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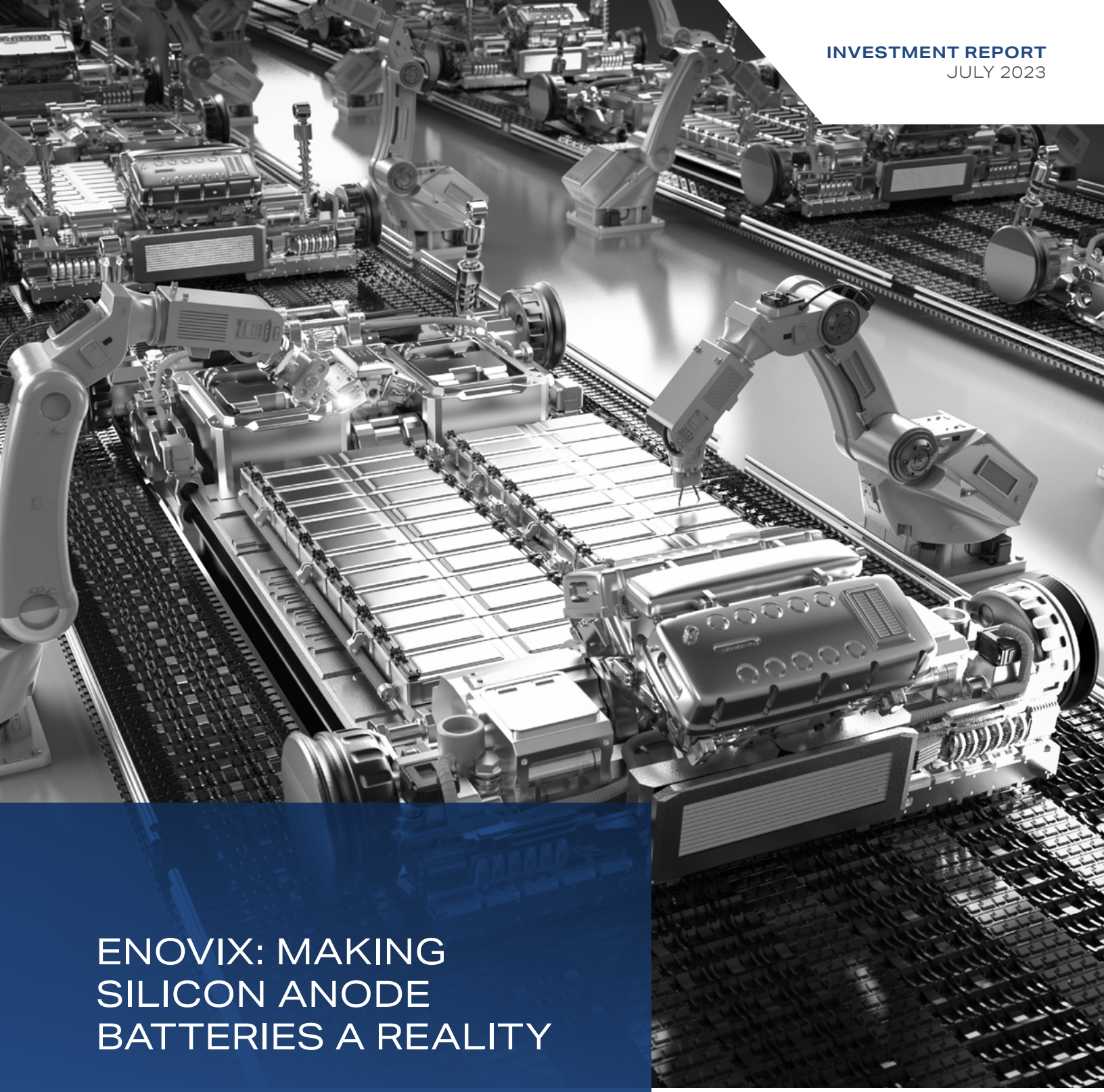

ENOVIX: MAKING SILICON ANODE BATTERIES A REALITY

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Elevator Pitch

The disparity in improvement rates between chips and batteries has forced the consumer devices industry to compromise the usable feature sets and the operating time between battery charges.

Enovix (ENVX) is a battery manufacturer well-positioned to capture market share in the consumer electronics niche and perhaps in EVs in the future. Within the consumer market space, one of the emerging issues is that cell phones, smart-watches, and other Internet of Things (IoT) technologies are limited by the energy batteries are capable of storing. While processing power has grown according to Moore's law, the same cannot be said of battery energy density, which has grown 4.3% per annum.[1] The disparity in improvement rates between chips and batteries has forced the consumer devices industry to compromise the usable feature sets and the operating time between battery charges.

On the feature front, it is not just additional processing power associated with increased chip processing power and native data processing, all of which will increase with the spread of AI (even if most AI processing is done in the cloud)[2], but also hardware that compromises device energy usage. Hardware can be particularly taxing on batteries, especially always-on-hardware associated with various health features (heart rate monitors, glucose monitors, etc.). Since the advent of the smart-phone, the following hardware-based features have been added to phones: accel-erometers, gyroscopes, magnetometers, GPS, biometric sensors, and various laser/light-based radar and measurement sensors. This represents just a partial list. Perhaps the most significant overlooked feature impacting battery life is 5G, which one industry insider called a "Battery Vampire."[3]

Enovix can address the disparity between improved processing power/feature power demand and battery energy via the firm's patented[4] 100% silicon anode battery with unique internal architecture, superior volumetric energy density (as much as 30% more energy) relative to traditional lithium-ion (Li-Ion) batteries, and unique safety features that can prevent thermal runaway. If traditional Li-Ion battery manufac-turers continue to increase energy density at the historical rate, the energy density of current Enovix batteries will not be matched for five years or more—a signif-icant head start. The superior volumetric energy density of Enovix batteries means the firm can charge a higher average selling price (ASP) than peers yielding superior margins. Finally, Enovix has a commercialized product[5], potentially years ahead of competitors attempting to develop similar silicon-based batteries.

While scaling production to meet demand represents a real and present challenge, we believe the management team is the right team to surmount these hurdles. Supply chain constraints could also pose a challenge in scaling operations, but supply

1 Based on a commercially available cylindrical lithium-ion batteries cells 1992-2015 and pouch cells for smartphones from 2015 to 2021. Source: Enovix 3/3/2022 Company Presentation.
2 AI processing occurs in the cloud, but apps that require large amounts of data transfer, including data transfer between sensors and memory in the phone or between the phone and the cloud, require more energy.
3 "5G's Waverform is a Battery Vampire" https://spectrum.ieee.org/5gs-waveform-is-a-battery-vampire
4 The technology in Enovix batteries involves more than 100 patented technologies and more than 100 technologies that are currently patent pending. Source: Enovix 3/3/2022 Company Presentation
5 Enovix batteries are already in five different products: Garmin Fenix 6x, Snap Spectacle, certain Motorola Radios, Motorola Razr Phone and the Dell XPS 13.

Enovix is a rare, innovative, and value-added technology that is commercially viable and well-positioned to capture significant market share within a high-margin niche of the battery industry.

chain logistics concerns are largely present throughout the industry and are not particular to Enovix. The lack of a clear plan to enter the EV battery sector represents a potential negative sentiment factor, but we view this issue as a limited and temporal price risk, not a value risk. Our valuation does not include any potential upside from the firm moving into EV batteries, despite the firm's intention to do so. In short, Enovix is a rare, innovative, and value-added technology that is commercially viable and well-positioned to capture significant market share within a high-margin niche of the battery industry.

We estimate that, at this writing (July 20, 2023), with modest growth plans, the firm is worth $30 a share, an expected return from the current price of roughly 50%. We believe there is significant opportunity for Enovix's share price to move higher as firm growth plans evolve.

Nature of Mispricing

We believe four factors have led to the current mispricing of Enovix's stock:

- **Poor Initial Management Communication and Execution:** Initial communication to the market and expectation setting were poor and unrealistic, given the challenges of scaling a manufacturing business following the firm's De-SPAC.
- **Skepticism About Technology:** This issue remains, but we believe any deep dive into technology addresses many of these concerns, as will further commercialization.
- **Skepticism About the Ability to Ramp Production:** Skepticism about the team's ability to ramp to commercial production has been a significant drag on the stock; we address this issue at length below.
- **Baby with the Bathwater:** The firm was a SPAC, and its price movement over the past 12 months correlates well with last year's self-off in SPACs, as measured by the IPOX SPAC Index. This correlated sell-off suggests that value-agnostic selling took place.

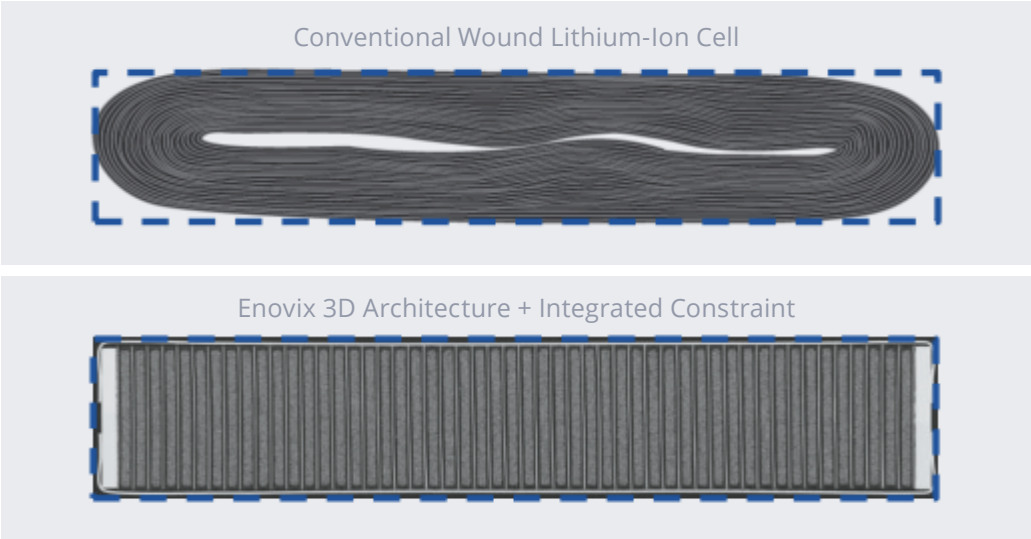
Why the Stock is Going to Move

As with many Massif Capital investments, the price of Enovix will appreciate because the firm is turning on an asset/assets, in this case, multiple battery fabrication facilities over the next few years, which will produce rapid, potentially exponential, top- and bottom-line growth. (We estimate revenue could grow a CAGR of 37% per annum between 2025 and 2030.) Note that this estimate is based on conservative projections of potential growth, with the firm capturing no more than 5% of its consumer electronics total addressable market by 2050. Furthermore, we expect the firm to produce superior margins relative to peers by focusing on selling its batteries to the consumer electronics market at a premium, ensuring strong relative economic performance on the back of strong fundamental performance in a sector of the economy that will continue to experience robust demand growth. In short, a confluence of rapid and value-accretive growth occurring within

a fast-growing industry subject to positive investor sentiment will drive the price of ENVX higher.

New and fantastic battery technologies solving all the world's energy problems have been pushed on the market for years. Rarely have such opportunities panned out as expected. That checkered track record makes Enovix a unique and exciting opportunity. Not only is the team bringing the Enovix battery to market one of the best teams at any battery manufacturer, but the Enovix battery is a real product. Enovix is not an investment in a battery concept; it is an investment in a company focused on scaling and selling a superior battery several years before its peers.

Figure 1: Conventional "Jelly Roll" vs. Enovix



Source: Enovix

The Challenges and Potential of Silicon

Within batteries, there are three critical components, an anode, a cathode, and an electrolyte solution. In a Li-ion battery, the anode absorbs lithium ions when charging and releases them back into the electrolyte and to the cathode when the battery is discharging. Conventional Li-ion batteries use a graphite anode in which lithium (Li) atoms bind with graphite (C) atoms at a one-to-six (1:6) ratio, forming LiC_6 in the battery, compared to one silicon (Si) atom that can store nearly four lithium atoms forming $Li_{15}Si_4$ in the battery. This increased binding is essential because the flow of Li ions from the anode to the cathode produces a battery's electrical output. The more binding of Li atoms to the anode, the more energy storage is possible.

A silicon anode can house 10x (by weight) and 2x (by volume) more lithium than a graphite anode. The challenge with silicon anodes has always been that when laden with lithium, the volume of the silicon anode changes by as much as ~300x during lithiation and de-lithiation. The volume change produces numerous issues, but a particularly challenging one is the 1,500psi of pressure it puts on battery cell housing,

translating into nearly 2 tons of force. This is analogous to the weight of a car being placed on a cell phone. The pressure change can lead to wasted silicon, which often means faster capacity loss through repeated charging and discharging cycles.

Enovix Solution

Enovix's architecture takes a more efficient approach that helps solve many of the abovementioned issues by first reorienting the forces within the cell by stacking cathode and anode material horizontally

Traditional li-ion battery cells have an architecture colloquially referred to as a "jelly roll" of cathode/anode/separator layers; this process not only wastes space near the corners and center of the cell but also makes the integration of new materials, and specifically materials that have more chemical attachment potential, challenging to use as it produces expansion. Enovix's architecture takes a more efficient approach that helps solve many of the abovementioned issues by first reorienting the forces within the cell by stacking cathode and anode material horizontally and by placing a stainless-steel casing around the stacked cathode and anodes that acts as an integrated constraint system defending against swelling-induced force. The case also maintains the anode and cathode materials under constant compression, resulting in excellent particle-to-particle connection, facilitating superior interaction of Lithium ions with cathode and anode materials.

These changes result in a battery with a greater volumetric energy density that retains more than 90% of its capacity over 500 charging cycles. By comparison, Apple iPhone batteries target a retention of 80% over 500 charging cycles. The EX-1 battery thus represents a 12.5% improvement, but that improvement is just the beginning. Newer cells tested as part of a program run by the Department of Energy and the National Renewable Energy Lab to support the development of Silicon anode batteries have demonstrated 88% capacity retention over 1,500 cycles; the program targeted 80% capacity retention over 1000 cycles. These newer-generation batteries thus represent a 10% capacity improvement versus an Apple iPhone battery over a cycle life that is 200% greater.

Contextualizing this a step further, the iPhone 13 has a battery that stores roughly 12.41 watt-hours, while a similar-sized Enovix EX-1 Battery stores 15.31 watt-hours. All things being equal, if you put an iPhone 13 running an Enovix EX-1 Battery up against an iPhone 13 running on its current battery, and both phones are used in the same way, such that the electrical demand and battery drain on each is at the same rate, the Enovix Ex-1 powered iPhone 13 will operate for 23% longer than the traditional iPhone 13.

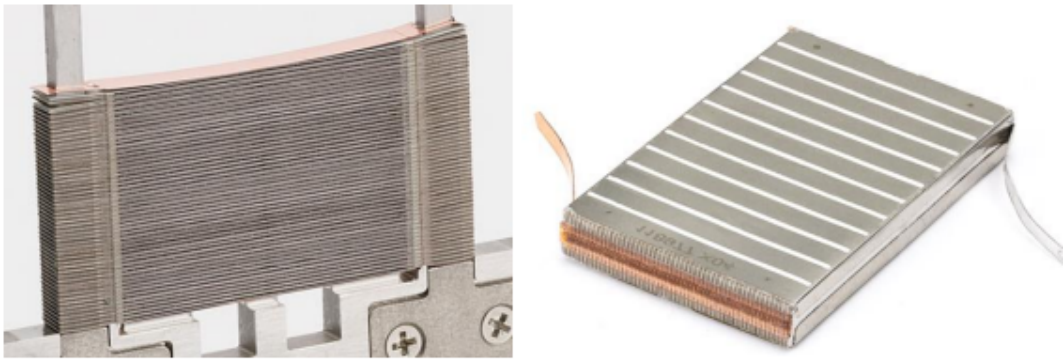
Apple claims that the iPhone 13 has a battery that can provide up to 19 hours of video playback. An Enovix-powered iPhone 13 could thus provide up to 23 hours of video playback. The average sales price for Enovix cell phone batteries is expected to be roughly $10 per battery; even after Apple's inevitable markup, we would be surprised if the consumer-facing price moved in a way that was noticeable to the consumer. As such, the battery offers the consumer a longer battery life, or product designers such as Apple and Samsung the opportunity to use more power over the same battery life in new features.

Manufacturing – The Final Hurdle

One of the frequently overlooked challenges for energy technologies, often lost in translation when one reads about significant energy breakthroughs in the media, is the need for the technology to be scalable at a reasonable cost. Often, this is the step that trips up otherwise promising technologies and is one of the challenges a former Director of Automation at Enovix noted (2/2020 to 12/2020) in a call regarding the technology. Based on our research, the manufacturing and scaling challenges have been addressed via reframing the problem, as explained below.

Enovix has reported that 70% of its manufacturing process overlaps with traditional battery manufacturing, but it is the other 30% that the Director of Automation we spoke with had concerns. Instead of winding the cathodes and anodes, the Enovix battery requires precisely stacking the cathodes and anodes.

Figure 2: Stacked Cathode and Anode Material for Enovix Battery



According to the company, the stacking has to be precise, with a reported assembly tolerance of 50 micrometers; in the battery world, that is high precision, and thus the concern arising from the former Director of Automation who had worked his entire career in consumer electronics manufacturing. This is where the insights of the firm's Chairmen of the Board, TJ Rogers[6], come into play. (Mr. Rogers also led the SPAC and has been a long-time investor in ENVX.) Mr. Rogers' background is in semiconductors and other silicon-based technologies.

As Enovix now notes in all its presentations, the assembly tolerances within high-volume chip manufacturing are 5 micrometers. The challenge for Enovix was not developing a way to manufacture its batteries in high volume with the 50-micrometer

6 TJ Rogers is the founder of Cypress Semiconductor, a firm he served as CEO for from 1982 to 2016. Cypress semiconductors biggest success was the Programmable System on a Chip used in the Apple iPhone and other smart phones to translate analog touch signals into device commands. From 2002 to 2011, he also served as the Chairman of SunPower, a firm that he convinced Cypress Board of Directors to take a majority stake in. Eventually, the Cypress position in SunPower would grow in value from the $168 million investment into a position worth $3.6 billion when the firm completed its spinoff of SunPower shares. In 2017 Mr. Rogers invested $10 million in Enphase when the firm had a market capitalization of roughly $135 million and was appointed to the Board of Directors. Mr. Rogers is still on the board and the firm's market capitalization is now $23.8 billion, although Mr. Rogers has sold shares several times, his current position is worth more than $200 million.

tolerance but rather adapting methods from the world of chip manufacturing to manufacture its battery. To help address that challenge, Mr. Rogers brought in a new CEO and team to lead the charge on the firm's build-out of fabrication facilities. The majority of senior leadership consists of former semiconductor manufacturing executives, including:

- **CEO:** Dr. Raj Talluri was previously senior vice president and general manager of the Mobile Business Unit at Micron Technology. This unit delivered $7 billion in worldwide revenue and over $2 billion in operating profit in 2022, his last year at the helm. Before Micron Technology, he incubated Qualcomm's IoT business unit taking it from an idea to over $1 billion in product revenue.
- **COO:** Ajay Marathe, who, before taking over as COO at Enovix, was the senior vice president of global operations at Western Digital, was the COO of Lumilefs for 10 years and spent 23 years at AMD, where he served in numerous roles, including Director of Global Supply Chains, managed Corporate Information Technology groups and Corporate Quality groups, and ran the firm's India division. As he notes in a recent short article discussing the development of the second-generation Enovix manufacturing line, he has had jobs that included such high-volume manufacturing that quality was measured in "parts per billion."

The nuanced approach to manufacturing extends beyond bringing on a new team with experience in high-volume silicon-involved manufacturing processes; it also includes introducing new tools. One of the observations the development teams made early on was that to make staked as opposed to rolled batteries, there was an ongoing need to cut a greater volume of electrodes. As a result, the team spent time developing ways of cutting and stacking electrodes more efficiently.

The Enovix team's answer was to design laser-cutting tools that change patterns with just a few software adjustments and never dull, thereby improving product quality.

For example, traditional electrodes are cut by mechanical punching or cutting processes. This approach creates two challenges. The first is that the mechanical cutting process wears down and the cutting becomes less precise, negatively impacting product quality. The second issue is that mechanical cutting requires new hardware for every new battery design. This means processing lines need to be taken down and retooled. The Enovix team's answer was to design laser-cutting tools that change patterns with just a few software adjustments and never dull, thereby improving product quality. While we are sure that ramping up the manufacture of millions of any complex product will have its challenges, this is a team that appears capable of addressing them.

Understanding the Competitive Landscape

Thinking through the competitive landscape that Enovix faces is not simple but can generally be considered from two angles. The first angle is the firm's direct silicon anode-focused battery peers; the second is considering other battery manufacturers in general. The second angle is more challenging, as most battery manufacturers at this time are laser-focused on scaling the volume production of EV batteries. While this may become a focus in the future, it is not currently the Enovix focus, nor are the

economics of that endeavor similar to the economics of scaling consumer electronic battery manufacturing. This discussion will focus primarily on the first angle, briefly discussing the firm that appears to be the most direct competitor among the existing battery manufacturers.

Regarding the first angle, several other firms are working on developing silicon anode battery technologies. Based on our research, the following list is not comprehensive but does appear to include the most significant silicon anode competition. The technology descriptions come from research provider BloombergNEF. The commercialization and manufacturing notes are based on our internal research. This list includes only full battery makers; it does not include companies focused on producing enhanced anode materials for use in batteries designed by others, such as Sila.

Company Name	Technology	Public/ Private	Commercialization and Manufacturing
Advano Technologies	Silicon-based 3D nanostructure	Private	No CD/No MF
Amprius Technologies	100% silicon nanowires	Public	Working to commercialize and appears to be at a similar stage to Enovix but targeting defense and specifically drone/aeronautic use cases.
Ecellix	Silicon porous composite coated with carbon	Private	No CD/No MF
Enevate	Silicon dominant carbon composite with carbon shell	Private	Sample batteries validated by 20 EV Battery manufacturers.
Group14	Silicon in carbon scaffolding	Private	No CD/No MF
Leyden-Jar Technologies	Porous pure silicon anode	Private	Targeting 2026-100MWh facility.
NanoGraf Technologies	Doped silicon alloy material architecture	Private	Targeting battery qualification By DOD associated with $1 million development contact in 2024.
Nexeon	Silicon-graphite composite	Private	No CD/No MF
OneD	Silicon nanowires fused onto graphite particles	Private	Pilot stage production facility.
Sionic Energy	Nano silicon paired with advanced electrolyte	Private	Unclear, Product has strong performance though, and like Enovix, have developed a proprietary method to prevent Thermal Runaway

No CD/No MF: No public commercialization date, no public plans for commercial scale manufacturing

Amprius Technologies warrants a few additional comments. The firm has a clear first-mover advantage in aviation, with a battery tested and approved for various drones and a partnership with Airbus. At the same time, there is no evidence yet of a focus outside this niche market. In many regards, Amprius's strategy appears similar to Enovix in that it is focused first on achieving a viable commercialized product in a potentially higher-margin niche of the battery world before, perhaps, venturing into the more volume-driven world of EVs. The similarities don't end there, as Amprius appears to suffer from similarly poor communication with the market, an issue we believe Enovix has addressed.

One technological area where Amprius does appear to have an edge over Enovix is gravimetric energy density, which means energy density by weight. With a focus on aeronautic use cases, gravimetric energy density makes sense as an area of focus. It is also important to EVs where battery weight limits the utility of increased volumetric

density. All that being said, there does appear to be plenty of room within the battery space for multiple silicon anode batteries, especially if, at the start, both are working to commercialize products within different market niches. A better understanding of the differences between both firms' batteries and those of Enevate and Sionic Energy is an area investors should spend time on when considering an Enovix investment with an eye towards it becoming a long-term hold in the five-to-ten-year range. It is less of an issue when considering the next three to five years.

What is clear is that Varta's batteries tend to have a volumetric energy density of roughly 400 wh/L versus Enovix's 600 to 900 wh/L, depending on which batteries one is considering.

Among existing producers, the most direct competitor is Varta, a European-listed battery firm that makes CoinPower cells for consumer devices in electronics, healthcare, and other fields. Varta products are cost-competitive with the Asian producers, as evidenced by the fact that many Asian firms import Varta batteries, an essential but overlooked factoid that suggests good management and process can allow Western firms to compete with larger Asian producers. Having struck a deal with performance luxury automobile manufacturer Porsche, Varta is, much like we envision Enovix could in the future, attempting to shift from consumer devices to EVs. Varta makes a wide variety of batteries, from traditional lead-acid to rechargeable double- and triple-A style to custom lithium-ion, which significantly obscures the economics of the consumer electronics-specific lithium-ion battery business. What is clear is that Varta's batteries tend to have a volumetric energy density of roughly 400 wh/L versus Enovix's 600 to 900 wh/L, depending on which batteries one is considering.

Sales Funnel

Currently, the firm's batteries can be found in four products, but that is more a function of manufacturing and the production validation process than it is representative of the market potential or demand. Enovix currently divides its sales channels into three levels, the broadest of which is Engaged Opportunities. Engaged Opportunities are developing relationships in which potential customers have determined the battery applies to their product and are actively evaluating the technology. Another level is Active Design, in which potential customers have qualified the technology, identified an end-use product for the batteries, and have, in corroboration with Enovix, begun design work to utilize the batteries. The third level is Design Wins, which are sales relationships in which a customer has committed to and approved a design and battery for a future product. At the current time (as of 1Q 2023), the combined funnel had $1.46 billion in revenue, split evenly between the top of the funnel (Engaged Opportunities) and the bottom of the funnel (Active Designs and Design Wins).

Fundamental Valuation

Building on numerous advances in manufacturing already in place, the new management team is pushing the manufacturing process forward, expecting the Fab 1 facility in California will produce 180,000 battery units in 2023. Additionally, the team has received board approval to launch the build-out of the second-generation manufacturing line at the California facility, which will produce batteries at a rate 10x faster than the first-generation manufacturing line. The Gen2 line will also be installed

at the firm's new Fab 2 in Malaysia, which will eventually house four Gen2 lines.

The first Gen2 line will be operating at Fab 2, with batteries having passed customer validation and entering high-volume manufacturing by 2025.

The build-out of these manufacturing lines was fully financed during the first half of 2023 via a $172 million convertible note. When complete, Fab 2 will produce between 38 million and 75 million batteries a year, depending on the size of the battery, with one cell phone battery equaling two wearable batteries. The expectation is that the first Gen2 line will be operating at Fab 2, with batteries having passed customer validation and entering high-volume manufacturing by 2025. Additional lines will be built out as order volume builds.

The first line will cost $70 million to build, and we assume some reduced costs with learning. In total, four lines are expected to generate roughly $375 million in revenue with gross margins of roughly 50%. Although management believes gross margins will be in the 50% range, no battery peers have gross margins that high. In what we believe to be a good peer group[7], Chinese battery giant CATL comes closest with 2022 gross margins of 35% and EBIT margins of 23.5%.

Assuming those margins, a 10-year operating life, 1-year build, 2-year ramp up, straight-line depreciation, and an annual sustaining CapEx investment of $5 million, with a 10% discount rate, we estimate the NPV of each Fab to have an NPV of roughly $2.00 per share. If we assume the goal is to have four fabs up and running by 2030, and we discount the individual Fab NPVs back to the present at 5% (pure TVM discount rate), the NPV of those facilities would be $6.61. In our estimation, this would represent a disappointing 1% of the total addressable consumer electronics market for Enovix batteries.[8]

If we assume the team has more aggressive goals in mind, for example, to capture 2.5% to 5% of their total addressable market by 2040/2050, we estimate they need to build 12 to 18 Fabs or 48 to72 Gen2 manufacturing lines, which would have an NPV of roughly $18 to $26 per share. We have an inkling that although either outcome would be a phenomenal success, the management and board ambitions are more significant than that.

The valuation process can also be approached from a multiple's perspective, building on similar total addressable market calculations.

- **EV to EBITDA:** Assuming 25% EBITDA margins, $70 million borrowed to build each manufacturing line necessary to produce the GWh equivalent volume of batteries needed to power 1%, 2.5%, and 5% of the consumer electronics total addressable market (TAM), utilizing a peer group EV/EBITDA of 17.6x and discounting values back 7, 17, and 27 years at 5% (timelines based on the assumption that it would take from 2030 to 2050 to achieve target market shares) we find that the firm has a

7 Peer Group Bloomberg Tickers: SLDP US, SES US, QS US, FREY US, VAR1 GR, 300750 CH, 6753 JP, 373220 KS, 066970 KS & 247540 KS

8 We estimate the total addressable market for consumer electronic batteries to be roughly 33 GWh per annum of batteries, driven primarily by the cell phone market at 25 GWh of batteries per annum according to JP Morgan.

value of between $24 a share and $44 a share.

- **EV to Revenue:** Repeating the exercise with the same timeline, discounting, and debt assumption but assuming the business sells at a peer-comparable 3x revenue, we find a tighter valuation range of $16 to $27 a share.
- **Price to Earnings:** Repeating the exercise with the same timeline and discounting assumptions but assuming the comparable peer PE of 24.9x and a 12.5% profit margin, we find a valuation range of between $19 and $37.

Combining all three approaches into a single probability-weighted value by weighting the 1% TAM market capture scenarios at 20% in total, the 2.5% market share scenario at a combined 50%, and the 5% market share scenario at 30%, our analysis suggests the business is worth roughly $30 a share, an expected return of roughly 50% from the current share price.

Market Share	Multiple		
	EV/EBITDA 17.6x	EV/Rev 3x	P/E 24.9x
1%	$24.48	$15.60	$19.74
2.50%	$36.37	$22.74	$30.30
5%	$44.16	$27.43	$37.20

Thirty dollars per share represents a modest return; when we first started looking at Enovix and initiated a position in the stock (at roughly $9 per share), this valuation represented a much more robust return. Nevertheless, that came before significant tangible progress in manufacturing build-out occurred; given the likely regular reassessment of this firm's valuation, we expect the valuation to increase as it grows into its market, expands its TAM, and management's forward-looking plans come into focus. Despite that, now may represent a more attractive risk-adjusted return relative to our initial entry point.

We would also note that, given the firm's short trading history, which includes two 40% selloffs in less than 18 months, both of which proved attractive entry points, interested investors may benefit from patience. Although the technology and team have given patient investors who are mindful of the challenges associated with scaling every reason to be confident in the business's ability to execute, the market will inevitably overreact to foreseeable hiccups in the scaling process. These selloffs will potentially be more exciting entry points or opportunities to average down.

Concept Value

With a company like Enovix, it seems critical to observe that the above valuation is based on fundamental information representing only the numbers associated with a limited narrative vision of what the company could become. That limited narrative must be regularly refreshed as the management team executes its existing strategy and expands the TAM for their batteries into EVs.

Expanding the narrative while remaining conservative in our assumptions is a challenging research objective but indicates further significant upside potential. In 2022, BloombergNEFestimated the battery demand for electric transport at 626 GWh/year. One percent of the EV TAM is thus 6.26 GWh/year of batteries. Enovix

would need to build the equivalent of 71 of their consumer electronics-focused size Fabs to produce that volume of batteries. It is important to note that 6.56 GWh/year is a small giga factory. Tesla is building a 100 GWh/year facility. We think Freyr is an interesting comparable from a cost perspective because it has a differentiated battery manufacturing process and, thus, similarly high-level execution challenges, aiming to build 38 GWh of production. Building these facilities cost billions, with Tesla's estimated cost at $3.6 billion.

Despite the superiority of its technology, we assume pricing is 50% less than that at which management will be selling batteries to consumer electronics on a GWh of produced battery basis.

To be conservative, it seems wise to assume the numbers don't scale down well and that a 6.56 GWh/year Enovix battery facility costs $1 billion[9] to build. This implies a capital intensity per GW/h of production capacity of roughly 4.2x that of Tesla. We do not believe this to be particularly likely, but the conservative nature of the assumptions demonstrates the robustness of more expansive narratives. In addition to assuming an expensive build, it is also necessary to assume a significantly reduced selling price, as batteries represent 50% of the cost of most EVs. Enovix will likely need to reduce costs to EV manufacturers to gain market share. Despite the superiority of its technology, we assume pricing is 50% less than that at which management will be selling batteries to consumer electronics on a GWh of produced battery basis. Finally, we assume peer-level EBITDA margins (10.83%). Despite these conservative assumptions, Enovix's 1% EV market share generates an additional $1.4 billion in annual EBITDA.

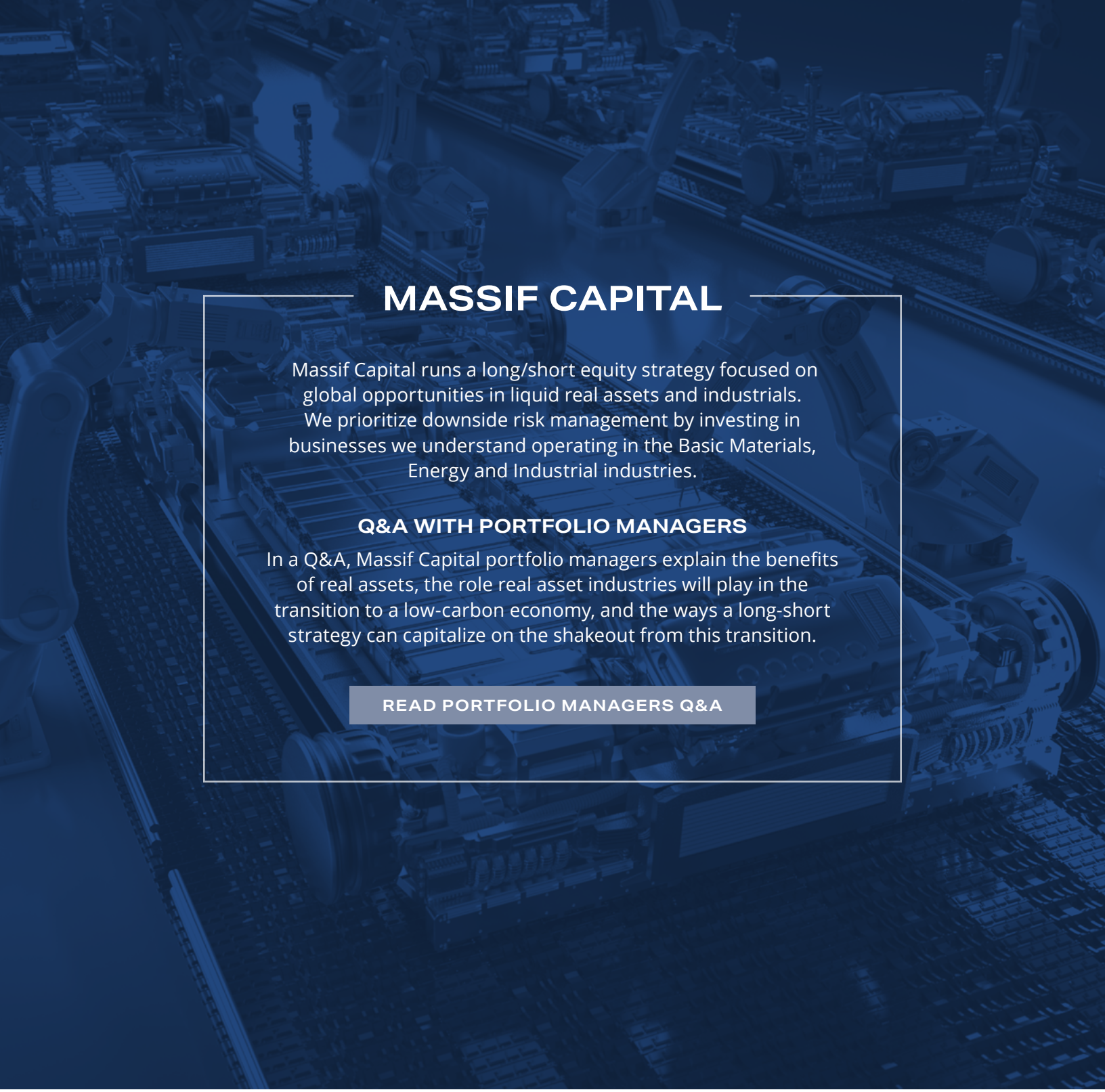
Returning to the EV/EBITDA valuation from above and assuming that the entire cost of the facility is borrowed, our EV/EBITDA scenarios change the firm's per-share value in the following way:

Consumer Electronics Market Share	Per Share Pure Consumer Electronics Business	Add 1% of EV Market	Per Share Value	Implied Mkt Cap (Bil USD)
1.00%	$24	-->	$49	$7.69
2.50%	$36	-->	$51	$8.10
5.00%	$44	-->	$53	$8.43

We provide the implied market capitalization to help calibrate and contextualize the nature of the longer-term opportunity: LG Energy Solutions currently has a market capitalization of roughly $100 billion. CATL currently has a market capitalization of roughly $139 billion. As this analysis demonstrates, while we do not expect Enovix batteries to become the primary EV battery manufacturer globally, the opportunity from a relatively small foray into the industry could be highly remunerative.

9 Note that this number is not picked based on any fundamentals. Given that Enovix's production lines are sufficiently different at a critical stage of the battery manufacturing process, it is not clear if there are any useful comparisons. At the same time, the diversity of average capital expenditure costs on a per GWh of production basis among reviewed plans for giga factories we have seen ranges from $50 million per GWh to $175 million per GWh hour. A billion was chosen as it would make it one of the more expensive facilities built but not the most expensive.

Whether seeking to invest in a more extensive and speculative future or the tangible present, Enovix offers the enterprising investor a rare opportunity to invest in a business just approaching a meaningful inflection point. Whether seeking a 50% return on the build-out of the firm's consumer electronics-focused business or playing for a more spectacular multi-bagger, one can take comfort in the fact that they are betting on an impressive and serious management team that is manufacturing a demonstrated product within a high-growth niche at a time of high investor enthusiasm for all things battery-related.



MASSIF CAPITAL

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Q&A WITH PORTFOLIO MANAGERS

In a Q&A, Massif Capital portfolio managers explain the benefits of real assets, the role real asset industries will play in the transition to a low-carbon economy, and the ways a long-short strategy can capitalize on the shakeout from this transition.

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