Trickle Research

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

3Q-F21 Earnings Update

Summit Wireless Technologies, Inc.

(Nasdaq Stock Symbol - WISA)

SUMMIT

WiSA WIRELESS SPEAKER & AUDIO

Report Date: 11/19/21

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 This Update (Closing Px: 11/19/2021): $2.00

Prepared By:
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Senior Analyst, Managing Partner
Trickle Research

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.

Summit's 3Q-F21 results were a bit of a mixed bag, largely because of some issues we will cover, but we thought the discussion from the conference call included some interesting comments as did some press that came out around the conference call. We will briefly address each of these.

The Company reported revenues of $1.8 million versus our estimate of $4.6 million. Much of the conference call was devoted to the now all-too-familiar supply chain crunch, and its impact on WISA's customers and by extension, WISA's results. With respect to the revenue miss, CEO Brett Moyer noted the following on the call: *"So let's be clear. We -- if there would (not) have been part shortages, our revenue numbers would have been, I think, significantly different"*. In our discussions with the Company, **we think "*that significantly different*" revenue number would have largely translated to our estimate.** Keep in mind, we have always assumed a considerable amount of seasonality in the business, with the 3rd quarter (September) typically being the best quarter as manufacturers and in turn retailers gear up for the holidays. Obviously, for companies like Summit the supply chain problems raging in the midst of Q3 was particularly problematic.

More specifically, they raised another issue in the context of the supply chain problems that we thought was interesting, and frankly, was something we have largely missed over the 3+ years we have covered the stock. They noted … "*We have brands that are strong internationally (but) have not launched in the U.S. because (they) can't get the pipeline inventory to launch"*. The fact that they have brands that were unable to launch WiSA enabled offerings in the U.S. because of supply chain issues is disappointing. However, it is encouraging to know that absent the supply chain issues that (presumably) will improve at some point, some number of *additional* WiSA products would likely have hit the U.S. markets, which brings us back to our notion that they would likely have been in the ballpark with our estimates.

In addition to the above, the Company also touched on another item that caught our attention. Historically, the Company has actively participated directly in the annual Consumer Electronics Show ("CES") held each January (Covid notwithstanding) in Las Vegas. However, on the call they indicated that this year they would not be participating "officially" in the show, but instead would be hosting suites around the event. They sited a handful of reasons for that decision, some of which were logistic in nature, but we think the overriding decision had more to do with something they also noted: "*it's smarter for us to continue to drive the expansion of the WiSA category through the wave versus spending a lot of money on being inside the CES trade show. We will have a next-generation demo in those suites for NDA only visitors*".

We think their CES decision fits with an emerging theme that we have tried to illuminate in the past few updates. As we have discussed, the Company has implemented several initiatives that in effect amount to proactively taking control of their own destiny. That is, they tried the approach of assuming their (established and recognizable) customers would drive awareness of WiSA through the promotion and sales *of their own* "WiSA Ready" brands. That did not work well. Moreover, while the "build it and they will come" approach of showcasing WiSA at CES helped them garner accolades and awards, that did not translate into substantial sales either. Recognize, the development of their SoundSend transmitter, their WisaWave marketing platform, the Company's U.S. distribution arrangement with Platin, and in part their NextGen endeavors represent their pivot towards that proactive approach, and we believe they are collectively showing signs of gathering momentum, which brings us to our next point.

Around the earnings call, the Company's WiSA Ready Platin line got two significant pieces of ink that we think underscore both our longstanding view the WiSA will become a standard in the delivery of high-quality multichannel audio and our just reiterated and more recent view that their initiatives around that goal are attracting attention:

The Rolling Stone Essentials 2021

Our team of product editors review the best new electronics, smart home devices, outdoor gear, grooming devices and accessories to buy this year

By BRANDT RANJ & JOHN LONSDALE & SAGE ANDERSON & TIM CHAN

Products featured are independently selected by our editorial team and we may earn a commission from purchases made from our links; the retailer may also receive certain auditable data for accounting purposes.

Thousands of products come across our desks each year, but only a few earn the *Rolling Stone* stamp of approval. Our team of product editors spent months testing some of the best new electronics, smart home devices, outdoor gear and accessories on the market to put together our second annual *Rolling Stone* Essentials list.

With a focus on performance, innovation, and design, this year's list features more than 50 products that we found ourselves reaching for and using over and over again — whether at home, at the office, or on an outdoor getaway. Products were reviewed based on utility and uniqueness, while factoring in items with a strong aesthetic point of view and diverse features.

Photo : Platin

Best Home Theater System: Platin Milan

Platin's Milan Home Theater System is a complete, audiophile-grade home theater system that's easy to setup and use. The package comes with five wireless speakers, a wireless subwoofer and the SoundSend, which works like an audio receiver. You control the entire system via an app on your phone (iOS or Android).

Platin's speakers pack a punch for their compact size, and never go out of sync, which is a nice surprise for a totally wireless audio system. Equally impressive is this system's support for Dolby Atmos, which you won't find in similar home theater setups.

If space constraints have kept you from setting up a 5.1 home theater system, Platin's Milan gives you no excuse.

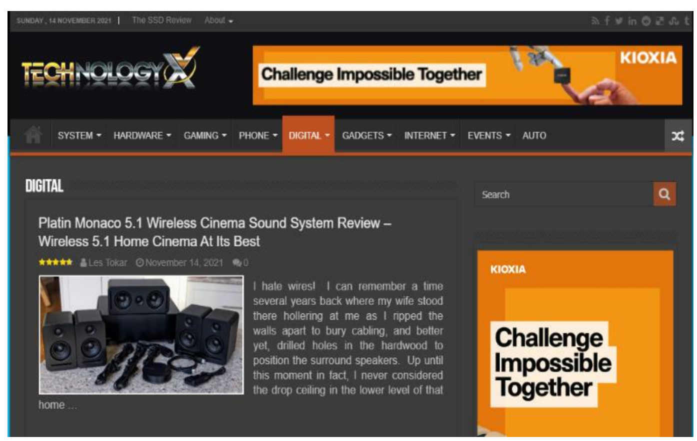
Buy: Platin Milan Home Theater at $799.95

THE WALL STREET JOURNAL.

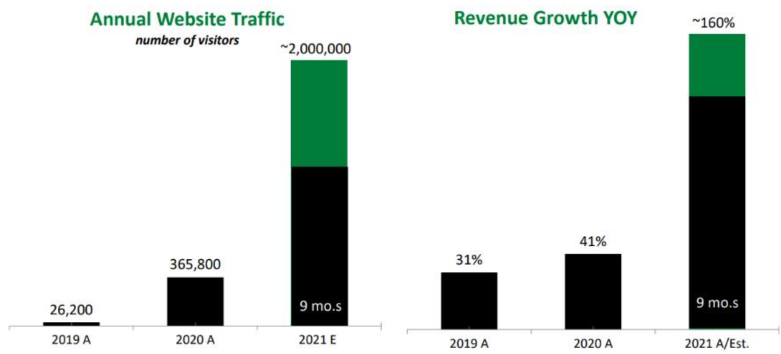
PHOTO: PLATIN

Platin Monaco 5.1 Wireless Speaker System

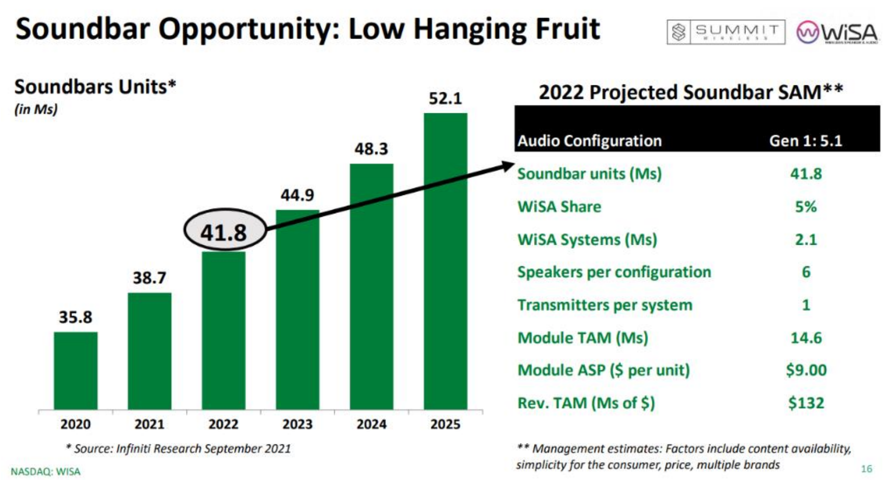
Soundbars are popular in home theaters because they're so simple and compact. Having real movie sound requires speakers all around you, but turning your home into a web of wires...well, no. Platin's Monaco 5.1 system—that's five speakers and a subwoofer—uses a wireless technology that can transmit high-resolution audio with essentially no latency. Essentially no setup, either: You plug them in, connect your TV to the transmitter via HDMI cable, and everything just works. $999; platin.com



In addition to the industry uptake, the Company provided some additional information on the reach of their WisaWave marketing and consumer awareness efforts. That initiative continues to generate increasing traffic across their social media platform(s). We submit, as we alluded to above regarding the prior CES accolades, while increasing industry and consumer awareness of the WiSA standard and its wireless attributes is clearly a pre-cursor to its ultimate sales success, the *desired* follow-on to greater awareness is the translation of that into sales. Put another way, what we would really like to know is how does the increase in web traffic translate into revenue which is the sort of “cost of acquisition” metric that most social media advertising approaches seek to identify. While again, we submit they may not have their arms around that as well as they would like (or at least if they do, they have not shared it just yet) the data appear to be trending on the right correlative path, and frankly, their comments regarding committing resources to this approach (as opposed to CES for instance) is in our view telling in that regard.



And finally, one last graphic from their presentation that most who follow the stock have seen before at least in some iteration or have at least heard articulated as the basis for why WISA could become markedly successful. To translate, consumers (through WiSA ready products in the market today) can buy an immersive sound high-fidelity audio system for comparative pricing to what they can purchase many soundbars for, which *makes us* believe, they have a great opportunity to capture what is a small fraction of the soundbar market. However, we also submit, this graphic is a bit overstated in the sense that there are a large portion of the 41.8 million soundbars referenced that are likely sub $200 products that WiSA ready systems ostensibly do not compete with. So, from that perspective, the question is “what portion of this market do WiSA Ready products really compete for”? We do not know the answer to that, but we are going to take a different approach anyway.



Having considered the above, we think a better way to look at the TAM for WiSA Ready Gen I products is through the lens of the television market, and perhaps even more specifically the high-end television market. Here are some industry metrics in that regard:

According to industry data Samsung to lead premium TV sales globally in 2021, says Report | Business Standard News (business-standard.com):

- *Global TV shipments are projected to reach **223.09 million units in 2021***

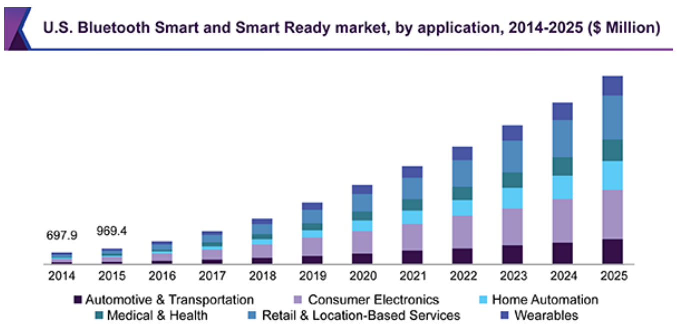
- *New figures from Strategy Analytics note, Smart TV sales increased by 7.4% in 2020 to reach **186 million units** and account for 79% of all TVs sold.*
- *Other figures from Strategy Analytics also note that smart TV ownership will reach **1.1 billion homes** – 51% of all households – by 2026.*
- *The sales of **QLED TVs**, anchored by the world's largest TV maker Samsung, is likely to surpass **12 million units this year** (2021), up 26 per cent from a year ago.*
- *Global **OLED TV** sales, led by LG, are expected to reach **5.6 million units in 2021**, up 200,000 units from its previous estimate. It is also a 60 percent increase from last year's shipments of 3.54 million units.*

As indicated, industry estimates suggest the collective sale of 17.6 million OLED and QLED televisions in 2021. While we believe WiSA technology is applicable to much of the smart TV market in general, we think the premium television market (of which OLED and QLED are a part), provides a particularly applicable addressable market and we believe that for a simple reason. We think people who are willing to spend $2,000+ for a television, are likely to spend some amount of additional money to enhance the audio experience from that expensive television. Granted that will not be the case with all premium TV's, for instance many of those will end up in bars or restaurants. Further, while some of those premium TV purchasers may already have premium audio installed while others will certainly choose soundbars, we continue to believe that *if informed/aware of the quality and functionality of WiSA*, a good portion of those addressable consumers will choose a WiSA Ready system, and that number is significant enough to drive adoption that we believe will support our valuation assessments. That leads us to another point that we think is worth considering from an investment perspective.

Again, referencing the soundbar graphic above as well as some of the television market metrics we have provided in terms of the addressable market, we know the *potential* for WISA here is considerable. We know they have a viable offering in that regard because their technology has been adopted by some of the largest television manufactures (LG and Hisense for instance) and has been designed into the products of some of the more recognized premium audio brands, in the world. However, while we believe the Company is aggressively/proactively trying to drive awareness, which we think is bearing positive results, adoption remains the allusive part of this story. That is the "elephant in the room".

The above noted, we will close with a different valuation perspective than we have posited in the past. The awareness/adoption/sell-through of WiSA enabled technology has been much slower than many of us anticipated, and that has had a considerably negative impact on the dilution and associated valuation of the Company, which given the time value of money, is probably appropriate. That said, unlike at some points since our initiation, WISA has the working capital onboard to both market the technology and fund the associated burn for the foreseeable future, which we assume should minimize additional dilution. In terms of determining and then discounting anticipated future cash flows, if our math is reasonably accurate, if we believe (which we do) that WISA can ultimately capture the $100+ million portion of the soundbar market identified in their graphic above, which again would represent a relatively small portion of the market, then we stand by our valuation target/assessments, even if that $100 million threshold is 4 or 5 years out and they have to continue to support a burn with their existing cash until they get there (albeit at a decreasing rate). Given that here are a few other items to consider.

Historically, consumer adoption of many **successful** consumer electronics technologies and products have similar trajectories. That is, they start relatively slowly and then at some point catch fire and growth becomes exponential. That notion by the way is not overly intuitive, and there are countless examples of that trajectory that have been demonstrated over time across a wide variety of consumer electronics products:



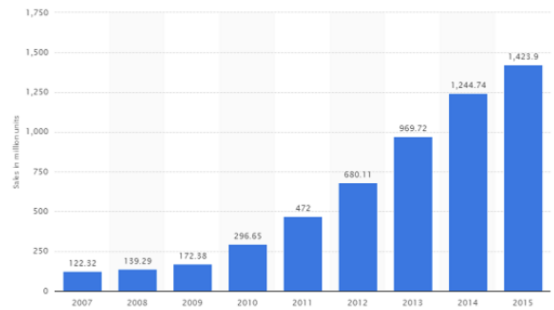
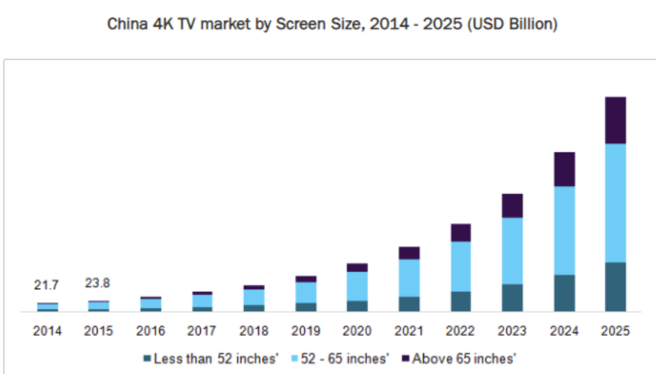
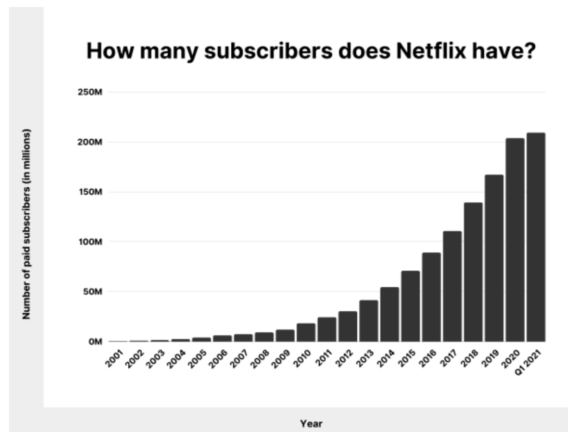


Figure 1: Global smartphone sales growth. Source: Statista.

https://www.c3wireless.com/wireless-industry-show-news.php?id=66





https://www.grandviewresearch.com/industry-analysis/4k-tv-market https://backlinko.com/netflix-users

Succinctly, we cannot be sure that WiSA will ever become a "successful" consumer electronics technology but if it does, that success will almost certainly not be linear.

Lastly, historically we have tried to model WISA's opportunity in terms of individual ("Gen I") module sales to speaker manufactures, and that model is driven by assumptions around adding manufacturers, adding projects (or sku's as we have typically described them) within those manufacturers, the sell through of those products to consumers (which we term "adoption"), and the resulting reorder of modules by manufacturers. That approach remains, germane and again our view is that the Company has engaged several initiatives to help drive the third leg of that process. However, recognize that there are other elements to the opportunity that are beginning to emerge, and they have to potential to *markedly* additive. Specifically, we think the Company's Platin distribution leg could prove more contributive than some might expect, and the Gen II rollout could be transformative. We think visibility on each of those fronts will improve as we move into and through 2022.

Our view that Summit will ultimately shine remains intact. Given the compression in the stock, we are inclined to raise our allocation and we will likely do that if the stock continues to experience pressure. For now, we reiterate our allocation and our price target and will revisit each as new information dictates.

Projected Operating Model

Summit Wireless Technologies, Inc.						
Projected Operating Model						
By: Trickle Research LLC						
	(Actual)	(Actual)	(Actual)	(Estimate)	(Estimate)	(Estimate)
	3/31/21	6/30/21	9/30/21	12/31/21	Fiscal 2021	Fiscal 2022
Revenue, net	$ 1,153,000	$ 1,581,000	$ 1,807,000	$ 1,824,000	$ 6,365,001	$ 10,287,567
Cost of revenue	$ 858,000	$ 1,122,000	$ 1,301,000	$ 1,281,200	$ 4,562,200	$ 6,951,216
Gross profit	$ 295,000	$ 459,000	$ 506,000	$ 542,800	$ 1,802,801	$ 3,336,351
Operating Expenses:						
Research and development	$ 1,173,000	$ 1,305,000	$ 1,322,000	$ 1,322,960	$ 5,122,960	$ 4,811,503
Sales and marketing	$ 874,000	$ 975,000	$ 1,021,000	$ 1,018,240	$ 3,888,240	$ 4,102,876
General and administrative	$ 968,000	$ 988,000	$ 1,081,000	$ 1,088,436	$ 4,125,436	$ 4,408,536
Total operating expenses	$ 3,015,000	$ 3,268,000	$ 3,424,000	$ 3,429,636	$ 13,136,636	$ 13,322,915
Loss from operations	$ (2,720,000)	$ (2,809,000)	$ (2,918,000)	$ (2,886,836)	$ (11,333,835)	$ (9,986,564)
Interest expense	$ 3,000	$ 3,000	$ 3,000	$ -	$ 9,000	$ -
Change in fair value of warrant liability	$ 567,000	$ 579,000	$ -	$ -	$ 1,146,000	$ -
Change in fair value of derivative liability	$ -	$ -	$ -	$ -	$ -	$ -
Gain on extinguishment of convertible notes payable	$ -	$ -	$ -	$ -	$ -	$ -
Other income (expense), net	$ (2,000)	$ (5,000)	$ 860,000	$ -	$ 853,000	$ -
Loss before provision for income taxes	**$ (3,292,000)**	**$ (3,396,000)**	**$ (2,061,000)**	**$ (2,886,836)**	**$ (11,635,835)**	**$ (9,986,564)**
Provision for income taxes	**$ -**	**$ 2,000**	**$ -**	**$ -**	**$ 2,000**	**$ -**
Preferred Dividend	**$ -**	**$ (14,000)**	**$ -**	**$ -**	**$ (14,000)**	**$ -**
Deemed Dividend on Conversion of Pref. to Common	**$ -**	**$ (1,192,000)**	**$ -**	**$ -**	**$ (1,192,000)**	**$ -**
Net loss Attributable to Common Shareholders	**$ (3,292,000)**	**$ (4,604,000)**	**$ (2,061,000)**	**$ (2,886,836)**	**$ (12,843,835)**	**$ (9,986,564)**
Net loss per common unit/share - basic and diluted	**$ (0.33)**	**$ (0.42)**	**$ (0.15)**	**$ (0.18)**	**$ (0.92)**	**$ (0.63)**
Weighted average number of basic common shares used in computing net loss per common share	**9,979,991**	**10,862,074**	**13,917,295**	**15,803,940**	**12,640,825**	**15,803,940**
	9,533,385	**10,862,074**	**13,917,295**	**15,803,940**	**12,529,173**	**15,803,940**

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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.