
Alamoudison



Valuation and Financial Analysis of Apple Inc

by

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ABSTRACT

This analysis offers a comprehensive examination of Apple Inc.'s valuation, encompassing various methodologies and financial metrics. By employing discounted cash flow (DCF) models, relative valuation techniques, and dividend discount models (DDM), alongside insights into the company's revenue forecasts, capital expenditure plans, and working capital dynamics, the study elucidates Apple's financial landscape. Noteworthy findings include diverse valuation scenarios, ranging from growth exit projections to EBITDA multiples analysis, all underpinned by meticulous forecasts and industry benchmarking. Insights into Apple's future trajectory, including its potential upside and downside risks, are underscored by detailed examinations of its earnings power, relative to industry peers and historical trends. Through this multifaceted approach, the analysis aims to provide stakeholders with a nuanced understanding of Apple's financial standing and prospects in the market.

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AAPL Apple Inc

Price: 168 USD

Volume: 48,992,690

United States | Technology Hardware, Storage & Peripherals

[Valuation Summary](#) | [Discounted Cash Flow](#) | [Trading Multiples](#) | [Peter Lynch Fair Value](#) | [Earnings Power Value](#) | [Dividend Discount Model](#) | [WACC](#)



Valuation Summary

Apple Intrinsic Value

As of 2024-04-18, the Intrinsic Value of Apple Inc (AAPL) is 176.45 USD. This Apple valuation is based on the model Discounted Cash Flows (Growth Exit 5Y). With the current market price of 168.00 USD, the upside of Apple Inc is 5%.

The range of the Intrinsic Value is 119.31 - 352.63 USD.

Intrinsic Value Valuation

Apple Intrinsic Value - Valuation Summary

	Range	Selected	Upside
DCF (Growth Exit 5Y)	119.31 - 352.63	176.45	5.0%
DCF (Growth Exit 10Y)	140.76 - 390.78	202.57	20.6%
DCF (EBITDA Exit 5Y)	142.24 - 212.99	195.55	16.4%
DCF (EBITDA Exit 10Y)	158.81 - 247.97	217.23	29.3%
Peter Lynch Fair Value	83.95 - 83.95	83.95	-50.03%
P/E Multiples	142.26 - 172.26	163.71	-2.6%
EV/EBITDA Multiples	84.93 - 165.11	136.05	-19.0%
Earnings Power Value	58.87 - 83.21	71.04	-57.7%
Dividend Discount Model - Stable	62.09 - 238.93	150.51	-10.4%
Dividend Discount Model - Multi Stages	92.77 - 278.27	139.23	-17.1%

5 % Upside
168.00 USD Stock Price
176.45 USD Intrinsic Value

Apple Intrinsic Value - Peers Comparison

	Range	Selected	Upside
Microsoft Corp	Microsoft Corp	Microsoft Corp	Microsoft Corp
277.71 - 277.71	277.71 - 277.71	277.71 - 277.71	277.71 - 277.71
277.71	277.71	277.71	277.71
-32.6%	-32.6%	-32.6%	-32.6%
Alphabet Inc	Alphabet Inc	Alphabet Inc	Alphabet Inc
142.13 - 142.13	142.13 - 142.13	142.13 - 142.13	142.13 - 142.13
142.13	142.13	142.13	142.13
-8.6%	-8.6%	-8.6%	-8.6%
Amazon.com Inc	Amazon.com Inc	Amazon.com Inc	Amazon.com Inc

Apple Intrinsic Value - Key Valuation

Market Cap (mil)	2,594,239
Beta	1.13
Outstanding shares (mil)	15,442
Enterprise Value (mil)	2,661,519

Market risk premium	5.1%
Cost of Equity	8.95%
Cost of Debt	4.3%
WACC	8.7%

Discounted Cash Flow

Apple DCF Valuation - Growth Exit 5Y

5 %
Upside

The Discounted Cash Flow (DCF) valuation of Apple Inc (AAPL) is 176.45 USD. With the latest stock price at 167.04 USD, the upside of Apple Inc based on DCF is 5.6%.

	Range	Selected	
WACC / Discount Rate	7.3% - 10.1%	8.7%	168.00 USD Stock Price
Long-term Growth Rate	3.0% - 5.0%	4.0%	
Fair Price	119.31 - 352.63	176.45	176.45 USD Fair Price
Upside	-28.6% - 111.1%	5.6%	

REVENUE & EXPENSES	CAPEX	D&A	WORKING CAPITAL	TERMINAL VALUE
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Apple DCF Valuation: Revenue & Expenses Forecast

(USD in millions)

		Projections				
	09-2023	09-2024	09-2025	09-2026	09-2027	09-2028
Revenue	383,285	391,206	414,004	436,830	454,750	470,902
<i>% Growth</i>	3%	2%	6%	6%	4%	4%
Cost of goods sold	(214,137)	(207,634)	(208,748)	(209,244)	(206,936)	(203,572)
<i>% of Revenue</i>	56%	53%	50%	48%	46%	43%
Selling, G&A expenses	(24,932)	(25,447)	(26,930)	(28,415)	(29,581)	(30,631)
<i>% of Revenue</i>	7%	7%	7%	7%	7%	7%
Research & Development	(29,915)	(30,533)	(32,313)	(34,094)	(35,493)	(36,753)
<i>% of Revenue</i>	8%	8%	8%	8%	8%	8%

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

Net interest & other expenses	(565)	(577)	(610)	(644)	(670)	(694)
<i>% of Revenue</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Tax expense	(16,741)	(18,695)	(21,402)	(24,203)	(26,799)	(29,328)
<i>Tax rate</i>	<i>15%</i>	<i>15%</i>	<i>15%</i>	<i>15%</i>	<i>15%</i>	<i>15%</i>
Net profit	96,995	108,319	124,001	140,230	155,270	169,923
<i>% Margin</i>	<i>25%</i>	<i>28%</i>	<i>30%</i>	<i>32%</i>	<i>34%</i>	<i>36%</i>

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL TERMINAL VALUE

Capital Expenditure Plan

(USD in millions)

Projections

09-2024 09-2025 09-2026 09-2027 09-2028

Capex	11,972	12,670	13,368	13,917	14,411
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% of Revenue 3% 3% 3% 3% 3%

Historical

	09-2019	09-2020	09-2021	09-2022	09-2023	5y Avg
<i>Capex</i>	10,495	7,309	11,085	10,708	10,959	10,111
<i>% of Revenue</i>	4%	3%	3%	3%	3%	3.1%

REVENUE & EXPENSES	CAPEX	D&A	WORKING CAPITAL	TERMINAL VALUE
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Depreciation & Amortization Schedule

Average useful life (years):	5				
<i>(USD in millions)</i>	Projections				
	09-2024	09-2025	09-2026	09-2027	09-2028
<i>For CAPEX in</i>					
2020	1,462				
2021	2,217	2,217			

2022	2,142	2,142	2,142		
2023	2,192	2,192	2,192	2,192	
2024	2,394	2,394	2,394	2,394	2,394
2025		2,534	2,534	2,534	2,534
2026			2,674	2,674	2,674
2027				2,783	2,783
2028					2,882
Total depreciation & amortization	10,407	11,479	11,935	12,577	13,267

REVENUE & EXPENSES CAPEX D&A **WORKING CAPITAL** TERMINAL VALUE

Change in Working Capital Forecast

(USD in millions except days)

Projections

	Historical Avg	09-2023	09-2024	09-2025	09-2026	09-2027	09-2028
Days receivables	27		27	27	27	27	27

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

Trade receivables		29,508	28,727	30,621	32,672	33,680	34,976
<i>Days payables</i>	<i>102</i>		<i>102</i>	<i>104</i>	<i>104</i>	<i>103</i>	<i>104</i>
Trade payables		(62,611)	(57,883)	(59,700)	(59,785)	(58,665)	(58,032)
<i>Days inventory</i>	<i>10</i>		<i>10</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>10</i>
Inventory		6,331	5,716	5,512	5,824	5,640	5,530
Net working capital		(26,772)	(23,440)	(23,566)	(21,288)	(19,345)	(17,526)
Change in NWC			3,332	(126)	2,278	1,944	1,819

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL **TERMINAL VALUE**

Enterprise/Equity Value Calculations

(USD in millions)

	9M/2024	2025	2026	2027	2028	Terminal
Profit before tax	95,261	145,403	164,433	182,070	199,251	181,918

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

(-) Net interest income/expense	(140)	(198)	(209)	(217)	(225)	(217)
(+) Depreciation & Amortization	7,805	11,479	11,935	12,577	13,267	12,593
EBITDA	103,206	157,080	176,577	194,864	212,743	194,728
(-) Tax	14,022	21,402	24,203	26,799	29,328	26,777
(-) Capex	8,979	12,670	13,368	13,917	14,411	13,898
(-) Change in NWC	2,499	(126)	2,278	1,944	1,819	2,013
Free Cash Flow (FCF)	77,707	123,134	136,728	152,204	167,186	152,039
Terminal value						3,358,889
WACC / Discount rate		8.7%				
Long-term growth rate		4.0%				
Timing of FCF (mid year)	0.38	1.25	2.25	3.25	4.25	4.75
Present value of FCF	75,311	110,931	113,311	116,034	117,245	2,259,240
Enterprise value		2,792,072				

Projection period	532,832	19.1%
Terminal value	2,259,240	80.9%
(-) Current net debt	67,280	
Equity value	2,724,792	
(/) Outstanding shares	15,442	
Fair price	176	

Apple DCF - Growth Exit 10Y

	Range	Selected
WACC / Discount Rate	7.3% - 10.1%	8.7%
Long-term Growth Rate	3.0% - 5.0%	4.0%
Fair Price	140.76 - 390.78	202.57
Upside	-15.7% - 133.9%	21.3%

21.3 %
Upside
168.00 USD
Stock Price
202.57 USD
Fair Price

REVENUE & EXPENSES	CAPEX	D&A	WORKING CAPITAL	TERMINAL VALUE
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Apple DCF Valuation: Revenue & Expenses Forecast*(USD in millions)***Projections**

	09-2023	09-2024	09-2025	09-2026	09-2027	09-2028	09-2029	09-2030	09-2031	09-2032	09-2033
Revenue	383,285	391,206	414,004	436,830	454,750	470,902	494,566	521,934	555,198	581,796	593,432
<i>% Growth</i>	3%	2%	6%	6%	4%	4%	5%	6%	6%	5%	2%
Cost of goods sold	(214,137)	(207,634)	(208,748)	(209,244)	(206,936)	(203,572)	(211,664)	(221,143)	(232,885)	(241,601)	(243,969)
<i>% of Revenue</i>	56%	53%	50%	48%	46%	43%	43%	42%	42%	42%	41%
Selling, G&A expenses	(24,932)	(25,447)	(26,930)	(28,415)	(29,581)	(30,631)	(32,171)	(33,951)	(36,115)	(37,845)	(38,602)
<i>% of Revenue</i>	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Research & Development	(29,915)	(30,533)	(32,313)	(34,094)	(35,493)	(36,753)	(38,600)	(40,736)	(43,333)	(45,409)	(46,317)
<i>% of Revenue</i>	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Net interest & other expenses	(565)	(577)	(610)	(644)	(670)	(694)	(729)	(769)	(818)	(858)	(875)

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

<i>% of Revenue</i>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tax expense	(16,741)	(18,695)	(21,402)	(24,203)	(26,799)	(29,328)	(31,117)	(33,167)	(35,627)	(37,693)	(38,810)
<i>Tax rate</i>	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Net profit	96,995	108,319	124,001	140,230	155,270	169,923	180,285	192,167	206,420	218,390	224,860
<i>% Margin</i>	25%	28%	30%	32%	34%	36%	36%				

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL TERMINAL VALUE

Capital Expenditure Plan

<i>(USD in millions)</i>	Projections									
	09-2024	09-2025	09-2026	09-2027	09-2028	09-2029	09-2030	09-2031	09-2032	09-2033
Capex	11,972	12,670	13,368	13,917	14,411	15,135	15,973	16,991	17,804	18,161
<i>% of Revenue</i>	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%

Historical

	09-2019	09-2020	09-2021	09-2022	09-2023	5y Avg
Capex	10,495	7,309	11,085	10,708	10,959	10,111
% of Revenue	4%	3%	3%	3%	3%	3.1%

REVENUE & EXPENSES	CAPEX	D&A	WORKING CAPITAL	TERMINAL VALUE
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Depreciation & Amortization Schedule

Average useful life (years): 5

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(USD in millions)	Projections									
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	09-2024	09-2025	09-2026	09-2027	09-2028	09-2029	09-2030	09-2031	09-2032	09-2033
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For CAPEX in										
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2020	1,462									
2021	2,217	2,217								
2022	2,142	2,142	2,142							

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

2023	2,192	2,192	2,192	2,192						
2024	2,394	2,394	2,394	2,394	2,394					
2025		2,534	2,534	2,534	2,534	2,534				
2026			2,674	2,674	2,674	2,674	2,674			
2027				2,783	2,783	2,783	2,783	2,783		
2028					2,882	2,882	2,882	2,882	2,882	
2029						3,027	3,027	3,027	3,027	3,027
2030							3,195	3,195	3,195	3,195
2031								3,398	3,398	3,398
2032									3,561	3,561
2033										3,632
Total depreciation & amortization	10,407	11,479	11,935	12,577	13,267	13,900	14,561	15,285	16,063	16,813

REVENUE & EXPENSES CAPEX D&A **WORKING CAPITAL** TERMINAL VALUE

Change in Working Capital Forecast
 (USD in millions except days)

Projections

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

	Historical Avg	09-2023	09-2024	09-2025	09-2026	09-2027	09-2028	09-2029	09-2030	09-2031	09-2032	09-2033
<i>Days receivables</i>	27		27	27	27	27	27	27	27	27	27	27
Trade receivables		29,508	28,727	30,621	32,672	33,680	34,976	36,784	38,747	41,249	43,230	44,080
<i>Days payables</i>	102		102	104	104	103	104	104	104	104	104	104
Trade payables		(62,611)	(57,883)	(59,700)	(59,785)	(58,665)	(58,032)	(60,273)	(62,902)	(66,315)	(68,772)	(69,437)
<i>Days inventory</i>	10		10	10	10	10	10	10	10	10	10	10
Inventory		6,331	5,716	5,512	5,824	5,640	5,530	5,803	6,033	6,355	6,603	6,660
Net working capital		(26,772)	(23,440)	(23,566)	(21,288)	(19,345)	(17,526)	(17,686)	(18,122)	(18,711)	(18,940)	(18,698)
Change in NWC			3,332	(126)	2,278	1,944	1,819	(160)				

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL **TERMINAL VALUE**

Enterprise/Equity Value Calculations

(USD in millions)	9M/2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal
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Valuation Summary | **Discounted Cash Flow** | Trading Multiples | Peter Lynch Fair Value | Earnings Power Value | Dividend Discount Model | WACC

Profit before tax	95,261	145,403	164,433	182,070	199,251	211,402	225,334	242,048	256,084	263,670	253,934
(-) Net interest income/expense	(140)	(198)	(209)	(217)	(225)	(236)	(249)	(265)	(278)	(283)	(275)
(+) Depreciation & Armortization	7,805	11,479	11,935	12,577	13,267	13,900	14,561	15,285	16,063	16,813	16,053
EBITDA	103,206	157,080	176,577	194,864	212,743	225,538	240,144	257,598	272,424	280,766	270,262
(-) Tax	14,022	21,402	24,203	26,799	29,328	31,117	33,167	35,627	37,693	38,810	37,377
(-) Capex	8,979	12,670	13,368	13,917	14,411	15,135	15,973	16,991	17,804	18,161	17,652
(-) Change in NWC	2,499	(126)	2,278	1,944	1,819	(160)	(436)	(589)	(229)	242	(192)
Free Cash Flow (FCF)	77,707	123,134	136,728	152,204	167,186	179,446	191,440	205,569	217,155	223,553	215,426
Terminal value											4,759,234
WACC / Discount rate	8.7%										
Long-term growth rate	4.0%										
Timing of FCF (mid year)	0.38	1.25	2.25	3.25	4.25	5.25	6.25	7.25	8.25	9.25	9.75
Present value of FCF	75,311	110,931	113,311	116,034	117,245	115,763	113,608	112,221	109,050	103,271	2,108,655

Enterprise value	3,195,401
Projection period	1,086,746 34.0%
Terminal value	2,108,655 66.0%
(-) Current net debt	67,280
Equity value	3,128,121
(/) Outstanding shares	15,442
Fair price	203

Apple DCF Valuation - EBITDA Multiples 5Y

	Range	Selected	
WACC / Discount Rate	7.3% - 10.1%	8.7%	16.8 % Upside
Peers' EV/EBITDA multiples	14.2x - 20.0x	19.4x	168.00 USD Stock Price
Fair Price	142.72 - 211.54	195.12	195.12 USD Fair Price
Upside	-14.6% - 26.6%	16.8%	

 REVENUE & EXPENSES	CAPEX	D&A	WORKING CAPITAL	MULTIPLES	TERMINAL VALUE
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Apple DCF Valuation: Revenue & Expenses Forecast*(USD in millions)***Projections**

	09-2023	09-2024	09-2025	09-2026	09-2027	09-2028
Revenue	383,285	391,206	414,004	436,830	454,750	470,902
<i>% Growth</i>	3%	2%	6%	6%	4%	4%
Cost of goods sold	(214,137)	(207,634)	(208,748)	(209,244)	(206,936)	(203,572)
<i>% of Revenue</i>	56%	53%	50%	48%	46%	43%
Selling, G&A expenses	(24,932)	(25,447)	(26,930)	(28,415)	(29,581)	(30,631)
<i>% of Revenue</i>	7%	7%	7%	7%	7%	7%
Research & Development	(29,915)	(30,533)	(32,313)	(34,094)	(35,493)	(36,753)
<i>% of Revenue</i>	8%	8%	8%	8%	8%	8%

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

Net interest & other expenses	(565)	(577)	(610)	(644)	(670)	(694)
<i>% of Revenue</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
Tax expense	(16,741)	(18,695)	(21,402)	(24,203)	(26,799)	(29,328)
<i>Tax rate</i>	<i>15%</i>	<i>15%</i>	<i>15%</i>	<i>15%</i>	<i>15%</i>	<i>15%</i>
Net profit	96,995	108,319	124,001	140,230	155,270	169,923
<i>% Margin</i>	<i>25%</i>	<i>28%</i>	<i>30%</i>	<i>32%</i>	<i>34%</i>	<i>36%</i>

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL MULTIPLES TERMINAL VALUE

Capital Expenditure Plan

(USD in millions)

Projections

	09-2024	09-2025	09-2026	09-2027	09-2028
Capex	11,972	12,670	13,368	13,917	14,411

Historical

	09-2019	09-2020	09-2021	09-2022	09-2023	5y Avg
Capex	10,495	7,309	11,085	10,708	10,959	10,111
% of Revenue	4%	3%	3%	3%	3%	3.1%

REVENUE & EXPENSES	CAPEX	D&A	WORKING CAPITAL	MULTIPLES	TERMINAL VALUE
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Depreciation & Amortization Schedule

Average useful life (years): 5

(USD in millions)	Projections				
	09-2024	09-2025	09-2026	09-2027	09-2028
<i>For CAPEX in</i>					
2020	1,462				
2021	2,217	2,217			
2022	2,142	2,142	2,142		
2023	2,192	2,192	2,192	2,192	
2024	2,394	2,394	2,394	2,394	2,394

2025		2,534	2,534	2,534	2,534
2026			2,674	2,674	2,674
2027				2,783	2,783
2028					2,882
Total depreciation & amortization	10,407	11,479	11,935	12,577	13,267

REVENUE & EXPENSES CAPEX D&A **WORKING CAPITAL** MULTIPLES TERMINAL VALUE

Change in Working Capital Forecast

(USD in millions except days)

Projections

	Historical Avg	09-2023	09-2024	09-2025	09-2026	09-2027	09-2028
<i>Days receivables</i>	27		27	27	27	27	27
Trade receivables		29,508	28,727	30,621	32,672	33,680	34,976
<i>Days payables</i>	102		102	104	104	103	104
Trade payables		(62,611)	(57,883)	(59,700)	(59,785)	(58,665)	(58,032)
<i>Days inventory</i>	10		10	10	10	10	10

Net working capital	(26,772)	(23,440)	(23,566)	(21,288)	(19,345)	(17,526)
Change in NWC		3,332	(126)	2,278	1,944	1,819

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL MULTIPLES TERMINAL VALUE

Peers' EBITDA Multiples

(USD in millions)

	Market Cap (USD mil)	Trailing EV/EBITDA	Forward EV/EBITDA
Apple Inc	2,579,415	20.4x	19.2x
Amazon.com Inc	1,861,630	21.9x	17x
Seagate Technology PLC	17,482	81.6x	45.4x
Microsoft Corp	3,003,904	26.2x	24.2x
Alphabet Inc	1,939,672	19.2x	15.4x

AAPL Apple Inc Price: 168 USD
 United States | Technology Hardware, Storage & Peripherals

Volume: 48,992,690

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

HP Inc	27,088	6.8x	8.7x
Hewlett Packard Enterprise Co	22,152	6.3x	6.5x
Dell Technologies Inc	84,491	19.7x	10.8x
Ionix Technology Inc	0	1.7x	2x
iGO Inc	9	2x	0.1x
Industry median		19.5x	13.1x

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL MULTIPLES TERMINAL VALUE

Enterprise/Equity Value Calculations

(USD in millions)

	9M/2024	2025	2026	2027	2028	Terminal
Profit before tax	95,261	145,403	164,433	182,070	199,251	181,918
(-) Net interest income/expense	(140)	(198)	(209)	(217)	(225)	(217)
(+) Depreciation & Armortization	7,805	11,479	11,935	12,577	13,267	12,593
EBITDA	103,206	157,080	176,577	194,864	212,743	194,728
(-) Tax	14,022	21,402	24,203	26,799	29,328	
(-) Capex	8,979	12,670	13,368	13,917	14,411	

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

(-) Change in NWC		2,499	(126)	2,278	1,944	1,819	
Free Cash Flow (FCF)		77,707	123,134	136,728	152,204	167,186	
Peers' EBITDA Multiples							19.4x
Terminal value							3,787,459
WACC / Discount rate	8.7%						
Timing of FCF (mid year)		0.38	1.25	2.25	3.25	4.25	4.75
Present value of FCF		75,311	110,931	113,311	116,034	117,245	2,547,502
Enterprise value	3,080,334						
Projection period	532,832	17.3%					
Terminal value	2,547,502	82.7%					
(-) Current net debt	67,280						
Equity value	3,013,054						
(/) Outstanding shares	15,442						
Fair price	195						

Apple DCF - EBITDA Multiples 10Y

	Range	Selected	
WACC / Discount Rate	7.3% - 10.1%	8.7%	29.8 % Upside
Peers' EV/EBITDA multiples	14.2x - 20.0x	19.4x	168.00 USD Stock Price
Fair Price	159.22 - 246.56	216.84	216.84 USD Fair Price
Upside	-4.7% - 47.6%	29.8%	

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL MULTIPLES TERMINAL VALUE

Apple DCF Valuation: Revenue & Expenses Forecast

(USD in millions)

Projections

	09-2023	09-2024	09-2025	09-2026	09-2027	09-2028	09-2029	09-2030	09-2031	09-2032	09-2033
Revenue	383,285	391,206	414,004	436,830	454,750	470,902	494,566	521,934	555,198	581,796	593,432
% Growth	3%	2%	6%	6%	4%	4%	5%	6%	6%	5%	2%

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

Cost of goods sold	(214,137)	(207,634)	(208,748)	(209,244)	(206,936)	(203,572)	(211,664)	(221,143)	(232,885)	(241,601)	(243,969)
<i>% of Revenue</i>	56%	53%	50%	48%	46%	43%	43%	42%	42%	42%	41%
Selling, G&A expenses	(24,932)	(25,447)	(26,930)	(28,415)	(29,581)	(30,631)	(32,171)	(33,951)	(36,115)	(37,845)	(38,602)
<i>% of Revenue</i>	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Research & Development	(29,915)	(30,533)	(32,313)	(34,094)	(35,493)	(36,753)	(38,600)	(40,736)	(43,333)	(45,409)	(46,317)
<i>% of Revenue</i>	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Net interest & other expenses	(565)	(577)	(610)	(644)	(670)	(694)	(729)	(769)	(818)	(858)	(875)
<i>% of Revenue</i>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

Tax expense (16,741)	(18,695)	(21,402)	(24,203)	(26,799)	(29,328)	(31,117)	(33,167)	(35,627)	(37,693)	(38,810)
<i>Tax rate</i>	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Net profit 96,995	108,319	124,001	140,230	155,270	169,923	180,285	192,167	206,420	218,390	224,860
<i>% Margin</i>	25%	28%	30%	32%	34%	36%	36%	37%	37%	38%

REVENUE & EXPENSES	CAPEX	D&A	WORKING CAPITAL	MULTIPLES	TERMINAL VALUE
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Capital Expenditure Plan

(USD in millions)

Projections

09-2024 09-2025 09-2026 09-2027 09-2028 09-2029 09-2030 09-2031 09-2032 09-2033

Capex	11,972	12,670	13,368	13,917	14,411	15,135	15,973	16,991	17,804	18,161
<i>% of Revenue</i>	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%

Historical

09-2019 09-2020 09-2021 09-2022 09-2023 | 5y Avg

Capex	10,495	7,309	11,085	10,708	10,959	10,111
<i>% of Revenue</i>	4%	3%	3%	3%	3%	3.1%

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL MULTIPLES TERMINAL VALUE

Depreciation & Amortization Schedule

Average useful life (years): 5

<i>(USD in millions)</i>	Projections									
	09-2024	09-2025	09-2026	09-2027	09-2028	09-2029	09-2030	09-2031	09-2032	09-2033
<i>For CAPEX in</i>										
2020	1,462									
2021	2,217	2,217								
2022	2,142	2,142	2,142							
2023	2,192	2,192	2,192	2,192						
2024	2,394	2,394	2,394	2,394	2,394					
2025		2,534	2,534	2,534	2,534	2,534				
2026			2,674	2,674	2,674	2,674	2,674			
2027				2,783	2,783	2,783	2,783	2,783		

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

2028					2,882	2,882	2,882	2,882	2,882
2029						3,027	3,027	3,027	3,027
2030							3,195	3,195	3,195
2031								3,398	3,398
2032									3,561
2033									3,632
Total depreciation & amortization		10,407	11,479	11,935	12,577	13,267	13,900	14,561	

REVENUE & EXPENSES CAPEX D&A **WORKING CAPITAL** MULTIPLES TERMINAL VALUE

Change in Working Capital Forecast

(USD in millions except days)

Projections

	Historical Avg	09-2023	09-2024	09-2025	09-2026	09-2027	09-2028	09-2029	09-2030	09-2031	09-2032	09-2033
Days receivables	27		27	27	27	27	27	27	27	27	27	27
Trade receivables		29,508	28,727	30,621	32,672	33,680	34,976	36,784	38,747	41,249	43,230	44,080

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

<i>Days payables</i>	102		102	104	104	103	104	104	104	104	104	104
Trade payables		(62,611)	(57,883)	(59,700)	(59,785)	(58,665)	(58,032)	(60,273)	(62,902)	(66,315)	(68,772)	(69,437)
<i>Days inventory</i>	10		10	10	10	10	10	10	10	10	10	10
Inventory		6,331	5,716	5,512	5,824	5,640	5,530	5,803	6,033	6,355	6,603	6,660
Net working capital		(26,772)	(23,440)	(23,566)	(21,288)	(19,345)	(17,526)	(17,686)	(18,122)	(18,711)	(18,940)	(18,698)
Change in NWC			3,332	(126)	2,278	1,944	1,819	(160)	(436)	(589)	(229)	242

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL MULTIPLES TERMINAL VALUE

Peers' EBITDA Multiples

(USD in millions)

	Market Cap (USD mil)	Trailing EV/EBITDA	Forward EV/EBITDA
Apple Inc	2,579,415	20.4x	19.2x
Amazon.com Inc	1,861,630	21.9x	17x
Seagate Technology PLC	17,482	81.6x	45.4x
Microsoft Corp	3,003,904	26.2x	24.2x
Alphabet Inc	1,939,672	19.2x	15.4x
HP Inc	27,088	6.8x	8.7x

AAPL Apple Inc Price: 168 USD
 United States | Technology Hardware, Storage & Peripherals

Volume: 48,992,690

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

Hewlett Packard Enterprise Co	22,152	6.3x	6.5x
Dell Technologies Inc	84,491	19.7x	10.8x
Ionix Technology Inc	0	1.7x	2x
iGO Inc	9	2x	0.1x
Industry median		19.5x	13.1x

REVENUE & EXPENSES CAPEX D&A WORKING CAPITAL MULTIPLES TERMINAL VALUE

Enterprise/Equity Value Calculations

<i>(USD in millions)</i>	9M/2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal
Profit before tax	95,261	145,403	164,433	182,070	199,251	211,402	225,334	242,048	256,084	263,670	253,934
(-) Net interest income/expense	(140)	(198)	(209)	(217)	(225)	(236)	(249)	(265)	(278)	(283)	(275)
(+) Depreciation & Armortization	7,805	11,479	11,935	12,577	13,267	13,900	14,561	15,285	16,063	16,813	16,053
EBITDA	103,206	157,080	176,577	194,864	212,743	225,538	240,144	257,598	272,424	280,766	270,262
(-) Tax	14,022	21,402	24,203	26,799	29,328	31,117	33,167	35,627	37,693	38,810	
(-) Capex	8,979	12,670	13,368	13,917	14,411	15,135	15,973	16,991	17,804	18,161	
(-) Change in NWC	2,499	(126)	2,278	1,944	1,819	(160)	(436)	(589)	(229)	242	
Free Cash Flow (FCF)	77,707	123,134	136,728	152,204	167,186	179,446	191,440	205,569	217,155	223,553	

Valuation Summary| **Discounted Cash Flow**| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

Peers' EBITDA Multiples												19.4x
Terminal value												5,256,604
WACC / Discount rate	8.7%											
Timing of FCF (mid year)		0.38	1.25	2.25	3.25	4.25	5.25	6.25	7.25	8.25	9.25	9.75
Present value of FCF		75,311	110,931	113,311	116,034	117,245	115,763	113,608	112,221	109,050	103,271	2,329,023
Enterprise value	3,415,769											
Projection period	1,086,746	31.8%										
Terminal value	2,329,023	68.2%										
(-) Current net debt	67,280											
Equity value	3,348,489											
(/) Outstanding shares	15,442											
Fair price	217											

Trading Multiples

P/E Multiples	EV/EBITDA Multiples		
P/E Multiples			-2.2 % Upside
	Range	Selected	
Trailing P/E multiples	24.2x - 26.3x	26x	
Forward P/E multiples	20.1x - 23.8x	22.4x	168.00 USD Stock Price
Fair Price	140.85 - 171.87	163.36	
Upside	-15.7% - 2.9%	-2.2%	163.36 USD Fair Price

Relative Valuation

Relative Valuation - Benchmarking P/E against peers

(USD in millions except Fair Price)

	Market Cap (USD mil)	Trailing P/E	Forward P/E
Apple Inc	2,579,415	25.6x	23.8x
Amazon.com Inc	1,861,630	61.2x	40.4x
NetApp Inc	20,667	22x	21x
Microsoft Corp	3,003,904	36.4x	33.2x
Alphabet Inc	1,939,672	26.3x	23.8x
HP Inc	27,088	8x	11.2x
Diebold Nixdorf Inc	1,204	0.9x	1x
Hewlett Packard Enterprise Co	22,152	11.6x	10.3x
Dell Technologies Inc	84,491	26.3x	18.7x

Super Micro Computer Inc	54,363	74.2x	54.8x
Industry median		26x	22.4x
(*) Profit after tax		100,913	108,319
Equity value		2,618,692	2,426,345
(/) Outstanding shares		15,442	15,442
Fair price		170	157

P/E Multiples **EV/EBITDA Multiples**

EV/EBITDA Multiples

	Range	Selected
Trailing EV/EBITDA multiples	14.2x - 20.0x	19.5x
Forward EV/EBITDA multiples	10.0x - 16.0x	13.1x
Fair Price	84.4 - 163.76	135.84
Upside	-49.5% - -2.0%	-18.7%

-18.7 %
Upside

168.00 USD
Stock Price

135.84 USD
Fair Price

TRADING MULTIPLES

EV/EBITDA - Benchmarking against peers

	Market Cap (USD mil)	Trailing EV/EBITDA	Forward EV/EBITDA
Apple Inc	2,579,415	20.4x	19.2x
Amazon.com Inc	1,861,630	21.9x	17x
Seagate Technology PLC	17,482	81.6x	45.4x
Microsoft Corp	3,003,904	26.2x	24.2x
Alphabet Inc	1,939,672	19.2x	15.4x
HP Inc	27,088	6.8x	8.7x
Hewlett Packard Enterprise Co	22,152	6.3x	6.5x
Dell Technologies Inc	84,491	19.7x	10.8x
Ionix Technology Inc	0	1.7x	2x
iGO Inc	9	2x	0.1x
Industry median		19.5x	13.1x
(*) EBITDA		129,935	137,608
Enterprise value		2,527,236	1,802,663
(-) Net debt		67,280	67,280
Equity value		2,459,956	1,735,383
(/) Outstanding shares		15,442	15,442
Fair price		159	112

Peter Lynch Fair Value

-49.7 %

Upside

As of 2024-04-19, the Fair Value of Apple Inc (AAPL) is 83.95 USD. This value is based on Peter Lynch's Fair Value formula. With the current market price of 167.04 USD, the upside of Apple Inc is -49.7%.

168.00 USD

Stock Price

83.95 USD

Fair Price

FAIR VALUE CALCULATION

Apple Fair Value

Peter Lynch's formula is:

Apple Fair Value = Earnings Growth Rate x TTM EPS

Apple Fair Value = 12.8 x 6.54

Apple Fair Value = 83.95

The earnings growth rate we use in the formula is the average growth rate of net income/earnings over the last 5 years. If the average growth rate is smaller than 5%, we set it to 5%. If it is larger than 25%, we set it to 25%. If the TTM EPS is negative, Peter Lynch Fair Value's result can be unreliable.

Historical Earnings

	09-2019	09-2020	09-2021	09-2022	09-2023	5Y Avg
Net income	55,256	57,411	94,680	99,803	96,995	80,829
YoY growth	-7.2%	3.9%	64.9%	5.4%	-2.8%	12.8%

Earnings Power Value

-57.5 %

Upside

	Range	Selected
WACC / Discount Rate	7.3% - 10.1%	8.7%
Normalized Earnings	98,735	98,735
Fair Price	58.87 - 83.21	71.04
Upside	-64.8% - -50.2%	-57.5%

168.00 USD

Stock Price

71.04 USD

Fair Price

REVENUE & GROSS PROFIT

Estimate Sustainable Revenue & Gross Profit

(USD in millions)

Historical

		09-2019	09-2020	09-2021	09-2022	09-2023
Revenue		260,174	274,515	365,817	394,328	383,285
Sustainable revenue	381,143					
Gross margin		38%	38%	42%	43%	44%
Sustainable gross margin	43.1%					
Sustainable gross profit	164,171					

NORMALIZED EBIT

Calculate Normalized EBIT

(USD in millions)

	Historical				
	09-2019	09-2020	09-2021	09-2022	09-2023
Sustainable gross profit	164,171				
Research & Development	16,217	18,752	21,914	26,251	29,915
Selling, G&A expense	18,245	19,916	21,973	25,094	24,932
Total operating expenses	34,462	38,668	43,887	51,345	54,847
<i>% of Revenue</i>	<i>13%</i>	<i>14%</i>	<i>12%</i>	<i>13%</i>	<i>14%</i>
(-) Maintenance operating expenses	50,026				
Normalized EBIT	114,145				
Tax rate	15%	16%	13%	14%	16%
5y Average	14.7%				
After-tax Normalized EBIT	97,344				

NORMALIZED EARNING

Deduct CAPEX and add back D&A to get Normalized Earnings

<i>(USD in millions)</i>		Historical				
		09-2019	09-2020	09-2021	09-2022	09-2023
After-tax Normalized EBIT	97,344					
Capex		10,495	7,309	11,085	10,708	10,959
Depreciation & Armortization		12,547	11,056	11,284	11,104	11,519
Difference		(2,052)	(3,747)	(199)	(396)	(560)
(-) 5y Average Difference	(1,391)					
Normalized Earnings	98,735					

VALUATION

Obtain the Final Valuation

<i>(USD in millions except Fair Price)</i>		
	Low	High
Normalized Earnings	98,735	98,735
(/) WACC	10.1%	7.3%
Enterprise Value	976,285	1,352,200
(-) Net debt	67,280	67,280
Equity Value	909,005	1,284,920
(/) Outstanding shares	15,442	15,442
Fair Price	59	83

Dividend Discount Model

Dividend Discount Model - Stable Growth

	Range	Selected
Long-term Growth Rate	3.0% - 5.0%	4.0%
Cost of equity	7.5% - 10.4%	8.9%
Fair Price	62.09 - 238.93	150.51
Upside	-62.8% - 43.0%	-9.9%

-9.9 %
Upside

168.00 USD
Stock Price

Fair Price

Fair Price Calculation

151.51 USD
Fair Price

(USD in millions except Fair Price)

	Low	High
Stable payout ratio	70%	90%
(*) TTM Profit after tax	100,913	100,913
Adjusted dividends	70,639	90,822
Cost of equity	10.4%	7.5%
Long-term growth rate	3.0%	5.0%
Equity value	958,726	3,689,584
(/) Outstanding share	15,442	15,442
Fair price	62	239

Dividend Discount Model - Multi Stage

	Range	Selected	
Long-term Growth Rate	3.0% - 5.0%	4.0%	-16.6 % Upside
Cost of equity	7.5% - 10.4%	8.9%	
Fair Price	92.77 - 278.27	139.23	168.00 USD Stock Price
Upside	-44.5% - 66.6%	-16.6%	
167.04 USD			139.23 USD Fair Price

Fair Price

Revenue & Expenses Forecast

(USD in millions)

	Projections					
	09-2023	09-2024	09-2025	09-2026	09-2027	09-2028
Revenue	383,285	391,206	414,004	436,830	454,750	470,902
% Growth	3%	2%	6%	6%	4%	4%

Valuation Summary	Discounted Cash Flow	Trading Multiples	Peter Lynch Fair Value	Earnings Power Value	Dividend Discount Model 	WACC
Cost of goods sold	(214,137)	(207,634)	(208,748)	(209,244)	(206,936)	(203,572)
<i>% of Revenue</i>	56%	53%	50%	48%	46%	43%
Selling, G&A expenses	(24,932)	(25,447)	(26,930)	(28,415)	(29,581)	(30,631)
<i>% of Revenue</i>	7%	7%	7%	7%	7%	7%
Research & Development	(29,915)	(30,533)	(32,313)	(34,094)	(35,493)	(36,753)
<i>% of Revenue</i>	8%	8%	8%	8%	8%	8%
Net interest & other expenses	(565)	(577)	(610)	(644)	(670)	(694)
<i>% of Revenue</i>	0%	0%	0%	0%	0%	0%
Tax expense	(16,741)	(18,695)	(21,402)	(24,203)	(26,799)	(29,328)
<i>Tax rate</i>	15%	15%	15%	15%	15%	15%
Net profit	96,995	108,319	124,001	140,230	155,270	169,923
<i>% Margin</i>	25%	28%	30%	32%	34%	36%

Apple WACC - Weighted Average Cost of Capital

	Range	Selected
Cost of equity	7.5% - 10.4%	8.95%
Tax rate	14.6% - 15.2%	14.9%
Cost of debt	4.0% - 4.6%	4.3%
WACC	7.3% - 10.1%	8.7%

WACC

Apple WACC calculation

Category	Low	High
Long-term bond rate	3.9%	4.4%
Equity market risk premium	4.6%	5.6%
Adjusted beta	0.78	0.98
Additional risk adjustments	0.0%	0.5%
Cost of equity	7.5%	10.4%
Tax rate	14.6%	15.2%

Debt/Equity ratio	0.04	0.04
Cost of debt	4.0%	4.6%
After-tax WACC	7.3%	10.1%
Selected WACC	8.7%	

Apple WACC - Detailed calculations of Beta

Peers	Company Name	Debt/Equity ratio	Beta	Unlevered beta
AAPL	Apple Inc	0.04	1.13	1.09
AMZN	Amazon.com Inc	0.04	1.06	1.02
MSFT	Microsoft Corp	0.02	0.95	0.94
KODK	Eastman Kodak Co	1.21	0.95	0.47
GOOGL	Alphabet Inc	0.01	1.15	1.14
HPQ	HP Inc	0.34	0.95	0.74
DBD	Diebold Nixdorf Inc	1.01	0.64	0.34

AAPL Apple Inc

Price: 168 USD

Volume: 48,992,690

United States | Technology Hardware, Storage & Peripherals

Valuation Summary| Discounted Cash Flow| Trading Multiples| Peter Lynch Fair Value| Earnings Power Value| Dividend Discount Model| WACC

DELL	Dell Technologies Inc	0.31	1.18	0.94
QMCO	Quantum Corp	1.98	1.37	0.51
IGOI	iGO Inc	0.92	0.89	0.5

Low

High

Unlevered beta	0.65	0.94
Relevered beta	0.67	0.97
Adjusted relevered beta	0.78	0.98