

U.S. Semiconductors

Intel (INTC): Intel IDM 2.0 - Pat chooses "D - All of the Above"

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Well, one can't fault new CEO Pat Gelsinger for a lack of vision, as he outlined plans for Intel's "IDM 2.0" strategy last night, and decided to go for "all of the above" as the company plans to double down on internal manufacturing (with a massive 2021 capex guide), increase outsourcing across multiple 3rd-party foundries, launch an IBM research collaboration, and invest in a new \$20B Arizona fab expansion to help fuel a major move to become a global 3rd party foundry themselves.

On the positive, they continue to claim that 7nm is fixed, with products coming in 2023 across client and datacenter. They are taking advantage of the current "perfect storm" in semis to secure external governmental funding / subsidization (and we believe that given the fungible nature of semicap tools Intel's own internal capacity will benefit from those subsidies as well). They have multiple "supporters" for a foundry effort (or at least multiple players willing to put their names on a slide). The foundry narrative could help to assuage "trough EPS" fears as (in theory) it could help backfill share losses and other headwinds. And tactically they indicated Q1 will "exceed" current outlook.

However, they also guided the full year below consensus (\$72B/\$4.55 vs Street \$73.6B/\$4.72), with particular pressure on GMs (56.5% vs Street 58%, suggesting material degradation into the 2H) and FCF (seen at \$10B, \$7B below the Street, a function of a massive \$19-\$20B capex guide that is mostly NOT related to the \$20B Arizona buildout, and which may be more indicative of "core" capex going forward). We still have no color on what the "transition economics" look like. A foundry business brings significant challenges with many open questions; it is something the company has tried, and failed at, before, and the company's process roadmap is likely to remain behind TSMC, begging the question of how they will attract enough business to make it viable (not to mention they will be competing with customers). And unfavorable product roadmap dynamics over the next several years remain unchanged, near-term PC strength may prove unsustainable, and Sapphire Rapids commentary (ramp in 1H22) felt like (at least to us) a bit of a pushout.

The bull case here remains "cheap hope" and we suppose investors can still have some reason to hope, at least for now; at a minimum Pat exudes an enthusiasm and confidence that has been sorely lacking at Intel for some time. At the same time however, executing on this plan is going to be very challenging, and we suspect the economics during the transition are going to get uglier; we will see how well appetite holds up as the truer picture emerges.

We are leaving our numbers unchanged for now. We rate Intel Underperform, \$43 TP.



Analyst Page



Bernstein Events



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BERNSTEIN TICKER TABLE

Ticker	Rating	23 Mar 2021		Target Price	TTM Rel. Perf.		EPS Reported			P/E Reported		
		Closing Price	USD				2020A	2021E	2022E	2020A	2021E	2022E
INTC	U	63.48	USD	43.00	(46.7)%	USD	5.30	4.68	4.27	11.98	13.56	14.86
SPX		3,910.52					137.10	170.56	196.84	28.52	22.93	19.87

O - Outperform, M - Market-Perform, U - Underperform, N - Not Rated

INVESTMENT IMPLICATIONS

INTC (UP, \$43): Intel's long-term structural issues have finally broken to the forefront, with competitive pressures increasing amid process outlook that remains uncertain.

DETAILS

Last night Intel held an update call to discuss "The Plan" around manufacturing, product roadmaps, and broader strategy, as well as providing refreshed outlook for the quarter and year.

Do you choose A, B, or C? How about "D – All of the above" – Well, one can't fault new CEO Pat Gelsinger for a lack of vision, as he outlined plans for Intel's "IDM 2.0" strategy across multiple paths, doubling down on internal manufacturing with a massive 2021 capex guide, increasing outsourcing across multiple 3rd-party foundries, an IBM research collaboration, and a new \$20B Arizona fab expansion to help fuel a major move of their own into 3rd party foundry.

The good:

- + **7nm supposedly fixed, leveraging advanced packaging** – As they mentioned on the January earnings call, Intel believes they have fixed the issues with 7nm, blaming them on not making more significant use of EUV; they indicated they have increased EUV layers, respun and simplified the process, and that the majority of their products will be made on 7nm internally beginning in 2023. At the same time, they will be increasing use of outsourcing, leveraging their advanced packaging expertise to stitch together tiles, potentially made at different locations, into (hopefully) leading products.
- + **Taking advantage of the current "perfect storm" in semis to secure external governmental funding** – The company is taking advantage of the current environment (including widespread shortages and increasing geopolitical tensions) to secure external governmental funding / subsidies to help with the staggering capex they are spending, both in the US and, eventually, in Europe as well. They did not quantify it (frankly the legislation still needs to be written) and suggested that the strategy itself is not dependent on subsidies, but it certainly seems to us that subsidization may be a major driver behind the move.
- + **"Dedicated capacity" does not mean "dedicated fab", at least not at first** – The company also indicated to us that while they will be dedicating capacity to the new foundry business, they will not be dedicating whole fabs to it, at least not initially given the likely small size of the business at the start. This suggests to us that subsidies might very well be paying for what is effectively internal capacity as well (not a bad deal we suppose).
- + **Multiple "supporters" for Intel as a foundry provider** with Amazon, Cisco, Ericsson, Google, IBM, Microsoft, IMEC, and Qualcomm all willing to at least put their names on the slide.
- + **A foundry narrative may help to assuage "trough EPS" fears somewhat**, given it is a (in theory) sizeable opportunity that could help to backfill share losses and other headwinds, if indeed they can scale it.
- + **Q1 likely to "exceed" current guidance** of \$17.5B/\$1.10 on the back of strong continued notebook demand.

The not-so-good:

- + **Full year outlook disappointing, particularly on gross margins and FCF.** Annual guidance, delayed since January, was offered, and was below the Street at ~\$72B/\$4.55 vs consensus \$73.6B/\$4.72. In particular, gross margins are seen at 56.5% vs Street 58%, suggesting sharp deterioration into the 2H as substrate costs increase and 7nm development costs

begin to come into the model. And with capex seen at \$19-\$20B (\$5B+ above the Street) FCF was guided to ~\$10B, almost \$7B below consensus given lower revenues and significantly higher capex (**Exhibit 1**).

- + **Gross margins and FCF may come under further pressure.** Management dodged a question on whether 2021 gross margins represent a trough, only indicating that they would discuss it at an analyst day in the 2H. We believe margins are likely to come under further pressure as 7nm ramps and capex increases, and of course over the long term the 3rd party foundry market is likely to have dilutive economics as well¹. And if capex stays high it seems possible that FCF could remain impaired, depending on the degree of subsidization the company can secure.
- + **Costs are going up regardless.** Our conversation with the company suggested the \$19-\$20B in 2021 capex does not overlap much with the \$20B Arizona buildout (only a little bit to start building the fab shells), suggesting it is much more representative of the structural capex level required by the core business, and considerably higher than previously, presumably given high costs of 7nm which now seems to be using much more EUV.
- + **Still no color on what the "transition economics" will look like.** Intel identified 2021 as a "transition" year to help explain the lowered outlook. However, we still have no clarity as to whether 2021 is the trough (on revenue, earnings, GMs, or whatever; we suspect it may not be) or what the trough economics of the company might look like. We presume we will have to wait till the analyst day.
- + **Foundry business model brings significant challenges and many open questions.** Intel has tried to build a third-party foundry business before; it was (to put it mildly) a spectacular failure. The company is of course suggesting things will be different this time, with a dedicated BU with P&L responsibility, dedicated capacity, and more use of industry-standard tools, but in practice this remains to be seen. At the same time, even if Intel can deliver 7nm by 2023 TSMC will be well into their own 3nm node, suggesting Intel will remain behind the market leader and begging the question as to how they will attract significant enough volume to make the business viable, not to mention the fact that they will be in potential direct competition with at least some of their customers.
- + **Even if they build a foundry business, will they be TSMC or Samsung?** Given INTC seems likely to remain behind TSMC on process, it seems plausible to us that even a scaled business could more closely resemble Samsung (with a worse roadmap and poorer economics as well as dealing with customer concentration) rather than TSMC.
- + **The product roadmap dynamics over the next several years still appears unfavorable, current PC strength may not be sustainable, and the Sapphire Rapids timeline looks (at least to us) like a bit of a pushout.** Everything Intel discussed pertained to product roadmaps for 2023 and beyond. But the roadmap over the next several years remains baked, and there is little they can do to change it. AMD will still be taking share. AAPL will still be moving away. Arm will continue to see greater deployment in the datacenter, as well as in PCs. Tactically we worry that the current revenue strength is mostly PC driven which we view as unlikely to be sustainable, bringing risk to the eventual 2022 outlook (where we remain well below the Street). And they indicated that while technically Sapphire Rapids will start to ship at the end of 2021, it won't ramp into volume until the 1H of 2022, which while it may meet the letter of their prior statements, still feels like a bit of a pushout to us.

Intel's stock rose over 6% in the aftermarket following the call, a move we found (frankly) somewhat surprising. The bull case here remains "cheap hope" and we suppose investors can still have some reason to hope, at least for now; at a minimum Pat exudes an enthusiasm and confidence that has been sorely lacking at Intel for some time. At the same time, executing on this plan is going to be very challenging, and we suspect the economics during the transition are going to get uglier; we will see how well appetite holds up as the truer picture emerges.

We are leaving our numbers unchanged for now. We rate Intel Underperform, \$43 TP.

¹ We actually did some comprehensive work on what a greenfield Intel foundry might look like almost 9 years ago in this note ([Intel vs. Samsung in Foundry - Who Could Win the Apple War?](#) published on June 14, 2012); it should not be a surprise that we estimated gross margins significantly below corporate average for such a business.

EXHIBIT 1: **INTC 2021 guidance disappointed, particularly on gross margins and FCF given very high capex**

Implied				
Bern E				
\$ in M excl. EPS	Guidance - PF	Bernstein	Consensus	Variance to Bernstein
Sales	\$72,000	\$71,706	\$73,591	\$294
Gross Margin	56.5%	58.6%	58.0%	-2.1%
Gross Profit	\$40,680	\$42,055	\$42,697	-\$1,375
Opex	\$19,365	\$19,750	\$20,159	-\$385
EBIT	\$21,315	\$22,305	\$22,539	-\$990
Financial/Other Expense	\$102	\$102	-\$120	\$0
EBT	\$21,213	\$22,203	\$22,659	-\$990
Tax	\$2,758	\$3,219	\$3,253	-\$462
Tax R	13.0%	14.5%	14.4%	-1.5%
Net Income	\$18,455	\$18,984	\$19,406	-\$529
EPS	\$4.55	\$4.68	\$4.72	(\$0.13)
DSO	4,056	4,056	4,108	NA
Capex	\$19B-\$20B	\$14,951	-\$14,510	\$4,549
FCF	\$10,000	\$16,812	\$17,197	-\$6,812

Source: company reports, Bloomberg, Bernstein estimates and analysis

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EXHIBIT 2: Bernstein INTC Income Statement

Intel: Income Statement (\$M)																
INTC (Calendar)	2020	2021E	2022E	2023E	Q120	Q220	Q320	Q420	Q121E	Q221E	Q321E	Q421E	Q122E	Q222E	Q322E	Q422E
Revenue	77,867.0	71,705.6	69,434.4	71,215.4	19,828.0	19,728.0	18,333.0	19,978.0	17,527.3	17,170.8	17,907.4	19,100.1	16,544.1	16,851.1	17,913.5	18,125.8
COGS	34,255.0	31,084.5	30,857.8	32,161.8	7,812.0	9,221.0	8,592.0	8,630.0	7,712.0	7,462.2	7,698.5	8,211.8	7,334.1	7,495.8	7,958.1	8,069.9
GAAP Gross Profit	43,612.0	40,621.1	38,576.6	39,053.7	12,016.0	10,507.0	9,741.0	11,348.0	9,815.3	9,708.6	10,208.9	10,888.3	9,210.0	9,355.3	9,955.4	10,055.9
Non-GAAP Gross Profit	44,823.0	42,055.3	39,965.3	40,478.0	12,305.0	10,809.0	10,051.0	11,658.0	10,165.9	10,052.0	10,567.0	11,270.3	9,540.9	9,692.3	10,313.6	10,418.4
R&D	13,556.0	13,550.0	13,750.0	13,950.0	3,275.0	3,354.0	3,272.0	3,655.0	3,350.0	3,400.0	3,400.0	3,400.0	3,425.0	3,425.0	3,450.0	3,450.0
SG&A	6,180.0	6,200.0	6,300.0	6,400.0	1,541.0	1,447.0	1,435.0	1,757.0	1,550.0	1,550.0	1,550.0	1,550.0	1,575.0	1,575.0	1,575.0	1,575.0
Other Operating Expenses	198.0	-	-	-	162.0	9.0	(25.0)	52.0	-	-	-	-	-	-	-	-
Total Operating Expenses	19,934.0	19,750.0	20,050.0	20,350.0	4,978.0	4,810.0	4,682.0	5,464.0	4,900.0	4,950.0	4,950.0	4,950.0	5,000.0	5,000.0	5,025.0	5,025.0
GAAP Operating Income	23,678.0	20,871.1	18,526.6	18,703.7	7,038.0	5,697.0	5,059.0	5,884.0	4,915.3	4,758.6	5,258.9	5,938.3	4,210.0	4,355.3	4,930.4	5,030.9
Non-GAAP Operating Income	25,087.0	22,305.3	19,915.3	20,128.0	7,539.0	6,058.0	5,396.0	6,246.0	5,265.9	5,102.0	5,617.0	6,320.3	4,540.9	4,692.3	5,288.6	5,393.4
Gains (losses) on Investments, Net	1,904.0	-	-	-	(111.0)	267.0	56.0	1,692.0	-	-	-	-	-	-	-	-
Other Non-operating Income (Loss)	(504.0)	(102.0)	(152.0)	(152.0)	(313.0)	(29.0)	(74.0)	(88.0)	12.0	(38.0)	(38.0)	(38.0)	(38.0)	(38.0)	(38.0)	(38.0)
Pre-Tax Income	25,078.0	20,769.1	18,374.6	18,551.7	6,614.0	5,935.0	5,041.0	7,488.0	4,927.3	4,720.6	5,220.9	5,900.3	4,172.0	4,317.3	4,892.4	4,992.9
Income Tax Provision	4,179.0	3,011.5	2,664.3	2,690.0	953.0	830.0	765.0	1,631.0	714.5	684.5	757.0	855.5	604.9	626.0	709.4	724.0
GAAP Net Income	20,899.0	17,757.6	15,710.3	15,861.7	5,661.0	5,105.0	4,276.0	5,857.0	4,212.8	4,036.1	4,463.8	5,044.8	3,567.1	3,691.3	4,183.0	4,268.9
Non-GAAP tax rate adjustment and other	1,364.9	1,226.2	1,187.3	1,217.8	431.2	165.3	420.2	347.2	299.7	293.6	306.2	326.6	282.9	288.2	306.3	310.0
Acquisition-related Opex (tax adjusted)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition-Related Amortization and Restructuring (tax adjusted)	166.1	-	-	-	139.8	7.7	(21.2)	40.8	-	-	-	-	-	-	-	-
Acquisition-Related Charges in GM (tax adjusted)	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-GAAP Net Income	22,430.0	18,983.8	16,897.6	17,079.5	6,232.0	5,278.0	4,675.0	6,245.0	4,512.6	4,329.8	4,770.1	5,371.4	3,850.0	3,979.4	4,489.3	4,578.9
GAAP Basic EPS (\$)	\$ 4.98	\$ 4.40	\$ 4.00	\$ 4.14	\$ 1.33	\$ 1.20	\$ 1.02	\$ 1.43	\$ 1.04	\$ 1.00	\$ 1.11	\$ 1.26	\$ 0.90	\$ 0.94	\$ 1.07	\$ 1.10
GAAP Diluted EPS (\$)	\$ 4.94	\$ 4.38	\$ 3.97	\$ 4.12	\$ 1.31	\$ 1.19	\$ 1.02	\$ 1.42	\$ 1.03	\$ 0.99	\$ 1.10	\$ 1.26	\$ 0.89	\$ 0.93	\$ 1.06	\$ 1.09
Non-GAAP Diluted EPS	\$ 5.30	\$ 4.68	\$ 4.27	\$ 4.43	\$ 1.45	\$ 1.23	\$ 1.11	\$ 1.52	\$ 1.10	\$ 1.06	\$ 1.18	\$ 1.34	\$ 0.96	\$ 1.00	\$ 1.14	\$ 1.17
Weighted Average Basic Shares	4,199	4,032	3,932	3,829	4,266	4,246	4,188	4,094	4,069	4,044	4,019	3,994	3,969	3,944	3,919	3,894
Weighted Average Diluted Shares	4,232	4,056	3,956	3,852	4,312	4,284	4,211	4,119	4,094	4,069	4,044	4,018	3,993	3,968	3,943	3,918
Margins	2020E	2021E	2022E	2023E	Q120	Q220	Q320	Q420	Q121E	Q221E	Q321E	Q421E	Q122E	Q222E	Q322E	Q422E
GAAP Gross Margin	56.0%	56.6%	55.6%	54.8%	60.6%	53.3%	53.1%	56.8%	56.0%	56.5%	57.0%	57.0%	55.7%	55.5%	55.6%	55.5%
Pro-Forma Gross Margin	57.6%	58.6%	57.6%	56.8%	62.1%	54.8%	54.8%	58.4%	58.0%	58.5%	59.0%	59.0%	57.7%	57.5%	57.6%	57.5%
R&D % of Sales	17.4%	18.9%	19.8%	19.6%	16.5%	17.0%	17.8%	18.3%	19.1%	19.8%	19.0%	17.8%	20.7%	20.3%	19.3%	19.0%
SG&A % of Sales	7.9%	8.6%	9.1%	9.0%	7.8%	7.3%	7.8%	8.8%	8.8%	9.0%	8.7%	8.1%	9.5%	9.3%	8.8%	8.7%
GAAP Operating Margin	30.4%	29.1%	26.7%	26.3%	35.5%	28.9%	27.6%	29.5%	28.0%	27.7%	29.4%	31.1%	25.4%	25.8%	27.5%	27.8%
Non-GAAP Operating Margin	32.2%	31.1%	28.7%	28.3%	38.0%	30.7%	29.4%	31.3%	30.0%	29.7%	31.4%	33.1%	27.4%	27.8%	29.5%	29.8%
GAAP Tax Rate	16.7%	14.5%	14.5%	14.5%	14.4%	14.0%	15.2%	21.8%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%
Non-GAAP Tax Rate	16.1%	14.5%	14.5%	14.5%	13.7%	13.9%	15.3%	21.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%	14.5%
GAAP Net Margin	26.8%	24.8%	22.6%	22.3%	28.6%	25.9%	23.3%	29.3%	24.0%	23.5%	24.9%	26.4%	21.6%	21.9%	23.4%	23.6%
Non-GAAP Net Margin	28.8%	26.5%	24.3%	24.0%	31.4%	26.8%	25.5%	31.3%	25.7%	25.2%	26.6%	28.1%	23.3%	23.6%	25.1%	25.3%

Source: Company reports, Bernstein estimates and analysis

EXHIBIT 3: **Bernstein INTC Balance Sheet and Cash Flow Statement**

Intel: Balance Sheet (\$ MM)																
INTC (Calendar)	2020E	2021E	2022E	2023E	Q120	Q220	Q320	Q420	Q121E	Q221E	Q321E	Q421E	Q122E	Q222E	Q322E	Q422E
Cash & Short Term Investments	8,157.0	11,995.5	14,399.9	17,601.0	12,676.0	13,527.0	6,343.0	8,157.0	8,348.7	9,012.4	10,403.7	11,995.5	12,500.6	12,860.9	13,634.5	14,399.9
Accounts Receivable	6,782.0	6,782.0	6,782.0	6,782.0	8,455.0	7,441.0	7,140.0	6,782.0	6,782.0	6,782.0	6,782.0	6,782.0	6,782.0	6,782.0	6,782.0	6,782.0
Inventories	8,427.0	8,668.0	8,787.2	9,125.4	9,246.0	8,969.0	9,273.0	8,427.0	8,568.9	8,540.1	8,382.8	8,668.0	8,312.0	8,328.6	8,488.6	8,787.2
Other Current Assets	23,883.0	23,883.0	23,883.0	23,883.0	11,124.0	14,453.0	14,029.0	23,883.0	23,883.0	23,883.0	23,883.0	23,883.0	23,883.0	23,883.0	23,883.0	23,883.0
Total Current Assets	47,249.0	51,328.5	53,852.1	57,391.3	41,501.0	44,390.0	36,785.0	47,249.0	47,582.6	48,217.4	49,451.6	51,328.5	51,477.5	51,854.5	52,788.2	53,852.1
Net PP&E	56,584.0	59,933.1	62,930.5	65,238.6	56,770.0	58,036.0	59,205.0	56,584.0	57,648.2	58,544.1	59,267.3	59,933.1	60,790.6	61,552.4	62,259.0	62,930.5
Goodwill	26,971.0	26,971.0	26,971.0	26,971.0	26,276.0	26,943.0	26,955.0	26,971.0	26,971.0	26,971.0	26,971.0	26,971.0	26,971.0	26,971.0	26,971.0	26,971.0
Other Long-Term Assets	22,287.0	22,287.0	22,287.0	22,287.0	23,163.0	23,170.0	22,316.0	22,287.0	22,287.0	22,287.0	22,287.0	22,287.0	22,287.0	22,287.0	22,287.0	22,287.0
Total Long-Term Assets	105,842.0	109,191.1	112,188.5	114,496.6	106,209.0	108,149.0	108,476.0	105,842.0	106,906.2	107,802.1	108,525.3	109,191.1	110,048.6	110,810.4	111,517.0	112,188.5
Total Assets	153,091.0	160,519.6	166,040.6	171,887.9	147,710.0	152,539.0	145,261.0	153,091.0	154,488.7	156,019.5	157,976.9	160,519.6	161,526.2	162,665.0	164,305.1	166,040.6
Accounts Payable	5,581.0	5,581.0	5,581.0	5,581.0	4,638.0	5,045.0	5,159.0	5,581.0	5,581.0	5,581.0	5,581.0	5,581.0	5,581.0	5,581.0	5,581.0	5,581.0
Short-Term Debt	2,504.0	2,504.0	2,504.0	2,504.0	3,464.0	2,254.0	504.0	2,504.0	2,504.0	2,504.0	2,504.0	2,504.0	2,504.0	2,504.0	2,504.0	2,504.0
Other Current Liabilities	16,669.0	16,669.0	16,669.0	16,669.0	15,793.0	15,182.0	16,449.0	16,669.0	16,669.0	16,669.0	16,669.0	16,669.0	16,669.0	16,669.0	16,669.0	16,669.0
Total Current Liabilities	24,754.0	24,754.0	24,754.0	24,754.0	23,895.0	22,481.0	22,112.0	24,754.0	24,754.0	24,754.0	24,754.0	24,754.0	24,754.0	24,754.0	24,754.0	24,754.0
Long-Term Debt	33,897.0	33,897.0	33,897.0	33,897.0	36,455.0	36,093.0	36,059.0	33,897.0	33,897.0	33,897.0	33,897.0	33,897.0	33,897.0	33,897.0	33,897.0	33,897.0
Other Long-Term Liabilities	13,402.0	12,727.0	12,052.0	11,377.0	11,006.0	11,955.0	12,536.0	13,402.0	13,233.3	13,064.5	12,895.8	12,727.0	12,558.3	12,389.5	12,220.8	12,052.0
Total Liabilities	72,053.0	71,378.0	70,703.0	70,028.0	71,356.0	70,529.0	70,707.0	72,053.0	71,884.3	71,715.5	71,546.8	71,378.0	71,209.3	71,040.5	70,871.8	70,703.0
Shareholders' Equity	81,038.0	89,141.6	95,337.6	101,859.9	76,354.0	82,010.0	74,554.0	81,038.0	82,604.5	84,304.0	86,430.1	89,141.6	90,316.9	91,624.5	93,433.4	95,337.6
Total Liabilities & Shareholders' Equity	153,091.0	160,519.6	166,040.6	171,887.9	147,710.0	152,539.0	145,261.0	153,091.0	154,488.7	156,019.5	157,976.9	160,519.6	161,526.2	162,665.0	164,305.1	166,040.6

Intel: Cash Flow Statement (\$MM)																
INTC (Calendar)	2020E	2021E	2022E	2023E	Q120	Q220	Q320	Q420	Q121E	Q221E	Q321E	Q421E	Q122E	Q222E	Q322E	Q422E
Net Income	20,899.0	17,757.6	15,710.3	15,861.7	5,661.0	5,105.0	4,276.0	5,857.0	4,212.8	4,036.1	4,463.8	5,044.8	3,567.1	3,691.3	4,183.0	4,268.9
Depreciation & Amortization	12,239.0	13,081.2	13,705.8	14,239.5	3,050.0	3,063.0	3,123.0	3,003.0	3,199.0	3,252.2	3,297.0	3,333.1	3,366.4	3,409.3	3,447.4	3,482.7
Other	1,845.0	924.6	1,066.6	873.7	(2,553.0)	2,989.0	780.0	629.0	151.1	327.8	446.3	(0.5)	653.2	279.3	136.3	(2.2)
Cash Flow From Operations	35,384.0	31,763.4	30,482.7	30,974.9	6,158.0	11,157.0	8,179.0	9,890.0	7,562.9	7,616.1	8,207.1	8,377.4	7,586.7	7,379.8	7,766.7	7,749.4
Capex	(14,259.0)	(14,951.3)	(15,224.1)	(15,068.6)	(3,268.0)	(3,408.0)	(3,716.0)	(3,867.0)	(3,893.4)	(3,778.3)	(3,650.5)	(3,629.2)	(3,854.2)	(3,801.3)	(3,784.1)	(3,784.5)
Other	(6,537.0)	-	-	-	(468.0)	(7,202.0)	2,950.0	(1,817.0)	-	-	-	-	-	-	-	-
Cash Flow From Investments	(20,796.0)	(14,951.3)	(15,224.1)	(15,068.6)	(3,736.0)	(10,610.0)	(766.0)	(5,684.0)	(3,893.4)	(3,778.3)	(3,650.5)	(3,629.2)	(3,854.2)	(3,801.3)	(3,784.1)	(3,784.5)
Net Stock Repurchase	(14,229.0)	(8,295.0)	(8,000.0)	(8,000.0)	(4,229.0)	-	(10,000.0)	-	(2,295.0)	(2,000.0)	(2,000.0)	(2,000.0)	(2,000.0)	(2,000.0)	(2,000.0)	(2,000.0)
Dividends	(5,568.0)	(5,678.6)	(5,854.2)	(5,705.2)	(1,408.0)	(1,403.0)	(1,404.0)	(1,353.0)	(1,432.8)	(1,424.0)	(1,415.2)	(1,406.4)	(1,477.5)	(1,468.2)	(1,458.9)	(1,449.6)
Other	6,880.0	1,000.0	1,000.0	1,000.0	10,401.0	(1,788.0)	(1,389.0)	(344.0)	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0
Cash Flow From Financing	(12,917.0)	(12,973.6)	(12,854.2)	(12,705.2)	4,764.0	(3,191.0)	(12,793.0)	(1,697.0)	(3,477.8)	(3,174.0)	(3,165.2)	(3,156.4)	(3,227.5)	(3,218.2)	(3,208.9)	(3,199.6)

INTC (Calendar)	2020E	2021E	2022E	2023E	Q120	Q220	Q320	Q420	Q121E	Q221E	Q321E	Q421E	Q122E	Q222E	Q322E	Q422E
Cash Flow from Operations	35,384.0	31,763.4	30,482.7	30,974.9	6,158.0	11,157.0	8,179.0	9,890.0	7,562.9	7,616.1	8,207.1	8,377.4	7,586.7	7,379.8	7,766.7	7,749.4
subtract Capex	(14,259.0)	(14,951.3)	(15,224.1)	(15,068.6)	(3,268.0)	(3,408.0)	(3,716.0)	(3,867.0)	(3,893.4)	(3,778.3)	(3,650.5)	(3,629.2)	(3,854.2)	(3,801.3)	(3,784.1)	(3,784.5)
FCF	21,125.0	16,812.1	15,258.5	15,906.3	2,890.0	7,749.0	4,463.0	6,023.0	3,669.5	3,837.7	4,556.6	4,748.2	3,732.5	3,578.5	3,982.5	3,965.0
Operating Income	23,678.0	20,871.1	18,526.6	18,703.7	7,539.0	6,058.0	5,396.0	6,246.0	5,265.9	5,102.0	5,617.0	6,320.3	4,540.9	4,692.3	5,288.6	5,393.4
add back D&A	12,239.0	13,081.2	13,705.8	14,239.5	3,050.0	3,063.0	3,123.0	3,003.0	3,199.0	3,252.2	3,297.0	3,333.1	3,366.4	3,409.3	3,447.4	3,482.7
EBITDA	35,917.0	33,952.3	32,232.4	32,943.2	10,589.0	9,121.0	8,519.0	9,249.0	8,464.8	8,354.2	8,914.0	9,653.5	7,907.3	8,101.6	8,736.0	8,876.1

Source: Company reports, Bernstein estimates and analysis

DISCLOSURE APPENDIX

VALUATION METHODOLOGY

U.S. Semiconductors

We value companies in our coverage using a combination of Enterprise Value to Sales, Enterprise Value to EBITDA and Price to EPS multiples.

Intel Corp

For INTC, we value the stock at ~10x our FY2022 non-GAAP EPS estimate \$4.27 yielding a target price of \$43 a share.

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U.S. Semiconductors

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Beyond the broader macro environment, several company-specific risks may influence the stocks in our coverage:

Intel Corp

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12-Month Bernstein Rating History as of 03/23/2021

Ticker Rating Changes

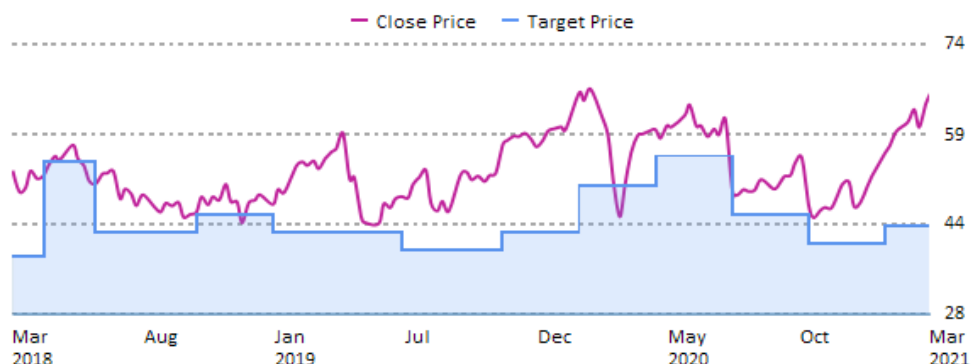
INTC U (RC) 07/24/20 M (RC) 03/26/20 U (RC) 06/26/18

Rating Guide: O - Outperform, M - Market-Perform, U - Underperform, N - Not Rated

Rating Actions: IC - Initiated Coverage, DC - Dropped Coverage, RC - Rating Change

INTC / Intel Corp (USD)

Date	Rating	Target
26-Jan-2018	U	38.00
27-Apr-2018	M	54.00
26-Jun-2018	U	42.00
26-Oct-2018	U	45.00
25-Jan-2019	U	42.00
01-Jul-2019	U	39.00
25-Oct-2019	U	42.00
24-Jan-2020	U	50.00
26-Mar-2020	M	50.00
24-Apr-2020	M	55.00
24-Jul-2020	U	45.00
23-Oct-2020	U	40.00
22-Jan-2021	U	43.00



O - Outperform

M - Market-Perform

U - Underperform

N - Not Rated

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