Monolithic Power Systems, Inc. (MPWR)

Updated May 16th, 2022 by Nikolaos Sismanis

Key Metrics

Current Price:	$421	**5 Year CAGR Estimate:**	14.1%	**Market Cap:**	$19.6 B
Fair Value Price:	$316	**5 Year Growth Estimate:**	20.0%	**Ex-Dividend Date:**	06/29/2022[1]
% Fair Value:	133%	**5 Year Valuation Multiple Estimate:**	-5.6%	**Dividend Payment Date:**	07/15/2022
Dividend Yield:	0.7%	**5 Year Price Target**	$786	**Years Of Dividend Growth:**	5
Dividend Risk Score:	C	**Retirement Suitability Score:**	F	**Rating:**	Buy

Overview & Current Events

Monolithic Power Systems is a leading semiconductor company that designs, develops, and markets high-performance power solutions. The company utilizes its deep system-level and applications expertise to develop highly integrated monolithic systems used in computing and storage, automotive, industrial, communications, and consumer applications industries. Its mission is to reduce total energy consumption in its customers' systems with green, practical, and compact solutions. Monolithic Power generates around $1.2 billion in annual revenues and is headquartered in Kirkland, Washington.

On May 2nd, 2022, Monolithic Power reported its Q1-2022 results for the period ending March 31st, 2022. For the quarter, revenues grew by 48.4% year-over-year to $377.71 million, once again powered by Monolithic's diversified growth strategy, technological innovation, investment in production capacity, and, importantly, broad-based market share gains. Notably, Storage and Computing revenues grew by 88.1% to $96.5 million, while Enterprise Data revenues jumped to $42.5 million, a gain of 163% versus the prior-year period. As a result of excellent market dynamics, Monolithic expects Q2 revenues in the range of $420 million to $440 million, suggesting year-over-year growth of 46.6% at the midpoint of this outlook.

Following strong top-line growth, adjusted EPS skyrocketed by 66.6% to $2.55. Based on management's Q2 guidance, the current market fundamentals, and Monolithic's revenue growth and net income margin expansion trajectories, we have raised our FY2022 adjusted EPS forecast. We now expect FY2022 adjusted EPS of $11.70, up from $8.56 previously. Keep in mind that adjusted EPS is a more meaningful valuation and performance metric than GAAP EPS due to Monolithic's high stock-based compensation expenses. However, all data shown in the table below reflects normalized results as originally reported in the company's 10K with the SEC.

Growth on a Per-Share Basis

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2027
EPS	$0.45	$0.61	$0.92	$0.89	$1.30	$1.58	$2.49	$2.52	$3.67	$5.28	***$11.70***	***$29.11***
DPS	$1.00	---	$0.45	$0.80	$0.80	$0.80	$1.20	$1.60	$2.00	$2.40	***$3.00***	***$7.46***
Shares[2]	34.9	37.4	38.7	39.5	40.4	41.4	42.2	43.2	44.8	45.8	***65.2***	***60.0***

Monolith's EPS has been growing rapidly over the past decade on the back of increasing demand for efficient analog semiconductor solutions. Specifically, the company features a 10-year and 5-year EPS CAGR of 31.5% and 49.2%, respectively. Despite Monolithic's prolonged success, EPS has accelerated over the past few years, as was also the case in its most recent results. This is primarily due to the company's new cutting-edge products, which the market has welcomed with very strong demand. We anticipate EPS growth of around 20% in the medium-term, implying a significant deceleration from its current levels. This is to account for potential demand and production headwinds going forward. The ongoing supply crisis combined with a global shortage in the semiconductor industry should also ensure the company retains solid pricing leverage in the short to medium-term, which should further contribute to EPS growth.

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[1] Estimated dates based on past dividend dates

[2] Share count is in millions.

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In 2014, Monolithic initiated its quarterly dividend, which has grown with each new EPS plateau following higher profitability. We expect DPS growth of around 20% in the medium-term, lower than the latest dividend hike of 25%, to be prudent. We assume that the company will retain a healthy payout ratio moving forward.

Valuation Analysis

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Now	2027
Avg. P/E	43.9	39.5	46.0	56.2	50.0	58.2	52.6	57.5	72.8	85.2	***36.0***	***27.0***
Avg. Yld.	---	---	1.1%	1.6%	1.2%	0.9%	0.9%	1.1%	0.7%	0.5%	***0.7%***	***0.9%***

Monolithic's historical P/E has averaged around 56 due to the company's constant rapid expansion. While we believe that the ongoing multiple expansion is not unreasonable based on Monolithic's accelerated growth and profitability prospects, we are setting a medium-term fair multiple at 27. This is to account for potential headwinds caused by the cyclical nature of the semiconductor industry and the possibility for a slowdown in growth. Due to its rich valuation multiple, Monolithic's dividend payments have historically resulted in very low yields. Despite the likely rapid dividend growth, we expect dividends to remain a token of the total returns.

Safety, Quality, Competitive Advantage, & Recession Resiliency

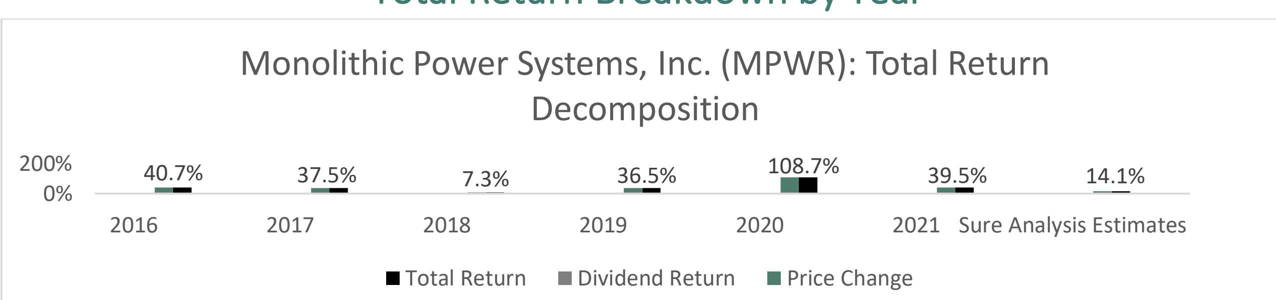
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2027
Payout	---	---	49%	90%	62%	51%	48%	63%	54%	45%	***26%***	***26%***

We consider Monolithic's dividend very safe, not only due to the stock's healthy payout ratio, which currently stands at around 26% of its adjusted EPS, but also due to the sky-high profitability growth expectations. The company also enjoys several qualities, including excellent margins, no long-term debt on its balance sheet, and continually strong R&D spending, which should help it stay above its competitors. That being said, the analog and mixed-signal semiconductor industry is highly competitive and will most certainly remain so. The company's primary competitors include industry giants such as Analog Devices, Infineon Technologies, Maxim Integrated Products, and NXP Semiconductors, which could easily gain market share if Monolithic doesn't remain constantly innovative. On the positive side, the company has displayed fantastic recession resiliency qualities, despite the cyclical nature of semiconductors due to its mission-critical products. Revenues remained robust during the Great Financial Crisis and even accelerated through the COVID-19 pandemic.

Final Thoughts & Recommendation

Monolithic Power Systems has rewarded its shareholders with fabulous returns over the past decade, powered by spectacular top- and bottom-line growth. Instead of maturing, the company has seen accelerated growth. While Monolithic's strong growth performance is likely to persist, challenging valuation headwinds could shorten annualized returns to 14.1% through 2027, which we feel is a satisfactory level nonetheless. We rate Monolithic Power Systems a buy, though note that fluxes in its growth rates can wildly swing total returns either way.

Total Return Breakdown by Year



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Disclosure: This analyst has no position in the security discussed in this research report, and no plans to initiate one in the next 72 hours.

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Income Statement Metrics

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue	214	238	283	333	389	471	582	628	844	1,208
Gross Profit	113	128	153	180	211	258	323	346	466	685
Gross Margin	52.9%	53.7%	54.0%	54.1%	54.3%	54.8%	55.4%	55.2%	55.2%	56.7%
SG&A Exp.	50	55	67	72	83	97	114	134	162	226
D&A Exp.	9	12	13	14	15	16	12	15	19	29
Operating Profit	14	24	27	42	54	79	115	105	167	269
Operating Margin	6.7%	9.9%	9.7%	12.6%	13.9%	16.7%	19.8%	16.7%	19.7%	22.3%
Net Profit	16	23	35	35	53	65	105	109	164	242
Net Margin	7.4%	9.6%	12.6%	10.6%	13.6%	13.8%	18.1%	17.3%	19.5%	20.0%
Free Cash Flow	4	45	65	54	71	68	119	120	212	225
Income Tax	2	1	1	7	5	18	13	4	5	30

Balance Sheet Metrics

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Assets	287	369	399	431	511	653	793	956	1,208	1,589
Cash & Equivalents	75	101	126	91	113	83	173	173	335	189
Accounts Receivable	19	24	26	31	34	38	55	53	67	105
Inventories	32	40	41	63	71	99	136	128	157	259
Goodwill & Int. Ass.		-	13	12	10	8	7	7	7	6.6
Total Liabilities	29	46	53	63	80	131	153	183	242	342
Accounts Payable	10	11	13	13	17	23	23	27	38	83
Long-Term Debt	-	-	-	-	-	-	-	-	-	-
Shareholder's Equity	258	323	346	369	431	522	640	773	967	1,244
LTD/E Ratio	-	-	-	-	-	-	-	-	-	-

Profitability & Per Share Metrics

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Return on Assets	5.6%	7.0%	9.2%	8.5%	11.2%	11.2%	14.6%	12.4%	15.2%	17.3%
Return on Equity	6.3%	7.9%	10.6%	9.8%	13.2%	13.7%	18.1%	15.4%	18.9%	21.9%
ROIC	6.3%	7.9%	10.6%	9.8%	13.2%	13.7%	18.1%	15.4%	18.9%	21.9%
Shares Out.	34.9	37.4	38.7	39.5	40.4	41.4	42.2	43.2	44.8	47.9
Revenue/Share	5.90	6.17	7.10	8.15	9.27	10.81	13.06	13.72	17.96	25.22
FCF/Share	0.11	1.16	1.62	1.31	1.69	1.56	2.67	2.61	4.51	4.69

Note: All figures in millions of U.S. Dollars unless per share or indicated otherwise.