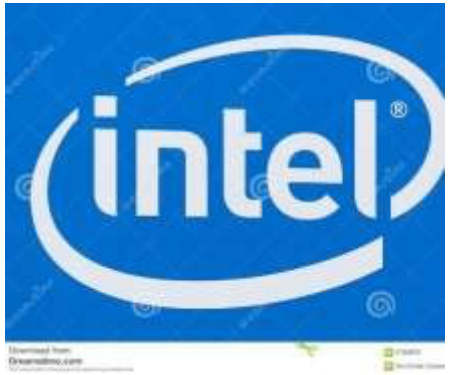

INTEL CORPORATION (INTC)

Investment Proposal

Prem Shankala

08/07/2020

LISTING	SECTOR	INDUSTRY	CURRENT PRICE
NASDAQ	Technology	Semiconductors	$58.31

REVENUE	MARKET CAP	BETA	PE RATIO
75.735 millions	$246.88B	0.79	11.30

Previous Close	59.54	Market Cap	246.885B
Open	59.07	Beta (5Y Monthly)	0.79
Bid	0.00 x 800	PE Ratio (TTM)	11.30
Ask	0.00 x 1300	EPS (TTM)	5.16
Day's Range	58.14 - 59.57	Earnings Date	Jul 22, 2020
52 Week Range	43.63 - 69.29	Forward Dividend & Yield	1.32 (2.26%)
Volume	15,996,487	Ex-Dividend Date	May 05, 2020
Avg. Volume	24,753,201	1y Target Est	63.19

- Industry analysis
- The global semiconductor market is projected to reach USD 730.29 billion by 2026, exhibiting a CAGR of 5.2% during the forecast period.

- Company analysis
- Intel has a strong balance sheet, and a low cash dividend pay-out ratio, which will allow the company to maintain its dividend throughout this year and grow its dividend in the future, we believe that the stock is at present undervalued.

- Competitor analysis
- Amidst all the noise surrounding Intel's competition, it continues to thrive quietly with free cash flows growing at ~11% CAGR over the last five years.
- Intel has a clear edge over its competitors because of the element of differentiation, Intel is widely respected to portray excellent product quality, customer service and an industry respected brand image and also being one of the oldest companies out there.

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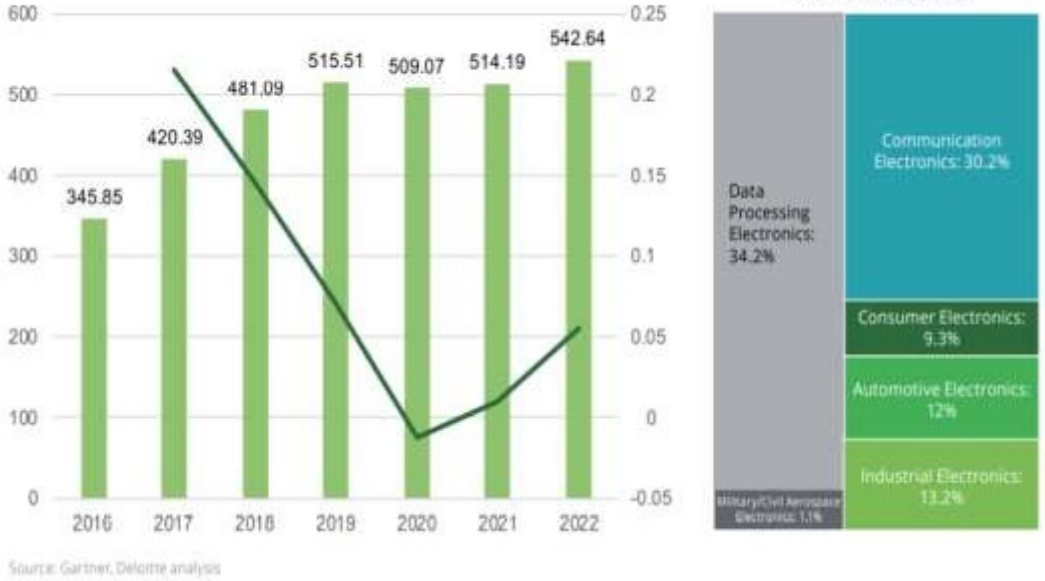
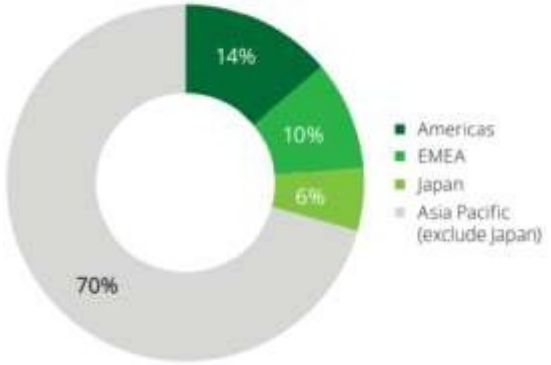
- In 2020, the global semiconductor industry is predicted to grow by 3.3 percent compared to the previous year, a recovery fromthe 12 percent fall that the market experienced in 2019. Semiconductors are crucial components of electronics devices.

Figure: Global semiconductor sales revenue (2016-2022, billion USD)



Source: Gartner, Deloitte analysis

Figure: Semiconductor sales by region (2018)



Source: Gartner

Figure: Semiconductor sales growth (2018)

- The global semiconductor market is projected to reach USD 730.29 billion by 2026, exhibiting a CAGR of 5.2% during the forecast period. In 2018, global chip sales rose 13.3% to $467.1 billion, despite the market weakening late in the year, according to the Semiconductor Industry Association. Memory chips are the largest semiconductor category, representing about a third of total sales.
- In 2019, the semiconductor industry suffered its worst year in almost two decades. Semiconductor revenue fell 12% to$412.1 billion, the SIA reported. This was due to the ongoing global trade unrest (between US and China affecting supply chains in China etc.) and the seasonal changes in product pricing. The World Semiconductor Trade Statistics organization projects annual global chip sales will increase 5.9% in 2020 and 6.3% in 2021.
- **Semiconductor chips are seeing massive emerging trends such as cloud computing, 5G wireless networks and artificial intelligence.**

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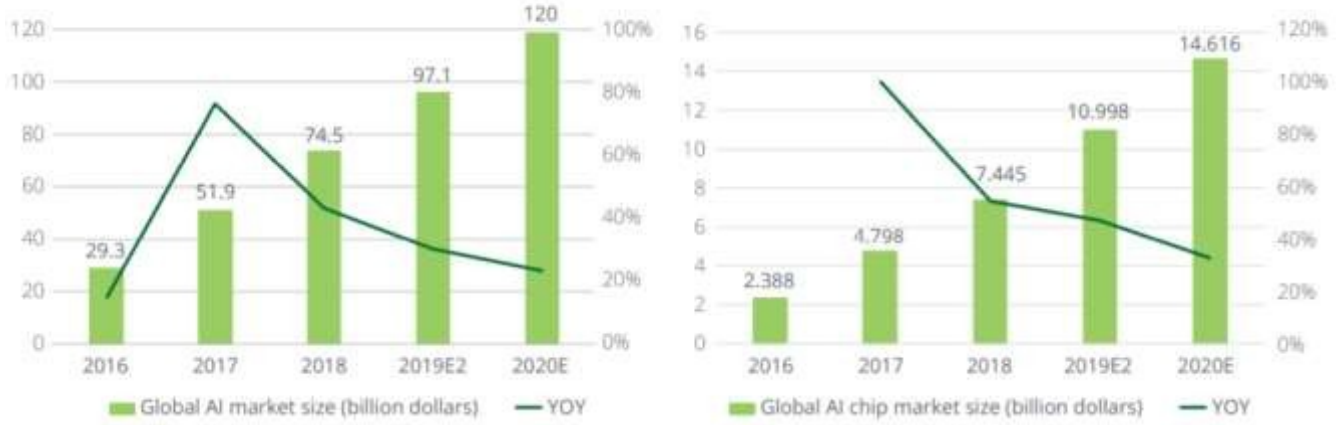
Industry trends

The two main drivers of growth are the **growth of IA** and the **electronification of automotive industry,** the others include the 5G Communication and Internet of Things (IOT).

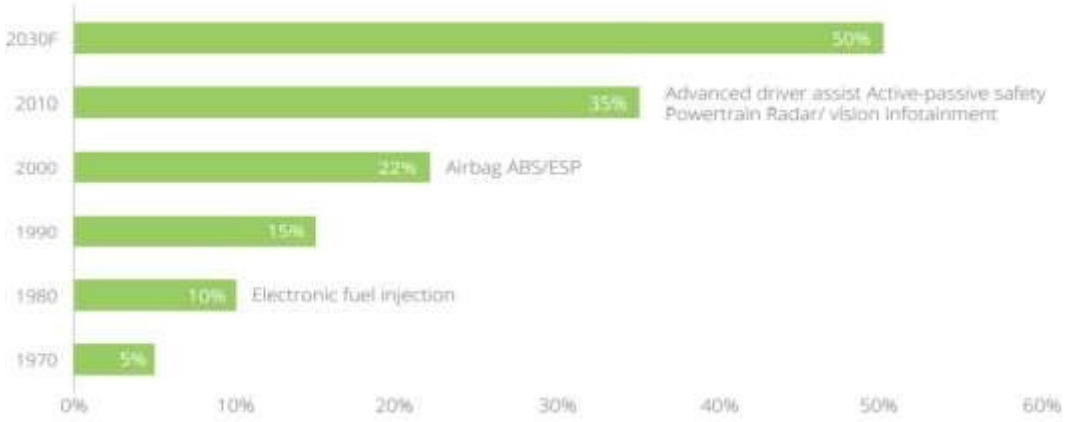
Figure: The global AI and AI chip market (2022)



The market for AI-related semiconductors is expected to grow from a current US$6bn in revenues to more **than US$30bn by 2022**, a **compound annual growth rate (CAGR) of almost 50%.** AI chips represent the biggest driver of growth in the Microchip market.

Electronic systems in a vehicle now represents over 40% of the total cost of the product. It is expected to continue growing, especially with **electrification of the mass automotive** market and the development of **autonomous driving.**

Electronic systems as % of total car cost



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- **Porter's 5 Forces:**

- Competitive rivalry – **Very Highly Competitive**
  - There are numerous competitors in the market, especially AMD (Advanced Micro Device), which is positioning itself to compete exactly on the same products as Intel.

- Threat of entrants – **Moderate**
  - With the arrival of new disruptive Fintech, the threat of a new entrant could be seen as significant, especially in the Research & Development sector.
  - On the other hand, the economics of scale required to compete on a scale similar to Intel, make the semiconductors market hard to enter, with extensive capital expenditure requirement.

- Threat of substitutes – **Low**
  - Semiconductors are part of our daily lives, they are in most piece of technology we use daily.

- Bargaining power of buyers – **Low**
  - The buyers of the semiconductor industry are endless. The switching costs of the buyers in the commodity semiconductor market is small as they can purchase from any semiconductor industry player who is representing the lowest cost available as long as the technology is compatible. The strong role of the industry giants like Intel and Samsung limits the bargaining power of buyers.

- Bargaining power of suppliers – **Moderate**
  - In terms of large semiconductor companies, they have inherent advantages when choose suppliers from thousands of them (Investopedia, 2011). The large diversified companies usually use enough number of suppliers to minimize the power of each. However, in the specialized semiconductor industry, in which the "fabless manufacturing" model is used by most of the companies. As a result, fabless companies play an important role in this specialized sector. Besides, not every sub-contractor has the capability to satisfied the needs of the specialized companies, so suppliers are much powerful than those in the large generic semiconductor sector (Ciolli, 2011).

- It is the world's largest and highest valued semiconductor chip manufacturer based on revenue, and is the inventor of the x86 series of microprocessors, the processors found in most personal computers (PCs).
- Intel employs more than 110 thousand people worldwide and generated more than 71 billion U.S. dollars in global annual revenue in 2019. The company is a major player in the global semiconductor market with a market share of around 13 to 15 percent over the past ten years.
- The company has made several acquisitions over the past few years to maintain its technological leadership. The largest acquisition was Mobileye, which focuses on autonomous driving. Intel has a relatively small net debt position of about $20 billion on the balance sheet. It's less than 1x the EBITDA. This means Intel has room to add more debt if it wants to acquire another company. Intel uses the excess free cash flow mainly for buybacks.
- Amidst Intel's competition, it continues to thrive quietly with free cash flows growing at ~11% CAGR over the last five years.
- The company is well-positioned to benefit from several secular growth trends, such as 5G, AI, IoT, and Autonomous Vehicles by way of its strong product roadmap.
- INTEL currently has $13 billion in Cash and cash equivalent, compared to a $3.7 billion short term debt. The financial structure of the company is therefore solid.

- SWOT Analysis:

- **Strength:** Intel Corporation is the strongest competitor in the global market for semiconductors and can lean on robust competitive advantages:

→ Strong partnership with Microsoft (dominating the market for desktop operating systems.

→ High-efficiency fabrication processes: allows the company to supply processors to equipment manufacturers on time and at adequate amounts.

→Economies of scale: High turnover and production allows them to reduce significantly costs of production.

→ Strong brand image: the company benefits from its image and long history of micro conductors making, INTEL is renown for its quality.

- **Weaknesses:** Intel remains the market leader but some weaknesses exist from it’s big involvement with Microsoft:

→Insignificant presence in the mobile market.

→Dependence on Windows machines:

→Limited business diversification: lack of extensive business processes for other products than windows, increasing business risks and lack of possible re-organisation.

- **Opportunities:**

→Business diversification: target new segments such as the household appliance market.
→Product development for the mobile market.
→Flexibility of processors.

- **Threats:**

→Increase competition, especially with AMD in the PC market
→Political risks is high for the company (ex: trade War between the US and China.
→Increase adoption of mobile device replacing computers, Intel's insignificant share of mobile processors could worry the company.

- Intel's top competitors include AMD, IBM, Samsung Electronics, NVIDIA, ASUS, Samsung, and Oracle. Intel is a developer and manufacturer of microprocessors and other semiconductor components.

- If you're looking for the best gaming CPU PC or the best CPU for Desktop Application , there are only two choices to pick from: Intel and AMD, it’s biggest competitor.

- AMD: short for Advanced Micro Devices, like Intel, produces more than just microprocessors. Both companies create motherboards, servers, and other computer-related hardware. In terms of the x86 microprocessor. MD still trails behind INTEL in terms of market share, but as been gaining some in the Laptop market recently.

- IBM: used to produce computers using Intel's processors, but has since sold off that business and is now selling its own servers and mainframes using its own processors, putting itself directly in competition with Intel. The company launched a program to open source much of its architecture and firmware back in 2013, which attracted many new customers to using its central processing units (CPUs), stealing market share from Intel.

- NVIDIA: NVIDIA is one of the key players in the graphics processing unit (GPU) market. It is one of the biggest names in video games. It also designs chips for mobile phones and automobiles. Many of its chips are used in supercomputers and it is now working on artificial intelligence. Intel is planning on releasing a new graphics card in 2020 that will compete directly with Nvidia's dominance in that field. It will use this to compete in areas of data centers, artificial intelligence, and machine learning.

- SAMSUNG: The company is the second largest provider of semiconductors in the world, with a more smartphones and data center focus compared to Intel’s Desktop and Laptop.

Name	Revenue (USD million)	Sales growth (YoY)	Gross margin	Net margin	ROE	P/E	Forward P/E	PEG	Price to Sales	Market Cap (USD million)
IMB	76,540	-0.8%	12.78%	11.78%	49.10%	11.85	11.05	9.61	1.40	106,280
AMD	7,250	7.6%	10.63%	6.72%	20.19%	124.19	53.19	1.57	8.49	62,540
NVIDIA	11,780	7.9%	29.41%	28.18%	29.11%	71.87	48.31	3.78	20.22	236,460
QUALCOM	24,780	1.9%	33.54%	16.36%	117.15%	27.18	16.39	0.80	4.41	103,350
ASUS	336,160	-4.3%	3.82%	3.22%	7.61%	12.94	14.51	N/A	0.48	160,810
INTEL	**75,732**	**5.2%**	**33.61%**	**30.02%**	**30.31%**	**11.48**	**12.72**	**1.90**	**3.44**	**250,360**

- Intel currently presents the best P/E ratio out of its main competitors, with a more than decent 30.3% ROE. It's P/E ratio is significantly lower than it's more alike competitor: AMD.

- Although INTEL's competition have gained significant attention over the last few years, INTEL still remains one of the fastest growing company, with a 5.2% growth rate. This fact is tremendous considering the currently low P/E ratio of the company.

- Net Margin of the company is the best out of all its closest competitors, the PEG ratio is over 1, but significantly lower than mostly all its most alike competitors.

- The 50 days moving average price is equivalent to $56.67, the current price is slightly above and thus the MA would be a strong support line.
- The Relative strength Index shows a metric around 50, meaning the stock neither highly bought or sold. The current price could be considered as neither attractive nor too expensive.
- The Moving average Convergence/Divergence metric does not allow us the see which momentum is currently running the stock price.
- Finally, the stock price is standing at $58.31 per share, the stocked picked around $68 per share at the beginning of the year. The company is solidly established with a good reputation, and is still expected to grow significantly over the next few years. We foresee the share price going back to similar level once the sanitary crisis passed.