Trickle Research

Every raging river, every great lake, every deep blue sea starts … with a trickle

Research Update & Price Target Decrease

Summit Wireless Technologies, Inc.

(Nasdaq Stock Symbol - WISA)

SUMMIT

WiSA WIRELESS SPEAKER & AUDIO

Report Date: 04/05/21

12- 24 month Price Target: *$8.00

Allocation: 5

Closing Stock Price at Initiation (Closing Px: 09/28/2018; post-split): $86.00 Closing Stock Price at Allocation Upgrade (Closing Px: 06/04/2019; post-split): $26.60

Closing Stock Price at Target Downgrade (Closing Px: 07/09/2020): $2.28

Closing Stock Price at Target Downgrade (Closing Px: 04/01/2021): $3.08

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Disclosure: Portions of this report are excerpted from Summit Wireless Inc.'s filings, website(s), presentations or other public collateral. We have attempted to identify those excerpts by *italicizing* them in the text.

WISA reported year end results a couple of weeks ago and after giving it some thought, we think there are a few salient takeaways from the earnings call as well as our subsequent discussion with management.

First, results for Q4 F20 were better than our estimates on revenues and considerably worse on net income. The first was a nice surprise while the second, was not particularly surprising given some of the Company's stepped-up efforts in terms of marketing and research and development. We will speak to each of those below because we think they embody some of the Company's past challenges as well as their approach going forward.

In our past few updates, we noted the Company's proactive efforts to address some of the major challenges they have encountered over the past couple of years in terms of driving awareness and ostensibly by extension, adoption, of WiSA enabled products. To that end, the Company spent the better part of 2020 developing and expanding initiatives they constructed in response to some of those challenges. To recap, those initiatives include the following:

WiSAWave – This is essentially the Company's initiative to market WiSA and its associated technology. The initiative is geared towards increasing consumer awareness of WiSA's value proposition and to in turn drive consumers to the WiSA enhanced products of what today is approximately 70 customers consisting of some of the world's largest and/or most recognized consumer electronics companies in the world. We submit, having customers of this caliber begs the question, with customers of that nature actively designing, building and selling products with "WiSA inside" why does a small company like Summit have to help them sell their WiSA enabled products? We have wondered the same thing, and it has been frustrating. Regardless, when we first started following Summit, they did not have the capital (nor did they or we think had the need) to market WiSA on behalf of these companies. Today, having raise additional capital, they were/are able to do that and *that* is WisaWave. We believe the approach is bearing fruit, and the Company provides several compelling metrics with respect to their growing social media outreach and associated consumer engagement, and we think that will continue to drive awareness and ultimately sales. Again, to our dismay, we never imagined large companies would go to the trouble of designing and integrating WiSA into their products and then not try to market them effectively, but that appears to be the case. We have some insights to that we would be happy to discuss further, but we will not belabor this update with that speculation. The point is, Summit Management recognized the lack of marketing around the technology, so they decided to address it themselves and, again, that appears to be bearing fruit.

SoundSend – SoundSend is the Company's first branded product. Simply put, it is a plug and play transmitter that attempts to simplify and ubitquitize WiSA functionality through any TV's HDMI (ARC) port. Historically, the Company has relied on WiSA members to develop similar plug-and-play transmitters. Providing their own "link" device provides them some control (functionality, interface, price point etc.) over this critical portion of the technology. Here again, we think it is clear that relying on customers to develop and market products that drive functionality and adoption has proven largely ineffective, so like WiSAWave, we see SoundSend as another approach by Summit to fill the voids that product developers (customers) are not filling, which by the way, as we speculated above, may have been by design. We think SoundSend may represent a key piece to Summit's success.

Distribution agreement with Platin - To reference Summit's year end call, *"the Platin product line is distributed by Summit in North America, not in Europe and Asia, but if that product has been certified by WiSA, we are doing the distribution in the U.S".* While a bit surprising on some levels, we think this arrangement squares with the others above. Recognize Platin's initial WiSA enabled line is called

"Monaco" and its more recent (more compact) line is called "Milan". Each of these systems is available with Summit's new SoundSend and each sell at retail at sub $1,000 price points (currently $999 and $899 respectively). Also, quoting the call, *"Now we are in no way headed to being a speaker company, but we are using the Platin line as a critical component of the WiSA Wave to define the category and open up the category to more consumers".* To translate, "*defining the category and open up the category to more consumers"* is an eloquent way of saying, they wanted a WiSA enabled, SoundSend packaged, 5.1 system in the marketplace with a sub $1,000 price tag that would naturally appeal to a larger (more price sensitive) set of consumers as a means of driving awareness and adoption from a larger addressable market. Again, like WiSAWave and SoundSend, this initiative represents Summit's attempt to fill the voids of WiSA marketing, but also to open the door to what is effectively the lower 70% of the TAM.

Generation II Technology – We have been speculating about and anticipating the "next generation" of WiSA technology for some time now. At this point, the nextgen initiatives include two new iterations; the first transmits on the 2.4ghz WiFi spectrum while the second utilizes 5ghz WiFi. To be clear, referring to these iterations as "Gen II" might create some confusion. Recall, one of the benefits of the current/original/first generation WiSA technology, is that it *does not* utilize the (more congested) WiFi network. As we have pointed out in the research at points along the way, that provided the platform several advantages that ultimately encompassed its superior performance profile, including expanded channels latency and others. As a result, it is important to recognize that Summit's Gen II initiatives reflect an approach (relative to Gen I) that includes a trade-off between quality/functionality and price. Specifically, 2.4ghz is a less robust frequency than 5ghz (although it has a longer range) and therefore is suitable for 3.1 channel systems, while 5ghz will support 5.1 channels but is less robust than Gen I. However, both Gen II iterations are measurably cheaper to deliver than Gen I, and therefore pave the way for what we think will ultimately be WiSA enabled products in sub-$500 market(s), which again, we think represents a marked portion of the addressable audio market. To edify, expectations are for the 2.4ghz form factor to begin impacting revenues in 2021, and the 5ghz to start in 2022.

So then, the summation of the above is this. In our view, since the time of our initiation, Summit has done a great job of driving adoption of their technology among notable consumer electronics companies. We will argue that point all day long. Inasmuch as our initial price targets and revenue assumptions have proven wildly overstated, if one had told us back then they would be in this position (with this many notable CE brands on board) *our assumptions probably would have been higher*. However, for reasons we can not necessarily put our fingers on (although we have some ideas about) clearly some of those same customers have ostensibly done little to market their WiSA Ready projects. Granted, there were probably some weaknesses in the original approach. For instance, there were some limitations and perhaps confusion on the transmission side of the equation ie: required dongles, WiSA Ready TV's (versus non-WiSA Ready TV's), HMDI ports, USB ports etc. We submit, it was not as "turn-key" as we envisioned it. However, in our view, SoundSend goes a long way towards fixing some of those issues. We also think WiSAWave helps address the lack of consumer awareness of WiSA in general, as well as the lack of marketing efforts by WiSA (CE) customers. Moreover, the Platin distribution agreement combined with some of the nextgen initiatives are clearly aimed at driving down the cost of WiSA functionality and in conjunction making it available to broader (lower price point) segments of the industry. In short, we think the Company's efforts to address the shortfalls of the business (which includes their access to capital, which has extended the runway) all bode well for increasing acceleration of WiSA awareness and adoption, and by extension, Summit financial performance.

The above said, we submit, revenue visibility will likely continue to be challenging. However, the Company noted on the call that it has 25+ speaker brands that will be collectively have 95 to 100 “projects” in the market by year end. Given that momentum in the customer base, we are comfortable suggesting that 2021 will reflect marked growth over 2020. Specifically, the Company also guided to *“100% revenue growth vs. Q1 ‘20”*, which implies revenues of $800,000+. In addition, the Company has added considerable dilution along the way that our early assumptions did not anticipate. For instance, when we first started covering the stock, the market cap was about $70 million, and our target assumed a *diluted* market cap of about $160 million. Those compare to the current market cap of about $30 million and a diluted target of about $98 million.

Again, after recasting our model to address some of the above, and accounting for added shares including added dilutive components, we are establishing a new 12-24 month price target of *$8.00, while maintain our allocation of 5. We will revisit each given added visibility or other catalysts.

Projected Operating Model

Summit Wireless Technologies, Inc.		12702000			
Projected Operating Model	$ (12,701,986)				
By: Trickle Research LLC					
	(Estimate)	(Estimate)	(Estimate)	(Estimate)	(Estimate)
	3/31/21	**6/30/21**	**9/30/21**	**12/31/21**	**Fiscal 2021**
Revenue, net	$ 864,000	$ 2,217,600	$ 4,608,000	$ 2,649,600	$ 10,339,200
Cost of revenue	$ 653,200	$ 1,616,880	$ 3,230,400	$ 1,908,480	$ 7,408,960
Gross profit	$ 210,800	$ 600,720	$ 1,377,600	$ 741,120	$ 2,930,240
Operating Expenses:					
Research and development	$ 1,294,560	$ 1,348,704	$ 1,444,320	$ 1,365,984	$ 5,453,568
Sales and marketing	$ 908,640	$ 922,176	$ 946,080	$ 926,496	$ 3,703,392
General and administrative	$ 1,019,596	$ 1,048,506	$ 1,096,912	$ 1,057,254	$ 4,222,269
Total operating expenses	$ 3,222,796	$ 3,319,386	$ 3,487,312	$ 3,349,734	$ 13,379,229
Loss from operations	$ (3,011,996)	$ (2,718,666)	$ (2,109,712)	$ (2,608,614)	$(10,448,989)
Interest expense	$ -	$ -	$ -	$ -	$ -
Change in fair value of warrant liability	$ -	$ -	$ -	$ -	$ -
Change in fair value of derivative liability	$ -	$ -	$ -	$ -	$ -
Gain on extinguishment of convertible notes payable	$ -	$ -	$ -	$ -	$ -
Other income (expense), net	$ -	$ -	$ -	$ -	$ -
Loss before provision for income taxes	**$ (3,011,996)**	**$ (2,718,666)**	**$ (2,109,712)**	**$ (2,608,614)**	**$(10,448,989)**
Provision for income taxes	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Preferred Dividend	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Net loss Attributable to Common Shareholders	**$ (3,011,996)**	**$ (2,718,666)**	**$ (2,109,712)**	**$ (2,608,614)**	**$(10,448,989)**
Net loss per common unit/share - basic and diluted	**$ (0.33)**	**$ (0.27)**	**$ (0.21)**	**$ (0.25)**	**$ (1.05)**
Weighted average number of basic common units/shares used in computing net loss per common unit/share	**9,112,375**	**10,207,375**	**10,207,375**	**10,401,157**	**9,982,070**
	10,444,490	**10,647,961**	**10,841,742**	**11,026,296**	**10,740,122**

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Summit Wireless has paid fees to present at investor conferences that Trickle Research co-sponsors.

Rating System Overview:

There are no letters in the rating system (Buy, Sell Hold), only numbers. The numbers range from 1 to 10, with 1 representing 1 "investment unit" (for my performance purposes, 1 "investment unit" equals $250) and 10 representing 10 investment units or $2,500. Obviously, a rating of 10 would suggest that I favor the stock (at respective/current levels) more than a stock with a rating of 1. As a guideline, here is a suggestion on how to use the allocation system.

Our belief at Trickle is that the best way to participate in the micro-cap/small cap space is by employing a diversified strategy. In simple terms, that means you are generally best off owning a number of issues rather than just two or three. To that point, our goal is to have at least 20 companies under coverage at any point in time, so let's use that as a guideline. Hypothetically, if you think you would like to commit $25,000 to buying micro-cap stocks, that would assume an investment of $1000 per stock (using the diversification approach we just mentioned, and the 20-stock coverage list we suggested and leaving some room to add to positions around allocation upgrades. We generally start initial coverage stocks with an allocation of 4. Thus, at $1000 invested per stock and a typical starting allocation of 4, your "investment unit" would be the same $250 we used in the example above. Thus, if we initiate a stock at a 4, you might consider putting $1000 into the position ($250 * 4). If we later raise the allocation to 6, you might consider adding two additional units or $500 to the position. If we then reduce the allocation from 6 to 4 you might consider selling whatever number of shares you purchased with 2 of the original 4 investment units. Again, this is just a suggestion as to how you might be able to use the allocation system to manage your portfolio.

For those attached to more traditional rating systems (Buy, Sell, Hold) we would submit the following guidelines.

A Trickle rating of 1 thru 3 would best correspond to a "Speculative Buy" although we would caution that a rating in that range should not assume that the stock is necessarily riskier than a stock with a higher rating. It may carry a lower rating because the stock is trading closer to a price target we are unwilling to raise at that point (more like a typical "Hold" rating). This by the way applies to all of our ratings.

A Trickle rating of 4 thru 6 might best (although not perfectly) correspond to a standard "Buy" rating.

A Trickle rating of 7 thru 10 would best correspond to a "Strong Buy" however, ratings at the higher end of that range would indicate something that we deem as quite extraordinary..... an "Extreme Buy" if you will. You will not see a lot of these.