intel stock price overview

Intel Corporation – NASDAQ: INTC

Intel stock caught the eye of many investors because it is a household name and it has a very low price to earnings ratio of 10 (based on 2020 earnings guidance) alongside giving exposure to the tech growth megatrend.

Given the current investment environment of low interest rates and high valuations, you don't encounter such situations often, especially in the tech sector. Plus, if we look at the cyclicality of Intel stock since 2018, it often went below \$50, but not much below, and then it usually spiked up.

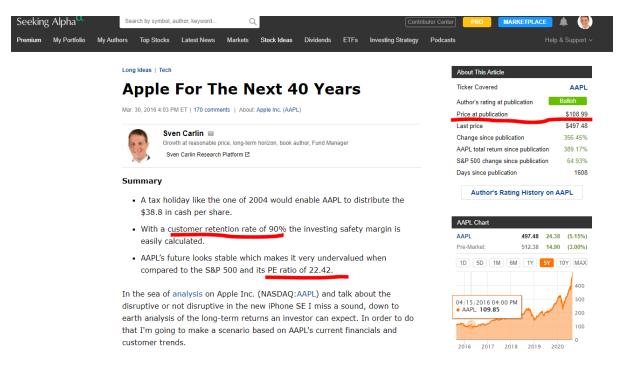


Intel stock price chart

One must keep in mind this is a cyclical stock within a cyclical growth industry. As the market is myopic and always focused on the short term, it might be a great investing opportunity as the next stock spike might be like the 2017 spike where we never saw those lows again.

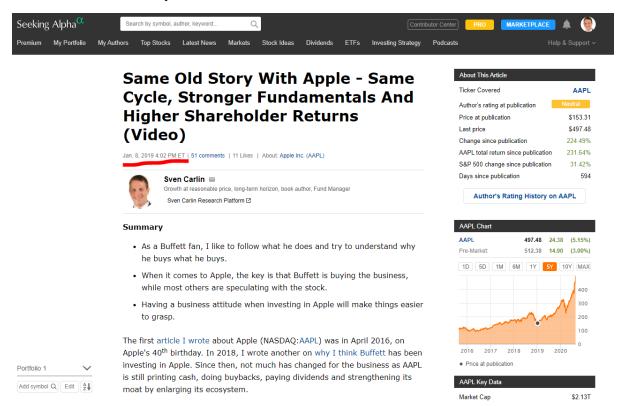
Intel stock and the Apple 2016 comparison

Intel stock now reminds me of Apple in 2016 when I wrote an article on how a good company like Apple that has strong cash flows, a stable customer base and is exposed to a positive structural tailwind, can't trade at a PE ratio of 9 for long and how it was a bargain. (disclosure: I was long AAPL in 2016, sold too early but that is another topic)



Intel stock analysis – Apple stock 2016 comparison

Then, in January of 2019, I made a video (I didn't have YouTube in 2016), where I explained the typical cycle that often hits Apple stock because the market and especially analysts, can't understand and model cycles.



Intel stock analysis – Apple stock 2019 cycle comparison

I discussed how Buffett was buying Apple's business while most others were buying the stock. Having a business owner perspective on Intel will make things much easier to understand from an investing perspective.

When it comes to Intel stock, if the company can deliver on long-term growth, stable cash flows, do buybacks and pay a growing dividend to reward shareholders, it is possible the future situation might be comparable to the developments Apple shareholders enjoyed over the past 4 years.

Why is Intel stock going down?

Before investing in Intel stock, we must also understand the market's perspective because it will give us the opportunity to spot the right time to buy. The right time to buy is usually when the bad news don't really affect the current fundamentals and you are happy buying what is there even if the worst scenario develops.

The most recent stock drop related to the Q2 earnings announcement was due to the 7NM product delay of 6 months which will give competitors more time to gain market share.



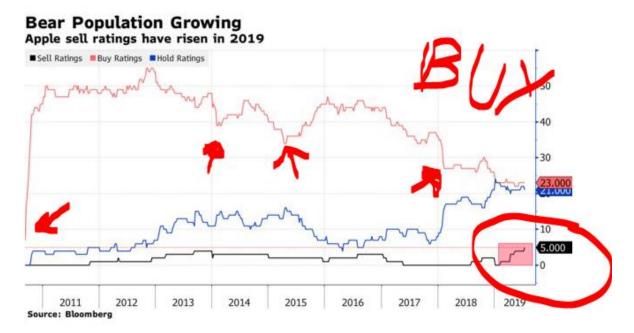
Intel stock price drops explained

This announcement led many analysts to downgrade the stock as their models gave a lower value for the stock. Also, most of the questions during the conference call were only about the 7nm issue.

Intel stock downgrades

The thing is that you must always be very careful when listening to analysts. Their job is to model what is known and project stock values over the coming quarters. As we mentioned Apple stock earlier, when I was working for Bloomberg as a researcher in 2014, I remember

how Apple was hated by analysts. Consequently, when the stock was downgraded the most was usually the best time to buy Apple stock.



When analysts turn negative it is the best time to buy – Source: Bloomberg

Intel is in a similar situation to where Apple stock had been in the past. After the last earnings report, many analysts have rushed to downgrade Intel.

Analyst Toshiya Hari from Goldman Sachs downgraded Intel stock to sell from neutral and cut his price target to \$54 from \$65.

"We upgraded the stock from sell to neutral March 24, as we believed the company would be an outsized beneficiary of WFH [working from home] through its exposure to the PC and server end-markets," Hari wrote in an analyst note.

But now the scenario has changed, he said. _

"With our recent industry checks indicating a slowdown in PC builds in the second half of 2020 and continued share loss for Intel in the client and server CPU markets, we reduce our 2021/2022 earnings estimates to below Street levels and return to a more cautious investment stance."

Intel stock downgrade by Goldman Sachs – Source: The street

Also, on the last earnings call, Intel stock was:

CUT TO HOLD by Deutsche Bank, Roth Capital, and Bank of America.

CUT TO SELL by Northland, Bernstein, Exane, Barclays, and Raymond James.

Firm:	New Price Target (\$)	Old Price Target (\$)	% Change
Deutsche Bank:	60	70	-1496
Mizuho:	63	67	-6%
BofA:	62	70	-1196
UBS:	64	70	-9%
Barclays:	48	58	-17%
Wells Fargo:	55	60	-8%
Northland:	48	60	-20%
RBC Capital:	48	52	-8%

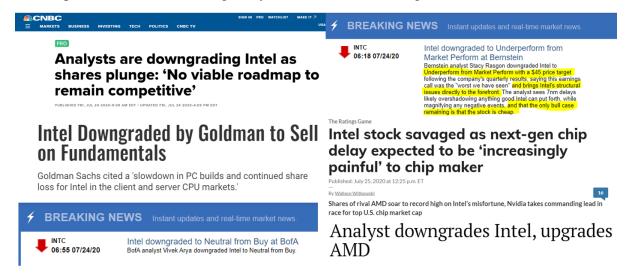
Intel stock price targets – Source: Wccftech

Some analysts described Intel stock now as nothing but a cheap stock! This is because their job is to make analyses that model earnings on what is known and their price targets are usually set for the next 12 months.

If you are an investment bank with big clients, the easiest thing to sell to a client is to tell them the stock has catalysts that will push it up over the next months. So, you earn the trading commission, retain the client where you get 1% through a commission of his wealth no matter what happens. Telling them it will deliver a good 2.38% dividend yield but that the stock can also fall another 20% is a tough sell.

Intel doesn't have any significant catalysts ahead. This makes all those short-term noise investors sell the stock, which causes a price drop because if the stock will not go up, it will most likely go down.

Dividends, earnings and buybacks are too boring factors in today's market to even discuss because you aren't cool if you do so. However, what pushed Apple stock from \$90 to the current price? Dividends, earnings, buybacks and a low starting valuation!



Intel stock downgrades

The thing is that on Wall Street, the 3 years up to 2023, when Intel's 7nm product will eventually hit the market, are an eternity and that is what Wall Street doesn't like and doesn't understand. But, as Seth Klarman says, a long-term perspective is the greatest advantage we value investors have!

On product delays, it is not the first time Intel had issues, it is actually normal in the sector:

- 2012 delay of 22nm Ivy Bridge
- 2013 delay of 14nm Broadwell release to 2015
- 2018 delay of 10nm production to 2019
- 2019 delayed 7nm production to 2021, now to 2022 or 2023

Another funny comparison with Apple. We could summarize the analysts' opinion on Intel that the latest delay will cause a fundamental deterioration of Intel. Look what some analysts were saying about Apple in July of 2019:

According to data compiled by Bloomberg, more than 60% of Apple's 2018 revenue was related to the iPhone, while roughly 20% came from China, which is also a critical part of its supply chain. Last week, Citi wrote That Apple's China sales "could be cut in half" due to "a less favorable brand image desire."

Rosenblatt's downgrade came as analyst Jun Zhang expects the company "will face fundamental deterioration □ over the next 6-12 months," based on disappointing sales trends. The downgrade pushed Apple stock lower by as much as 2.9% in Monday trading.

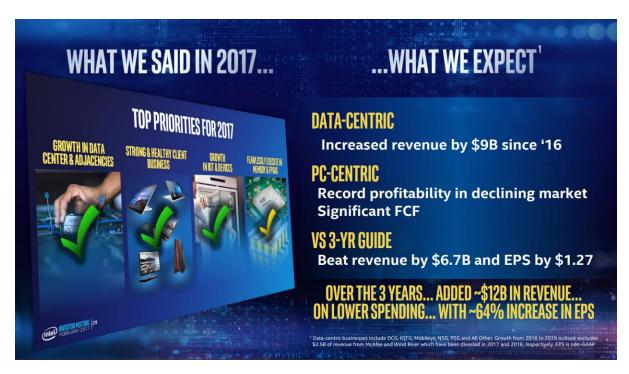
This is the news, the noise, now we have to compare what is the actual value of the stock and compare it to the stock price which is a result of the noise in the short-term, not of fundamentals. As would <u>Benjamin Graham say</u>: "The market is a voting machine in the short term and a weighing machine in the long-term."

The market has voted, let's see what is the business outlook and what will be the weight of the fundamentals over the long-term.

Intel's business cycle and current situation

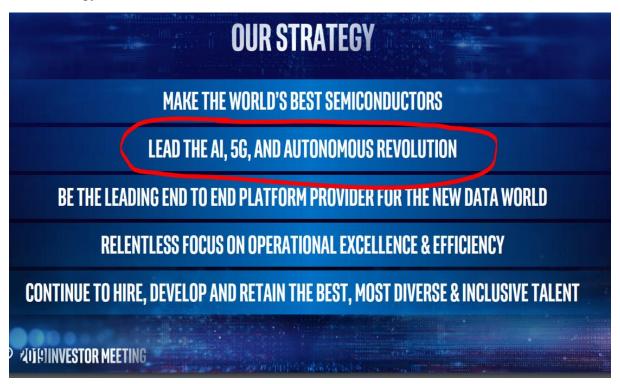
Within the semiconductor industry, it is all about being first in developing and putting to market the latest chips. If you don't do that, you miss the high margins you get before the competition comes in and you lose market share for future developments. This is what plagues Intel at the moment but we must not forget Intel is not just about the 7nm chip.

Over the past 3 years, Intel has been constantly losing the nod game with their chips but has still managed to grow revenues, earnings and cash flows.



Intel 2019 Investor presentation

Their strategy is to lead the AI, 5G and autonomous revolution.



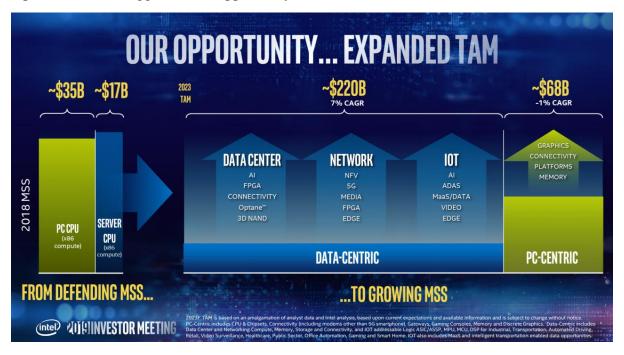
Intel 2019 Investor presentation

The data centric business segment is expected to be a bigger and bigger part of the company. The data centric businesses include DCF, IOTG, Mobileye, NSG, PSG and all other.



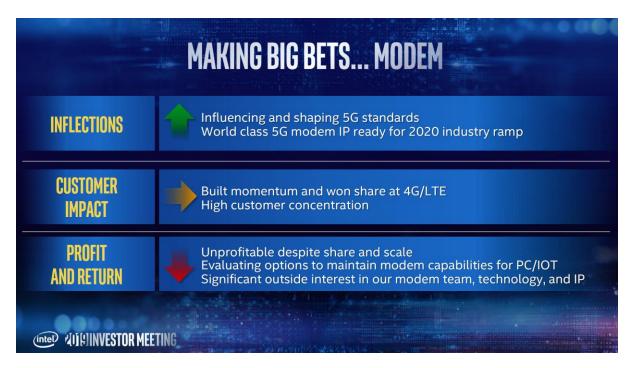
Intel 2019 <u>Investor presentation</u>

It is expected that the data centric sector will grow faster than the PC-centric business and represent a much bigger market opportunity for Intel.



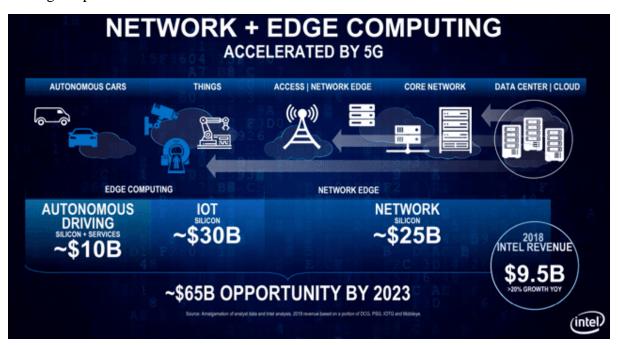
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The company will make big bets on Modem:



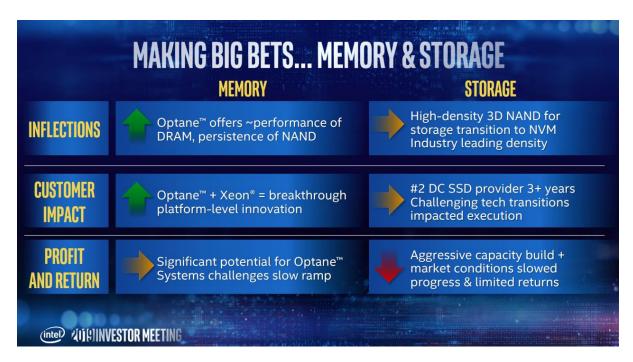
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It has good products to cater for 5G needs:



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Memory and storage:



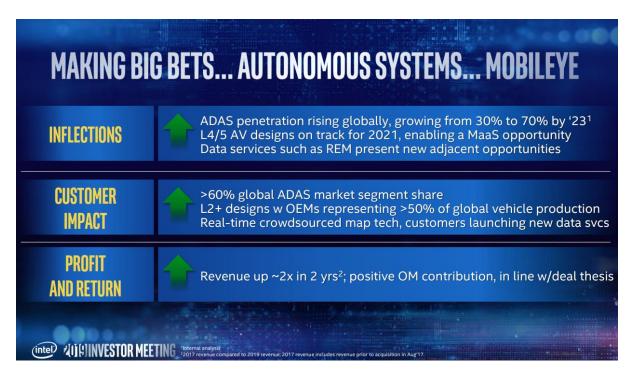
Intel 2019 Investor presentation

And on autonomous systems with Mobileye that has <u>implemented cameras into 17.5 million</u> cars in 2019.



Intel 2019 <u>Investor presentation</u>

The above and the growth rates are a big deal from a tech perspective but the market doesn't care because it is old boring Intel.



Intel 2019 Investor presentation

Also, something Wall Street doesn't see is that most of the benefits from the above data centre technologies should come over the next decade and not immediately. So, what analysts model is slow growth. Something shunned by most investors in today's high growth environment where profitability doesn't matter and growth is what pushes stock prices higher.



Intel 2019 Investor presentation

At the last <u>conference call</u>, Intel's CEO, Bob Swan highlighted the following as example of where the company looks for growth acceleration ahead:

Intel is positioning itself to take advantage of what is the next stage in the internet of things.

"We've built scale businesses indexed to key technology inflections such as cloud, AI, 5G, and the intelligent and autonomous edge"

It is constantly adding new products in various areas.

"we launched our third-generation Intel Xeon Scalable processor Cooper Lake, which is the first mainstream server CPU bfloat16 support, which increases AI throughput by reducing the amount of data required for the same accuracy."

Selling picks and shovels to the tech industry.

"In Q2, both our cloud and comms service provider businesses grew more than 40% year-over-year as critical cloud-delivered applications continued to scale and 5G build-outs accelerated. Leading cloud service providers, including Alibaba, Baidu, Facebook and Tencent, announced they are adopting our third-gen Intel Xeon Scalable processors into their infrastructure and services."

My car at the moment doesn't have any computer in it. I wonder if that will be also the case in 10 years.

"The largest opportunity we see at the edge is the \$230 billion 2030 TAM for ADAS, data and mobility-as-a-service technologies."

For now, Intel is covering 'only' 20% of the global automotive market.

"we were excited this week to announce a significant design win with Ford. Design wins to date in 2020 include multiple new ADAS production programs representing cumulative volume of over 20 million units."

Their 'old' processors are not to be written off yet.

"The Core S and H series processors for desktop and mobile gaming deliver speeds out of the box reaching up to 5.3 gigahertz, making them the world's fastest gaming processors, and our new 10th Gen Intel Core vPro processors delivered uncompromised productivity and hardware-based security for commercial PCs."

Despite the increase in competition, their guidance for the full year is:

"We are now forecasting revenue of \$75 billion and EPS of approximately \$4.85."

For investors that wish for stability and security, slow growth with a positive long-term outlook alongside a PE ratio of 10, Intel has all what you might need. And, as long-term investors, we must also care about what comes beyond 2023. Given the above, we might see

higher growth, better margins on growing demand which means the earnings could be much higher and the valuation too.



Intel 2019 Investor presentation

In order to achieve the above, Intel spent more than \$13 billion on R&D yearly over the past years which is 3 times more than AMD and NVIDIA put up together. Also, the company is doing acquisitions that are risky and might be questionable now, but when you invest into a high growth area, you just need a few winners to do really well.



Intel's 2020 disruptive acquisitions

In 2017 the company <u>acquired Mobileye</u> and recently <u>added Moovit</u> to the picture with a \$900 million acquisition. (more on <u>Mobileye's growth</u> plans) In 2019 Intel acquired artificial intelligence Habana labs for \$2 billion where it expects to cater for a \$25 billion market by 2025 that can grow exponential afterward.

INTEL ACQUIRES ARTIFICIAL INTELLIGENCE CHIPMAKER HABANA LABS

12/16/2019

Combination Advances Intel's AI Strategy, Strengthens Portfolio of AI Accelerators for the Data Center

SANTA CLARA, Calif.--(BUSINESS WIRE)-- Intel Corporation today announced that it has acquired Habana Labs, an Israel-based developer of programmable deep learning accelerators for the data center for approximately \$2 billion. The combination strengthens Intel's artificial intelligence (AI) portfolio and accelerates its efforts in the nascent, fast-growing AI silicon market, which Intel expects to be greater than \$25 billion by 2024¹.

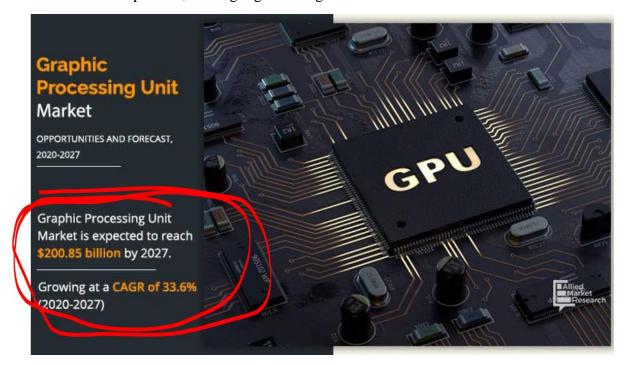
This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20191216005167/en/



Habana Labs chairman Avigdor Willenz stands near a rack that incorporates Habana Labs' HLS-1 Gaudi artificial intelligence training system at Habana Labs' office in Caesarea, Israel. Willenz will serve as a senior adviser to the business unit as well as to Intel Corporation after Intel's purchase of Habana. (Credit: Eyal Toueg/Intel Corporation)

Habana labs acquisition - Source: Intel

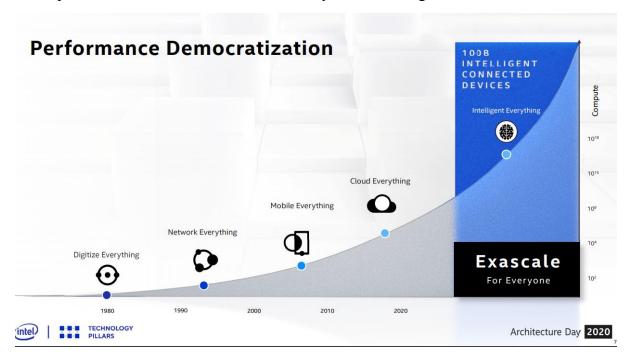
Further, there are sectors like the graphic processing units that are expected to explode over the next years and if Intel manages to get a share of those markets too, we don't have to worry about revenues, earnings and dividends. As Intel is spending significantly more on R&D than the competition, we might get some good news down the road.



GPU market expected to grow to \$200 billion – Source: Allied market research

And, it is not like Intel is not already a player there. <u>Intel has</u> 10.21% of the steam GPU market, AMD has 14.9% and Nvidia 74.75%. Even if the market share remains at 10%, 10% of \$200 billion is \$20 billion in 2027.

Apart from specific segments like GPU, if the world in 10 years follows the below expected development, I don't think we will have to worry about Intel's growth.



Intel's future – Source: <u>Intel Architecture Day 2020</u>

It is actually impossible to estimate the growth rate over the next 10 years, but it doesn't even matter with a price to earnings ratio of 10. A PE of 10 assumes no growth, so any growth ahead is good from an investing perspective.

I would say that given the current sales, the market share in various segments and the history, Intel has and will keep having a wide moat in the field which will likely lead to a growth rate similar to the market's growth rate.

Further and what matters most to us investors, I think I am safe to say the industry Intel operates in, is a growth industry.

According to the last quarterly information, despite all the setbacks over the last years, Intel's business keeps growing and the company keeps shipping more and more products.

BUSINESS SUMMARY

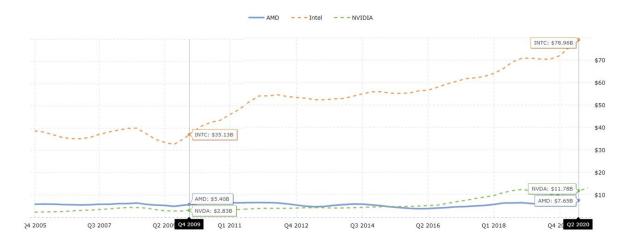
- We experienced growth in most of our data-centric businesses, driven by strong demand across all DCG segments, and strength in 5G adjacencies and NAND. We introduced the 3rd Gen Intel® Xeon® Scalable processors and additions to our hardware and software Al portfolio.
- Growth in our PC-centric business was driven by strength in notebook demand, strong platform ASP, and continued strength in modem, partially offset by
 desktop demand. We announced the new 10th Gen Intel® Core™ vPro® processors for enterprise needs to deliver increased productivity improvements,
 connectivity, security features, and remote manageability. We also launched the Intel® Core™ processors with Intel® Hybrid Technology, leveraging Intel's
 Foveros 3D packaging technology.
- We acquired Moovit for \$915 million to accelerate Mobileye's MaaS offering. Moovit is known for its urban mobility application and brings Mobileye closer to achieving our plan to become a complete mobility provider, including robotaxi services.
- We continue to accelerate our transition to 10nm-based products. We now expect to increase our 10nm-based product shipments for the year by more than 20 percent versus our January expectations. We expect production shipments of our next-generation 10nm client CPU product "Tiger Lake" in Q3 and are targeting initial production shipments of our first 10nm-based Xeon Scalable product, "Ice Lake," for the end of the year. Our 10nm-based products are positioned for 2021, led by our third-generation client product "Alder Lake" and our second-generation server product "Sapphire Rapids." Both products are expected to start initial production shipments in the second half of 2021.
- We now expect an approximate six-month delay in our 7nm-based CPU product timing relative to prior expectations. The primary driver is the yield of our 7nm manufacturing process, which based on recent data, is now trending approximately twelve months behind our internal target. We will continue to invest in our future process technology roadmap, but we will be pragmatic and objective in seeking to deploy the process technology that delivers the most predictability and performance for our customers, whether that be our process, external foundry process or a combination of both. Our advanced packaging technologies combined with our disaggregated architecture give us the flexibility to use the process technology that best serves our customers. As an example, we now expect that our data center discrete GPU design, "Ponte Vecchio", which was described in our 2019 Form 10-K, will be released in late 2021 or early 2022 utilizing external and internal process technologies combined with our advanced packaging technologies.
- We now expect to see initial production shipments of our first Intel-based 7nm product, a client CPU, in late 2022 or early 2023. We are also focused on
 maintaining an annual cadence of significant product improvements independent of our process roadmap, including for holiday 2022. In addition, we expect
 to see initial production shipments of our first Intel-based 7nm data center CPU design in the first half of 2023.

Intel Q2 2020 business summary – Source: Q2 Financials

Of course, there will be competitors that will grow revenues at a faster pace, but I don't get all the worries surrounding Intel given that Nvidia's revenues are at 15% of Intel's revenue and AMD's at just 10%.

The most important investing fact here is that the faster AMD and NVDA grow, the better it will be for Intel too. Everybody is so focused on the competitive environment that they miss out this is a growth sector with strong tailwinds.

Every company will make mistakes, like AMD and NVDA did in 2015 when both companies had declining revenues. So, Intel will make mistakes too, but will also do good things based on its investments and market position.



Intel, AMD, NVDA revenue growth - Source: Macrotrends

Given the above, I believe the most important question we have to find an answer to as investors is whether Intel will grow or not over the next 10 years. If yes, then at current valuations, it will likely be a good investment.

How good will it be? That is impossible to know because it depends on factors developing in the future. My best investments over the last 20 years have been those where I would buy something because I was happy with the safe, stable and relatively certain things the investment offered. I feel intel offers stability and thanks to its product offering also a high level of certainty when it comes to future earnings. Positive developments can only bring upside.

Let's take a look at the fundamentals and give a perspective on what could be the dividends and valuations in the future.

Intel's stock fundamentals

When it comes to fundamentals, the fundamental value of a company, also called intrinsic value, is the sum of all the discounted cash flows created by the company from today to judgement day as would Warren Buffet define it.

To estimate future cash flows, you should know the future which is impossible, at least for me. What we have to do is to create scenarios, estimate likely outcomes and as value investors, focus on what is more certain. So, we leave any uncertain positives as a pure bonus.

Given what we discussed above, the moat in its core business and the growth coming from new businesses, I would say the most likely outlook for Intel is for it to double revenues (1 in the table below) again over the next decade. Over the past decade revenue growth has been 7% per year.

Financials									Exp	ort 🛅	Ascending	~
		2010-12	2011-12	2012-12	2013-12	2014-12	2015-12	2016-12	2017-12	2018-12	2019-12	тп
Revenue USD Mil	1	43,623	53,999	53,341	52,708	55,870	55,355	59,387	62,761	70,848	71,965	78,95
Gross Margin %	2	65.3	62.5	62.1	59.8	63.7	62.6	60.9	62.3	61.7	58.6	57.
Operating Income USD Mil		15,588	17,477	14,638	12,531	15,642	14,356	14,760	18,320	23,244	22,428	26,35
Operating Margin %		35.7	32.4	27.4	23.8	28.0	25.9	24.9	29.2	32.8	31.2	33.4
Net Income USD Mil	3	11,464	12,942	11,005	9,620	11,704	11,420	10,316	9,601	21,053	21,048	23,66
Earnings Per Share USD	4	2.01	2.39	2.13	1.89	2.31	2.33	2.12	1.99	4.48	4.71	5.42
Dividends USD	5	0.63	0.78	0.87	0.90	0.90	0.96	1.04	1.08	1.20	1.26	1.29
Payout Ratio % *	6	31.3	31.6	40.8	48.6	42.8	40.7	47.9	37.3	36.4	29.2	23.8
Shares Mil	7	5,696	5,411	5,160	5,097	5,056	4,894	4,875	4,835	4,701	4,473	4,35
Book Value Per Share * USD	8	8.97	9.22	10.36	11.16	12.00	12.28	13.53	15.32	15.94	17.34	19.28
Operating Cash Flow USD Mil		16,692	20,963	18,884	20,776	20,418	19,017	21,808	22,110	29,432	33,145	37,91
Cap Spending USD Mil	9	-5,207	-10,764	-11,842	-10,747	-10,197	-7,446	-9,625	-11,778	-15,181	-16,213	-16,014
Free Cash Flow USD Mil	10	11,485	10,199	7,042	10,029	10,221	11,571	12,183	10,332	14,251	16,932	21,900
Free Cash Flow Per Share * U	SD	2.02	1.83	1.36	2.00	1.91	2.47	2.16	2.42	3.03	3.25	-
Working Capital USD Mil		22,284	13,844	18,460	18,516	11,711	24,689	15,206	12,079	12,161	8,929	_

Intel stock fundamentals – Source: <u>Intel quote Morningstar</u>

Despite the growth, gross margins (2) have been declining at a very slow pace while operating margins even improved over the last years. Net income (3) more than doubled at a growth rate of 10% per year. Earnings per share increased even more because the company has been constantly doing buybacks (7) and has lowered the number of shares outstanding by 24%. Apple has been applying a similar strategy. Dividends (5) have doubled too while the

pay-out ratio remained small as the company is investing into the future and preferring buybacks.

Capital spending (9) has been growing, which is good because it keeps Intel's moat intact in many areas. But, the free cash flows (10) are still very strong and give a free cash flow yield that is above 10% which is a remarkable in the current market environment.

If Intel continues to produce cash flows close to \$20 billion per year alongside 7% to 10% growth, you will not have to think worry much about your investment in Intel over the next 10 years.

Intel stock dividend and buyback yields

On top of the above, Intel recently announced that it will accelerate its stock buyback plan and I would expect to see other announcements when the current plan is completed. Such a statement shows Intel's dedication to rewarding shareholders which is an extremely important factor, especially when the stock is cheap. Most companies increase buybacks when the stock is expensive and thing are going good and don't do them when the stock is cheap due to headwinds.

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INTEL INITIATES \$10 BILLION ACCELERATED SHARE REPURCHASE AGREEMENTS

1 08/19/2020

SANTA CLARA, Calif.--(BUSINESS WIRE)-- Intel Corporation today announced it is entering into accelerated share repurchase (ASR) agreements to repurchase an aggregate of \$10 billion of Intel's common stock. Following completion of these agreements, Intel will have repurchased a total of approximately \$17.6 billion in shares as part of the planned \$20 billion share repurchases announced in October 2019.

Intel stock buybacks – Source: <u>Intel investor relations</u>

A \$20 billion repurchase plan gives an implied buyback yield of 9%. According to the latest financial report, on June 27th, the number of shares outstanding has already been 100 million lower than the above reported number by Morningstar.

As of June 27, 2020, the registrant had outstanding 4,253 million shares of common stock.

Number of shares outstanding - Intel Q2 financial report

Let's imagine Intel spends \$10 billion on buybacks per year over the next 10 years. This means it would buy back half of the number of shares currently outstanding at current prices. Even if earnings remain flat by 2030, earnings per share would double. Consequently, I don't think the stock would keep trading at below \$50 where the PE ratio would be at 5.

Just the buyback activity is likely to bring 100% growth to Intel's earnings per share over the coming decade. If revenues grow another 7% per year, you already have a 15% yearly investment return as earnings would be likely to quadruple by 2030.

On top of revenue growth and buybacks, you also have a dividend.

Intel dividend

Intel's dividend is also important, has been doubled over the past decade and will likely continue to be increased as the business grows.



INTEL DECLARES QUARTERLY CASH DIVIDEND

6 07/16/2020

SANTA CLARA, Calif.--(BUSINESS WIRE)-- Intel Corporation today announced that its board of directors has declared a quarterly dividend of \$0.33 per share (\$1.32 per share on an annual basis) on the company's common stock. The dividend will be payable on Sept. 1, 2020, to stockholders of record on Aug. 7, 2020.

Intel dividend – already at \$1.32 per year – Source: Intel dividend news

The dividend yield of 2.68% ads to the above double-digit yearly return. Plus, it is also likely the dividend will grow over time and further increase returns.

Intel balance sheet

A look at the balance sheet shows how Intel's debt went up over the last quarters but that is just as the company is taking advantage of the high liquidity on the markets and low interest rates. Total long-term debt (3 below) is \$36 billion which is less than two years of free cash flows. So, not a major concern. Plus, short term assets (2) are twice the current liabilities which also indicates strength.

Millions)	Ju	n 27, 2020	De	c 28, 2019
ssets	(L	naudited)		
rrent assets:				
Cash and cash equivalents	s	8,736	s	4.194
Short-term investments	*	4,791	*	1,082
Trading assets		12,288		7.84
Accounts receivable		7,441		7,659
Inventories		8,969		8.74
Other current assets		2,165		1,71
otal current assets	_	44,390	_	31,23
operty, plant and equipment, net of accumulated depreciation of \$77,988 (\$73,321 as of December 28, 2019)	_	58,036	_	55,38
uity investments		3,901		3,96
her long-term investments		2,884		3,27
podwill		26,943		26,27
entified intangible assets, net		10,303		10,82
her long-term assets		6.082		5,55
'otal assets	s	152,539	\$	136,52
abilities, temporary equity, and stockholders' equity urrent liabilities: Short-term debt Accounts payable	\$	2,254 5.045	\$	3,69 4.12
Accounts payable Accrued compensation and benefits		2.833		3.85
Other accrued liabilities		12.349		10.63
otal current liabilities	_	22,481	_	22,31
obt 2	-	36,093	_	25,30
ontract liabilities		1,329		1,36
come taxes payable, non-current		4,795		4,91
oferred income taxes		2,723		2,04
her long-term liabilities		3,108		2,91
ontingencies (Note 13)		5,100		_,-,-
mporary equity ockholders' equity:		_		15
Preferred stock		_		_
Common stock and capital in excess of par value, 4,253 issued and outstanding (4,290 issued and outstanding as of December 28, 2019)		25,516		25,26
Accumulated other comprehensive income (loss)		(1,152)		(1,28
Retained earnings		57,646		53,52
etal stockholders' equity		82,010		77,50
otal liabilities, temporary equity, and stockholders' equity	\$	152,539	\$	136,52

Intel stock balance sheet – Source: Intel Q2 financial report

Let's put the above into a valuation model so that you can make an investment decision.

Intel stock valuation model

A conservative value investing thesis would one where Intel doubles its revenues over the next 10 years and increases earnings by 150% over the same period thanks to buybacks while the dividend keeps slowly growing and increases 100%. Given the investments in growth through R&D and acquisitions, we can estimate the same from 2030 onward. Earnings growth of 150% over 10 years implies a 9.5% growth rate.

If the valuation doesn't change, which I find unlikely if the company keeps growing, doing buybacks and interest rates remain so low, the returns investors can expect are in line with the earnings growth rate plus the dividend yield. We are already at 13.15% on a yearly basis.

	INTEL STO	CK EARN	IINGS I	MODEL	VALUATION		10				Current price:		\$49.43
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TERMINAL	VALUE
EARNINGS	\$5.42	\$5.93	\$6.50	\$7.12	\$7.79	\$8.53	\$9.34	\$10.23	\$11.20	\$12.27	\$13.43	\$134.32	
DIVIDEND (24% pay	\$1.30	\$1.42	\$1.56	\$1.71	\$1.87	\$2.05	\$2.24	\$2.46	\$2.69	\$2.94	\$3.22		
Dividend yield	2.63%												
Implied return	2.717377	10.51%											
TOTAL RETURN	13.15%												

Intel stock valuation model with a price to earnings ratio of 10 in 2030 on a 9.5% yearly earnings growth rate.

If in 2030 the market recognizes Intel as a quality growth company and the stock starts trading with a PE ratio of 15, the yearly return would be a staggering 17.7%.

	INTEL STO	EL STOCK EARNINGS MODEL <mark>'</mark>			VALUATION		15				Current price:		\$49.43
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TERMINAL	VALUE
EARNINGS	\$5.42	\$5.93	\$6.50	\$7.12	\$7.79	\$8.53	\$9.34	\$10.23	\$11.20	\$12.27	\$13.43	\$201.48	
DIVIDEND (24% pay	\$1.30	\$1.42	\$1.56	\$1.71	\$1.87	\$2.05	\$2.24	\$2.46	\$2.69	\$2.94	\$3.22		
Dividend yield	2.63%												
Implied return	4.076065	15.09%											
TOTAL RETURN	17.72%												

Intel stock valuation model with a price to earnings ratio of 15 in 2030 on a 9.5% yearly earnings growth rate.

If Intel reaches a PE ratio of 20 in 2030 thanks to all the growth areas it is exposed to, the stock price could reach \$268 for a yearly investment return of 21.8%.

	INTEL STOCK EARNINGS MODEL				VALUATION		20				Current pi	rice:	\$49.43
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TERMINAL	.VALUE
EARNINGS	\$5.42	\$5.93	\$6.50	\$7.12	\$7.79	\$8.53	\$9.34	\$10.23	\$11.20	\$12.27	\$13.43	\$268.64	
DIVIDEND (24% pay	\$1.30	\$1.42	\$1.56	\$1.71	\$1.87	\$2.05	\$2.24	\$2.46	\$2.69	\$2.94	\$3.22		
Dividend yield	2.63%												
Implied return	5.434754	18.45%											
TOTAL RETURN	21.08%												

Intel stock valuation model with a price to earnings ratio of 20 in 2030 on a 9.5% yearly earnings growth rate.

If I increase Intel's PE ratio to 37.5, the current PE ratio for Apple, the returns become incredible.

	INTEL STOCK EARNINGS MODEL			VALUATION	ALUATION 37.5					Current price:		\$49.43	
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TERMINAL	.VALUE
EARNINGS	\$5.42	\$5.93	\$6.50	\$7.12	\$7.79	\$8.53	\$9.34	\$10.23	\$11.20	\$12.27	\$13.43	\$503.70	
DIVIDEND (24% pay	\$1.30	\$1.42	\$1.56	\$1.71	\$1.87	\$2.05	\$2.24	\$2.46	\$2.69	\$2.94	\$3.22		
Dividend yield	2.63%												
Implied return	10.19016	26.13%											
TOTAL RETURN	28.76%												

Intel stock valuation model with a price to earnings ratio of 37.5 in 2030 on a 9.5% yearly earnings growth rate.

If Intel's valuation changes for the positive sooner, then the stock could reward shareholders with good capital gains and even higher returns in a shorter period of time. However, if the news keeps to be bad and disliked by analysts, I would not be surprised to see a lower price to earnings ratio of 8 or even 7. This is the risk and reward of investing in Intel at the moment.

Now, when I find a business that offers such good returns, I always wonder what am I missing. Charlie Munger says that an investor can expect returns in line with the return on invested capital the business can deliver.

Profitability	2010-12	2011-12	2012-12	2013-12	2014-12	2015-12	2016-12	2017-12	2018-12	2019-12	TTM
Tax Rate %	28.55	27.21	26.01	23.72	25.93	19.65	20.25	52.83	9.71	12.51	13.44
Net Margin %	26.28	23.97	20.63	18.25	20.95	20.63	17.37	15.30	29.72	29.25	29.97
Asset Turnover (Average)	0.75	0.80	0.69	0.60	0.61	0.57	0.55	0.53	0.56	0.54	0.56
Return on Assets %	19.72	19.27	14.16	10.89	12.70	11.71	9.53	8.12	16.76	15.92	16.70
Financial Leverage (Average)	1.28	1.55	1.65	1.59	1.62	1.66	1.69	1.76	1.71	1.76	1.86
Return on Equity %	25.16	27.15	22.66	17.58	20.35	19.23	15.98	14.02	29.07	27.58	30.10
Return on Invested Capital %	23.84	24.62	18.66	14.27	16.52	14.94	12.11	10.29	21.29	20.24	21.20
Interest Coverage	_	434.68	166.26	52.68	83.30	43.17	18.64	32.50	50.82	50.20	51.91

Intel's return on invested capital – Source: Morningstar

Intel's returns on invested capital have constantly been in the double digit area and often above 20%. If the company can continue to keep returns on invested capital in the double digits over time, that is likely to be our investment return too.

Intel stock investment conclusion – investing in great businesses with tailwinds

The numbers we ran above look really good, Intel's business looks good and the company has been around for a while, so it has proven itself. Yes, the growth is likely to be slow ahead, definitely not linear (something Wall Street hates) and there are no immediate catalysts expected in the form of great news. So, as one analyst said: the only reason to invest in Intel is because it is cheap.

I would say that is a great reason to invest in something, especially when it is very likely there will be many positive catalysts from 2023 to 2030 as most of the sectors Intel is investing in boom. Thus, a great business at a fair price.

On the risk side, losing market share to AMD, having lower cash flows in 2021 and 2022, alongside high investments in acquisitions and R&D and consequently lower earnings, might put even more pressure on the stock and push it down to \$40, perhaps even to the thirties for a while. That could easily happen if more bad news comes out and we already described how the market is a voting machine in the short-term. If you invest in Intel stock, be ready to wait a while for your returns, but given the quality of the company, the long-term outlook, the buybacks, I think it is a worthwhile wait.

My action and portfolio strategy

I'll start with a 7% portfolio exposure. The above discussed possible returns fit my required investment returns and the buyback activity might create a support for the stock.

If there is more bad news in the form of noise but the fundamentals remain strong and the long-term outlook positive, I will be ready to make Intel a core position within my portfolio and take even more advantage of the market's irrationality and short-term focus.