

## Mercury Systems (NASDAQ:MRCY)

### Rapid Expansion into Adjacent Tech, Margin and Backlog Growth

☑ Stock Rating	○ Industry View	○ Price Target
BUY	Attractive	\$98.22

I propose a long position in Mercury Systems (MRCY) with a BUY at market price and a \$98 one-year target price. I was able to achieve this target price by using a weighted average pricing model with DCF (60%), P/BV and P/E (20% each).

#### MRCY continues to expand and tread on the edge of new technology

MRCY is a leading commercial provider of sensor and safety-critical mission processing subsystems. Their innovating next-generation defense electronics business model propels growth that leads in their industry, researching and developing emerging tech while delivering it to customers with an affordable pricing system.

Recommendation: BUY

Current Px: \$72.51

IV: \$89.33

1-Year Target Px: \$98.22

52 week H/L: \$89.44/\$41.16

SI: 3.63% (3.36 days to cover)



35.7% Upside

#### Industry Analysis:

The aerospace and defense electronics market expects continued growth in 2019 and thereafter. According to Renaissance Strategic Advisors (RSA), the market is estimated to be valued at \$125B in 2019, growing to \$151B by 2023. The US market is estimated to be approximately \$69B and \$85B of the two-year's totals, respectively. The A&D electronics marketplace consists of two predominant sub-segments: (i) C4I and (ii) sensor and effector mission systems.

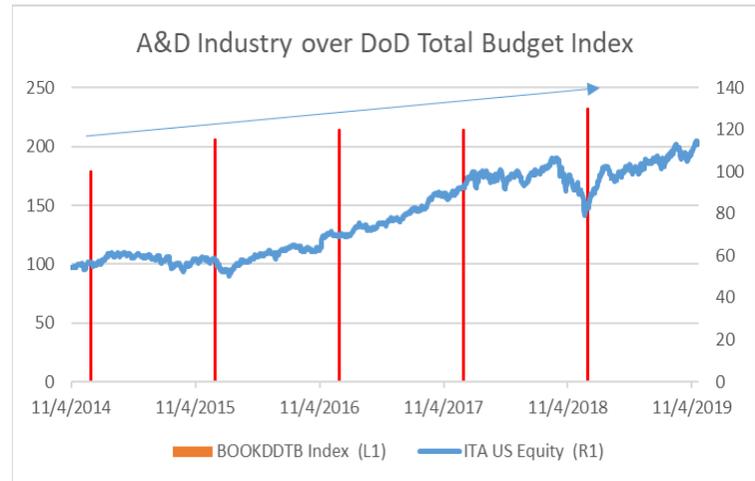
C4I encompasses platform and mission management, which includes command and control and intelligence, and dedicated communications processing. Sensor and effector mission systems are primarily different types of modalities including EW, radar, and acoustic as well as weapons like missiles and munitions. Within the tier 2 C4I market in which MRCY participates, RSA estimates the market (and CAGR from 2018-2023) for 2019 to be \$6.7B (6.5%) for platform and mission management, \$8.1B (6.2%) for C2I, and \$8.2B (5.8) for dedicated communications.



Within the tier 2 sensor and effector mission systems market in which MRCY participates, RSA estimates the market (and CAGR from 2018-2023) for 2019 \$4.5B (5.2%) for EW, \$5.1B (6.5%) for EO/IR, \$1.2B (6.5%) for acoustics, and \$3.1B (8.1%) for weapons systems.

MRCY believes that the Department of Defense have a high priority on the subject matters of C4I, EW, guided missiles and precision munitions, and ballistic missile defense market segments. They continue to build on their strengths and improve technological advances within those segments, providing performance optimized electronic subsystems for these markets. In addition, they focus on teaming up with multiple defense prime contractors as they bid on these projects for the DoD, which allows MRCY an increasing probability for an outcome of success. Their guidance for indicates above industry-average growth.

The American A&D industry’s exports accounted for approximately \$151B or 9% of all net exports in 2018. As mentioned above, RSA indicates that the industry is poised for steady growth in the short-term future. Changes in international trade agreements would be likely to increase costs and disrupt supply chain management for many firms in the industry, but the growing geopolitical tensions and increased spending in defense and military equipment across the globe mitigate this.



- DoD total budget index is highly correlated with the A&D index.
- As the total budget increases year over year, the A&D index follows suit.
- With the small increase from FY18 to FY19, there was a drop in the A&D index that can be attributed to the lackluster increase in funding, compared to FY17 to FY18.

Figure 1. Department of Defense Budget

<i>\$ in billions</i>	FY 2017 Actuals	FY 2018 Actuals	FY 2019 Enacted	FY 2020 Request
Base	523.5	599.6	616.1	544.5
Overseas Contingency Operations	82.5	65.2	68.8	66.7
OCO for Base	--	--	--	97.9
Emergency	--	5.8	--	9.2
<b>Total</b>	<b>606.0</b>	<b>670.6</b>	<b>685.0</b>	<b>718.3</b>

**Catalysts:**

**In-House M&A driving organic growth**

One main growth driver for the firm stems from their in-house mergers and acquisitions platform. They have low leverage risk, despite how aggressive their acquisition strategy is. They finance all of their M&A through the issuance of common shares, utilizing their LOC facility, which extends up to \$750MM, and on-hand cash. They have significant in-house origination, execution and integration capabilities, and implement standard operating procedures when integrating new firms into their business. They supplement organic growth with the M&A activity, and continue to show positive YoY growth in organic revenues, with a 17% increase from Q1 FY19 to Q1 FY20, as shown below.

(In thousands)	Q1 FY19	Q1 FY20	LTM Q1 FY19	LTM Q1 FY20
Organic revenue <sup>(1)</sup>	\$ 135,062	\$ 158,053	\$ 522,177	\$ 622,087
Acquired revenue	8,994	19,251	8,994	65,905
<b>Net revenues</b>	<b>\$ 144,056</b>	<b>\$177,304</b>	<b>\$ 531,171</b>	<b>\$ 687,992</b>

**Notable expansion into secure and safety-critical subsystems**

Another catalyst consists of the new opportunities within weapons systems, space, avionics processing, mission computing, and secure, rugged, embedded and rackmount servers. In January 2019, MRCY acquired GECO Avionics, LLC. GECO specializes in hardware solutions for mission processors, displays, avionics software, and their technology is deployed on numerous military platforms such as the AH-64 Apache attack helicopter and the KC-46A tanker, among others.

This expansion complements previous acquisitions by MRCY and positions them as a leading provider of secure and safety-critical process subsystems for their customers. This acquisition also allows for enhanced market penetration in commercial platform management, C4I and mission computing markets that closely align with their existing market focus.



GECO was a suitable fit for MRCY because they complement MRCY's hardware and software solutions. This is notable because it demonstrates MRCY's strategy of merging with adjacent technologies, therefore staying on the edge of industry technological advances.

### MRCY's largest growth opportunity

The U.S. Government is intensely focused on making systems more affordable and shortening their development time. This affordability is most likely going to take shape in outsourcing. In addition, the US government is challenging defense prime contractors to leverage commercial technology wherever possible.

This trend will most likely turn many of the contractors toward Mercury because of the leading-edge technology that they offer. As a company that provides commercial items to the defense industry, they are poised to benefit immensely from this shift and intensification of focus. The timing for this push from the DoD is perfect, because over the past five years MRCY has transformed its business model to address these long-term outsourcing trends and other needs.

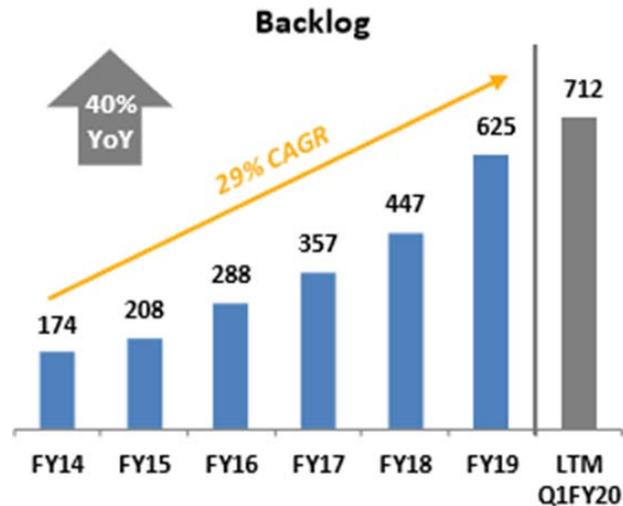
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### Key Operational Drivers:

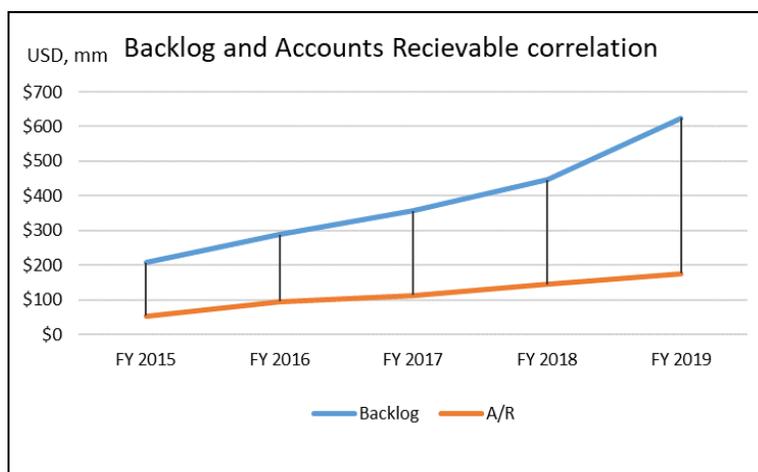
#### Backlog:

Company backlog has been growing at a CAGR of 29% YoY from FY14 to FY19 with LTM Q1FY20 numbers reaching \$712MM, as illustrated below. This indicated that the demand for their products is growing steadily year over year. Backlog expected to ship within the next 12 months increased 32% from Q1 last year to \$499MM, currently.

As of 6/30/19, MRCY had a backlog of orders aggregating approximately \$625MM, of which \$451MM is expected to be delivered within the following 12 months. They include accumulated backlogged customer orders for products and services for which they have accepted signed purchase orders as long as they are expected to ship within the next 24 months. They do have a policy in which customers incur penalty fees for cancellation of orders.



Backlog to accounts receivable correlation is illustrated below. As the backlog increases year over year, the accounts receivable growth also is present. In addition, as shown in the data table, the unearned revenues do not have a positive nor negative correlation with the accounts receivable or backlog growth, but this is not deemed as negative for MRCY.



Fiscal Year	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Backlog	\$208	\$288	\$357	\$447	\$625
A/R	\$54	\$96	\$114	\$144	\$176
Unearned Revenues	\$9	\$8	\$6	\$13	\$11

## Operational Analysis:

### **Revenues:**

Total revenues increased by 33% year over year from FY2018. This includes net revenue from acquired business that have been a part of MRCY for at least four quarters or less. This inflation is mitigated by over \$108M in organic revenues attained this past fiscal year. This revenue is attributed to the increases in their F-35 and UAV predator programs. They were offset slightly by decreases in revenues from some other, underperforming programs. The good part about the company is that it has over three hundred current programs, none particularly taking up over ten percent of the business.

### **Gross Margin:**

Decreased 210 basis points from the previous FY. The decrease is mitigated by the expected growth in margins contributed from the acquisitions of Athena and Syntonic during the fourth quarter of this past fiscal year.

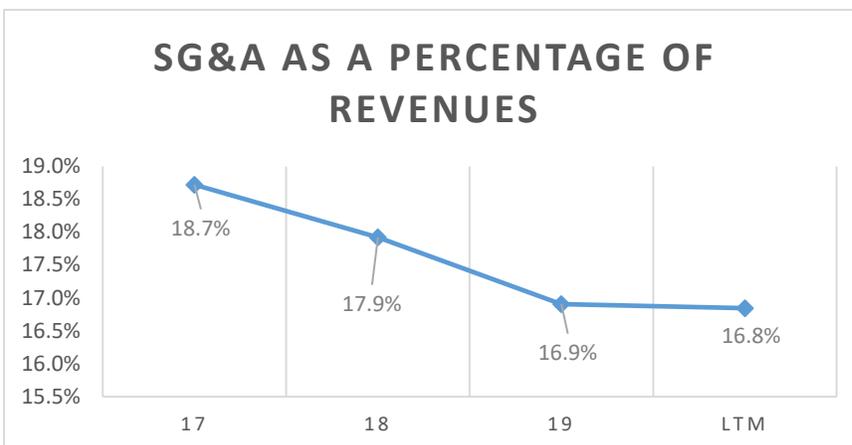
### **SG&A:**

Increased by 25% due to the high compensation related costs and headcount increases from this FY, and the full year impact of the Themis acquisition. This is mitigated by the SG&A decreasing as a percentage of revenue year over year from FY18, as illustrated on the next page.

\*Please see consolidated financial statement on the following page for reference to these numbers.

### Interest Expense:

Increased from the prior FY due to the utilization of their LOC during a recent acquisition, which was paid down during Q4 of FY19. This is encouraging to see from the firm because it demonstrates their ability to leverage themselves while still maintaining a healthy way to service their debt.



(In thousands)	Fiscal 2019	As a % of Total Net Revenue	Fiscal 2018	As a % of Total Net Revenue
Net revenues	\$ 654,744	100.0%	\$ 493,184	100.0%
Cost of revenues	368,588	56.3	267,326	54.2
Gross margin	286,156	43.7	225,858	45.8
Operating expenses:				
Selling, general and administrative	110,717	16.9	88,365	17.9
Research and development	68,925	10.5	58,807	11.9
Amortization of intangible assets	27,914	4.3	26,004	5.3
Restructuring and other charges	560	0.1	3,159	0.7
Acquisition costs and other related expenses	1,456	0.2	2,538	0.5
Total operating expenses	209,572	32.0	178,873	36.3
Income from operations	76,584	11.7	46,985	9.5
Interest income	932	0.1	32	—
Interest expense	(9,109)	(1.4)	(2,850)	(0.6)
Other expense, net	(8,880)	(1.3)	(1,594)	(0.3)
Income before income taxes	59,527	9.1	42,573	8.6
Tax provision	12,752	2.0	1,690	0.3
Net income	\$ 46,775	7.1%	\$ 40,883	8.3%

### Acquisition Strategy:

MRCY integrates common practice throughout all of their M&A activities. They use a mix of debt, equity, and cash to finance all of their transactions. The firm is currently building cash deposits, which provokes speculation that they could be eyeing another acquisition target, whether it be for expanding further into adjacent technologies in AI, subsystem processing, or modular enhancements for current programs they are facilitating.

**Syntonic** – A leading provider of advanced synthesizers, wideband phase coherent tuners and microwave converters optimized for signals intelligence and electronic intelligence applications demanding high frequency coverage.

**APC** – APC complements their product line by providing very advanced, ruggedized displays for the military aerospace, ground vehicle and commercial aerospace markets.

**Athena** – A leading provider of cryptographic and countermeasure IP vital to securing defense computing systems.

**GECO Avionics** – In January 2019, MRCY acquired GECO. Based in Mesa, Arizona, GECO has over twenty years of experience designing and manufacturing affordable safety-critical avionics and mission computing solutions.

**Germane** -- In July 2018; Germane is a leading provider of rugged servers for C2I applications The acquisition of Germane provided an east coast presence for MRCY's rugged server platform and added important new submarine and airborne programs.

The logo for Syntonic, featuring the word "syntonic" in a blue, lowercase, sans-serif font. The letter "o" is stylized with a white circle inside it.The logo for GECO, featuring the word "GECO" in a bold, green, sans-serif font. The letter "G" is stylized with a white outline.The logo for Germane Systems, featuring the word "GERMANE" in a bold, black, sans-serif font, with "SYSTEMS™" in a smaller, blue, sans-serif font below it. The logo is accented with three blue curved lines above the text.

### **Competitive Strengths:**

#### Subsystem Solutions Provider:

Through their commercially developed subsystem solutions, MRCY is able to process massive streams of data and dramatically shorten time that it takes to give U.S. armed forces a tactical combative edge.

#### Diverse mix of Growth Programs:

MRCY currently has more than 300 programs and over 25 defense prime contractors. Serving high-priority markets for the DoD such as Predator & Reaper UAV, and ballistic missiles, they are an integral part of the program.

#### Made in the U.S.A:

Simply put, one of the most highly marketable aspects of MRCY is that they provide sustainable and domestic technology through a trusted, U.S. based supply chain.

## Company Overview:

KEY FINANCIALS	
Market Cap (\$USD)	4.01bn
Enterprise Value (\$USD)	3.94bn
Revenue (LTM)	688M
EBIDTA (Adj.) (LTM)	139M
Price/Earnings	64.80
Stock Price (\$USD)	72.91



### CORE MANAGEMENT

**Mark Aslett (President & CEO)**  
Brings in-depth experience that spans the technology industry, across a variety of markets that include telecommunications, data networking, security, defense, and life sciences.



**Michael Ruppert (EVP, CFO)**  
He brings a wealth of investment banking experience spanning mergers and acquisitions and capital formation, as well as transaction execution for a wide range of companies in the aerospace and defense markets.



### Diversified Product Mix:

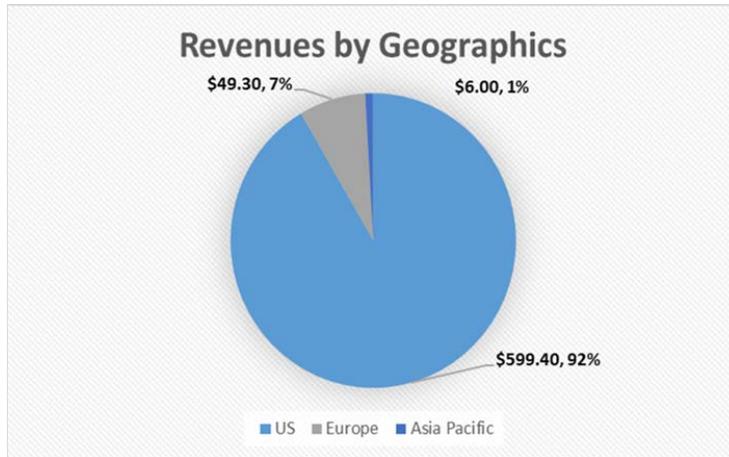
MRCY has a diverse mix of stable and growth programs, and ones that are specifically aligned with DoD finding priorities.

They have differentiated secure sensor and safety-critical processing solutions that offer meaningful capabilities upgrades for their customers and enable the rapid, cost-effective deployment of the subsystems that the end customer values highly.

### NET REVENUE, BY PRODUCT GROUPING

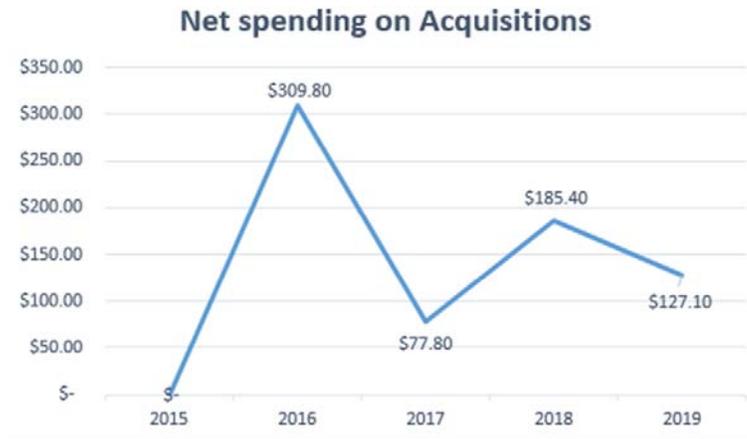


They have established long-standing relationships with defense prime contractors, like the U.S. government and other key organizations in the defense industry, spanning multiple governments and continents.

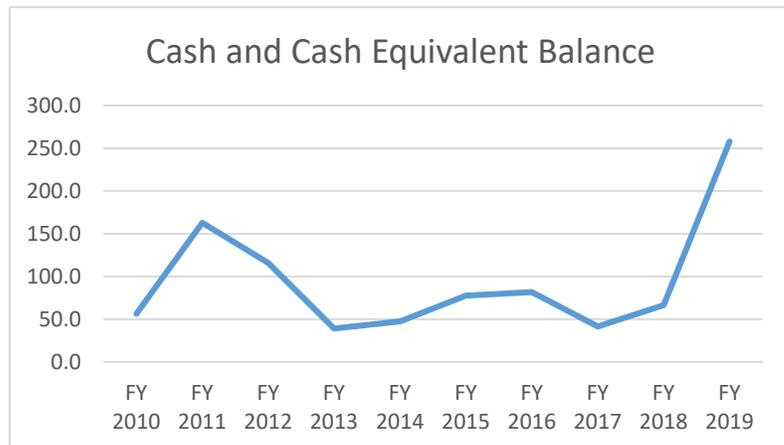


**Cash Flow Statement:**

Net spending on acquisitions has ranged between approximately \$80MM and \$310MM from FY15 to present, accompanied with issuances of shares of common stock and borrowing on their revolving line of credit.



MRCY has been building their cash reserves over the last few fiscal years, with FY19 cash and cash equivalents reaching \$258MM, up from \$67MM at FY18.



	2015	2016	2017	2018	2019
Net Income	\$ 10.40	\$ 19.70	\$ 24.90	\$ 40.90	\$ 46.80
Cash from Operating Activities	\$ 32.20	\$ 36.90	\$ 59.10	\$ 43.30	\$ 97.50
Cash from Investing Activities	\$ (5.60)	\$ (318.20)	\$ (111.10)	\$ (200.90)	\$ (153.80)
Cash from Financing Activities	\$ 3.90	\$ 284.90	\$ 11.30	\$ 182.90	\$ 247.80
Net Changes in Cash	\$ 30.30	\$ 4.10	\$ (40.10)	\$ 24.90	\$ 191.40

The changes in cash correlate directly with the amount of net spending on acquisitions, which demonstrates how they are able to maintain a low debt-to-equity ratio as a firm. This is valuable to investors because by keeping this low, utilizing their revolving line of credit, and issuing shares of common stock, they maintain a stable capital structure, which is highlighted below.

Capital Structure	FY 2015 6/30/2015		FY 2016 6/30/2016		FY 2017 6/30/2017		FY 2018 6/30/2018		FY 2019 6/30/2019	
	Millions	% of Total								
Hist Market Cap	476.8	100.0%	961.5	83.3%	1,948.9	100.0%	1,785.9	90.2%	3,816.3	100.0%
ST Borrowings	0.0	0.0%	10.0	0.9%	0.0	0.0%	0.0	0.0%	0.0	0.0%
LT Borrowings	0.0	0.0%	182.3	15.8%	0.0	0.0%	195.0	9.8%	0.0	0.0%
Pref Equity	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Total Capital	476.8	100.0%	1,153.7	100.0%	1,948.9	100.0%	1,980.9	100.0%	3,816.3	100.0%

### Valuation Summary:

I decided to use a weighted valuation mix of DCF (60%), P/BV (20%), and P/E (20%) in order to reach my IV of \$89 and my 1-year target price of \$98. I simulated three different cases, a bear, likely, and bull case where I changed assumptions by 300 bps. I changed; Revenue growth, Capex/Rev, Depr, Capex, EBITDA margins, and continuing period estimates. I found the one-year return range between 20% to 40% from worst to best cases, as shown to the side.

	Bear	Base	Bull
	\$91.73	\$98.22	\$101.67
	26.5%	35.7%	+40.3%
	• Decreased assumption values by 300bps	• Current case	• Increased assumption values by 300bps



**Conclusion:**

Overall, this is a growth stock that stands on the figurative cutting-edge of technological advances. The in-house M&A coupled with the current industry climate and the DoD push for affordable and secure technology puts Mercury Systems in the correct spot for exposure to increasing organic revenues and wider margins for a high upside potential.



**Sources:**

**Mercury Systems Investor Relations:**

- 10K
- Earnings Call Report Nov 19
- Press Releases

**Bloomberg**

- Charting data, all hard-coded into excel
- Bloomberg Exported Excel information for MRCY
- Bloomberg Financial Analysis and in-depth breakdown software

**Capital IQ**

- Basic Key Stats information
- Exports used in Excel hard coding

**Aerospace and Defense Information**

- US Department of Defense Budget
  - Various websites including DoD
-