

Trickle Research

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



Price Target Update

Summit Wireless Technologies, Inc.

(Nasdaq Stock Symbol - WISA)



Report Date: 07/09/20

12- 24 month Price Target: *\$14.00

Allocation: 5

Closing Stock Price at Initiation (Closing Px: 09/28/2018; post-split): \$86.00

Closing Stock Price at This Report (Closing Px: 06/04/2019; post-split): \$26.60

Closing Stock Price at This Report (Closing Px: 07/09/2020): \$2.28

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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.

A lot has happened at Summit since our initiation in late September 2018. The irony is that as we will address, much of what has happened has been quite positive. The stock on the other hand, has been a disaster. Succinctly, following a 1 for 20 reverse split in April (2020), *the stock is down over 95%* from our initiating coverage price despite of what we think has been reasonable progress on various fronts. As we look at where the Company has been and where we still believe it can go, we feel like a mea culpa is in order. Some of this is a bit atypical for an equity research piece on a specific company, but we think it is worth addressing since we know several of our subscribers and past conference attendees have been impacted by the decline in the stock. We saved the mea culpa for the end for those who don't care to read that portion, but again, we think it is germane to Summit as well as other companies in the microcap space over the past two years or so.

We were introduced to Summit in early 2017 when we first saw a demonstration of their technology. We walked away from that presentation thinking it was going to be a great opportunity, however, the company was private at the time and our focus is largely directed toward public companies. 18 months or so later in July 2018, the Company entered the public market through the filing of an S-1.

We initiated coverage a couple months later in late September 2018. For reference, at the time of that initiation, our estimates were for revenues of \$1.4 million for fiscal 2018 and \$11.8 million in fiscal 2019. For 2018 the Company recognized actual revenues of \$1.37 million but for 2019 revenues finished only slightly higher at \$1.7 million well below our estimate of \$11.9 million. Obviously, our original estimates were based on growing adoption of WiSA standards and associated Summit technologies through 2019. Just to edify, we have always assumed the Company's third fiscal quarter (September 30) to be their major quarter because that is the quarter that largely incorporates customer purchases of the technology to be integrated into customers' products for the holiday season. We believe that assumption remains intact.

In June 2019 we increased our allocation of Summit from 4 to 5 largely on the basis of the marked sell-off in the shares. To frame that, we initiated the stock at \$4.30 per share with a 12-24 month price target of \$9.25. Those numbers translate into \$86 and \$185 respectively in current share valuations given the 20 for 1 reverse in April (2020). By the same metrics, the relative price of our allocation increase is today \$26.60 based on a pre-split allocation upgrade price of \$1.33. As we noted, the stock's decline has been harsh. Further, at the time of our allocation upgrade, we also provided a revised model, which revised our 2019 estimates down to \$5.5 million and 2020 estimates of \$21.6 million. Our 2019 estimates at the time were based in part on guidance at the time for Q1 revenues of \$400,000 to \$500,000 and second half revenues of \$3 million to \$5 million. More specifically, our second half projection was \$4.5 million. Again, both the Company's expectations as well as ours proved aggressive as the adoption cycle has proven longer than anticipated.

As a result of the slower than anticipated adoption of the technology and in turn lower revenues and larger losses, the Company has had to access the public equity markets several times over the past few months. To put *that* into perspective, following the 20 for 1 reverse split in early April (2020) and the subsequent financings since that split, the current share count is 7,723,853 shares. On a pre-split basis, those shares would translate into 154.5 million shares. That compares to 20,452,480 shares outstanding in the first reported quarter following our initiation or about 7.5x. The associated dilution has been draconian and as such has been considerably negative for investors prior to the split and subsequent financings. Considering this from another angle, had the Company been able to raise the same \$17.6 million at valuations commensurate with the initiating coverage, they would have issued roughly 4 million pre-split for a total of just 20 million shares (compared to 154.5 million) or just 1 million post-split shares (compared to 7.7 million). Below is a summary of the recent financings and their respective impact on shares counts as well as on cash:

Date	Shares Sold	Price	Gross Proceeds	Warrants Issued	Warrant Description
04/23/20	2,000,000	\$3.25	\$6,500,000	2,000,000	Strike Px = \$3.25 Expiration = 5 years
06/04/20	2,275,000	\$2.55	\$5,800,000	2,275,000	Strike Px = \$2.55 Expiration = 5.5 years
06/04/20	2,040,000	\$2.61	\$5,300,000	2,040,000	Strike Px = \$2.61 Expiration = 5.5 years
Totals	6,315,000	\$2.79 (avg.)	\$17,600,000	6,315,000	\$2.79 (avg.)

While the good news is that the recent raises provide the Company with considerable working capital to further execute the business plan, that has clearly come at the marked expense of legacy shareholders.

As we alluded to above, the Company's struggles with capital have largely stemmed from slower adoption and in turn lower anticipated revenues. On the other hand, as we have also noted along the way, in spite of slower adoption/product rollouts by customers, we continue to believe Summit has made considerable progress. That progress includes the addition of a number of key customers as well as other advances that we view as topical. The dates/releases below provide an overview of some of those milestones/achievements since our initiation as well as some color on why we view each as important.

- **September 20, 2018**

WiSA – the Wireless Speaker and Audio Association – Unveils New WiSA Ready Certification

*SAN JOSE, Calif.--(BUSINESS WIRE)-- **WiSA™ - the Wireless Speaker and Audio Association** today unveiled the "WiSA Ready" certification, which marks an important milestone in delivering immersive wireless audio. This new certification coincides with the launch of the industry's first WiSA Ready USB transmitter from founding member **Summit Wireless Technologies, Inc. (Nasdaq: WISA)**, which will be compatible with forthcoming WiSA Ready sources.*

The new WiSA Ready certification will clearly identify entertainment sources – such as TVs, gaming systems or computers – that are equipped to deliver up to eight channels of high-definition audio to WiSA Certified speakers when connected with a WiSA USB transmitter. This new program simplifies consumer set-up and reduces costs by replacing AV receivers or wireless hubs with a low-cost USB accessory. Using WiSA Ready products makes it extremely simple and convenient for consumers to enjoy wireless multi-channel sound, eliminating the clutter, wires and complicated installs previously required to create immersive audio experiences

"The WiSA Ready certification is pivotal to amplifying our mission of delivering immersive, wireless sound to those who desire exceptional audio," said Tony Ostrom, president of WiSA. "Consumer electronics brands that leverage WiSA Certified technology will accelerate consumer adoption and the availability of immersive wireless audio while pushing the consumer entertainment experience to new heights."

Why This Was Important: This announcement contains two salient points regarding what we see as Summit's opportunity and these touch most of the other announcements we highlight below so we will spend a little time here. Recall, there are two parts to this story: Summit Wireless and the WiSA Association. The latter is essentially controlled by Summit and is largely comparable to the Blue Tooth SIG. Much like the Blue Tooth SIG, the

purpose of WiSA is to establish standards around the technology so that members create products that are interoperable across their own brands but also among all other WiSA certified products/brands. We believe that growth in WiSA membership is perhaps a leading indicator of the ultimate adoption of the technology and ultimately the case for the development of the technology as a “standard” in the consumer electronics space. At the time of our initial coverage, WiSA membership included about 30 major consumer electronics brands. Today, that number exceeds 60 of these brands. For reference, we have pasted WiSA’s delineation of these brands further below in this update.

Recognize that the Company typically makes two types of announcements around WiSA members. These include the announcement of new members, which we assume means that these new members are in some stage of contemplating and/or developing projects that will include WiSA technology. That assumption is based on the notion that enterprises are likely not inclined to pay member fees (several thousand dollars) to belong to a certifying organization unless they plan on integrating the technology into future products. The “rub” is trying to determine the time between which a company becomes a member and ultimately design it into and launches a commercial product. By extension, when an announcement is made regarding a WiSA member “certifying” products, it generally means that they have done their design and development work and are planning to commercialize the product/project. Again, the lag between, membership, certification and commercial launch of actual products (and concurrently, sales by Summit) are some of the challenges of the analysis.

With those points in mind, here are excerpts from some of the additional announcements that we find particularly topical.

- *December 11, 2018*

Summit Wireless Announces 2019 Global Launch of WiSA Certified Products by Nine Leading Wireless Speaker Manufacturers Across North America, Europe and Asia; Supports LG Electronics’ WiSA Ready Lineup of OLED and Flagship UHD TVs for 2019.

SAN JOSE, Calif.--(BUSINESS WIRE)-- Summit Wireless Technologies, Inc. (NASDAQ: WISA), the leading provider of immersive, hi-fidelity, wireless sound technology for intelligent devices and home entertainment systems, and a founding member of WiSA, the Wireless Speaker and Audio Association, today announced the 2019 global launch of WiSA Certified™ products from nine leading wireless speaker manufacturers across North America, Europe and Asia. This multi-tiered deployment, slated for the first quarter of 2019, will coincide with the worldwide roll out of WiSA Ready™ TVs from LG Electronics’ 2019 lineup of OLED and flagship UHD displays.

The WiSA Ready standard has experienced rapid adoption and includes not only the 2019 lineup of LG TVs, but Xbox One gaming systems as well as PCs running Windows 10. Products bearing the WiSA Ready logo, combined with a WiSA USB Transmitter and WiSA Certified speakers enable the most innovative, wireless sound experience available for movies, music and games. **Summit estimates that there will be up to 60 million units of WiSA Ready platforms in the market in 2019, providing for a total available market of more than 300 million WiSA enabled speakers.***

*Summit’s WiSA Certified customers include industry leaders Harman International, Klipsch, Bang & Olufsen, Axiim, Enclave Audio, EC Living, Platin, Golden Ear, and System Audio.** These customers have embraced Summit’s technology to implement WiSA standards that ensure interoperability, ease of set up by consumers, and multichannel hi-definition, concert-quality sound for the next generation home entertainment experience. Beginning in the first quarter 2019, WiSA will kick off an international channel marketing program to support the entire spectrum of WiSA Certified speakers launching next year.*

Why This Was Important: As we highlighted in bold above, this was one of the first announcements from the Company we can recall that attempted to frame the market size of “*WiSA ready platforms*” represented by certified products. Recognize, when they use the term “platform”, they mean a consumer electronic product. That might mean a television or, in the case of speakers, a surround sound system. Keep in mind, a 5.1 channel surround sound system would include 5 or 6 speakers per surround sound platform, which would in turn translate into the 300 million speakers referenced above. We would add, numbers of this nature are what drove some of our initial modeling, which we will speak to further in this report.

- **January 07, 2019**

Summit Wireless Unveils WiSA Ready Platforms at CES 2019; Showcases Immersive Wireless Sound for Intelligent Devices and Home Entertainment Systems via LG Electronics, Xbox and Nine Premium Speaker Manufacturers

*LAS VEGAS--(BUSINESS WIRE)-- Summit Wireless Technologies, Inc. (NASDAQ:WISA), the leading provider of immersive, hi-fidelity, wireless sound technology for intelligent devices and home entertainment systems, and a founding member of WiSA, the Wireless Speaker and Audio Association, today showcased an innovative line-up of WiSA Ready™ platforms -- powered by Summit's WiSA technology and featuring demos via LG Electronics, Xbox and nine premium global WiSA Certified™ speaker manufacturers, all who've adopted the WiSA industry standard. Products bearing the WiSA Ready logo, combined with a WiSA USB Transmitter and WiSA Certified speakers enable the most advanced, wireless sound experience possible for movies, music, games/esports, and more. The company estimates there will be up to 60 million WiSA Ready platforms in market in 2019.**

Why This Was Important: The above announcement as well as the following announcement reference Summit's participation in CES ,which is the large consumer electronics show held in January each year in Las Vegas. The show is quite important for consumer electronics brands introducing/showcasing new technologies and products, which they hope will translate into orders for the following holiday season. Obviously, holiday sales represent a major portion of overall annual consumer electronics sales. As a point of reference, much of the retail ordering for holiday sales are placed between June and October, making calendar Q3 the pivotal quarter for most CE manufacturers.

- **January 15, 2019**

Summit Wireless Technologies Receives Accolades for WiSA Technology at CES

SAN JOSE, Calif.--(BUSINESS WIRE)-- Summit Wireless Technologies, Inc. (NASDAQ: WISA), a leading provider of immersive, wireless sound technology for intelligent devices and next-generation home entertainment systems and founding member of WiSA, the Wireless Speaker and Audio Association, today announced WiSA technology was recognized with three awards at CES 2019.

CES, the Consumer Electronics Show that takes place every January in Las Vegas, is one of the nation's biggest annual tech events. This year it showcased the latest technology innovations from 4,500 companies and had over 180,000 global attendees.

WiSA technology received the following accolades:

- ***High-Def Digest Editors' Choices: Best Gear of CES 2019 Best Home Theater Technology:*** *WiSA technology was chosen for its support of wireless audio transmission of up to 8 channels of uncompressed*

24-bit audio, including immersive audio formats like Dolby Atmos and DTS:X, as well as the tech's network performance offering superior latency over standard Bluetooth and Wi-Fi at just 5ms of lag time.

- Digital Trends Top Tech of CES 2019: Klipsch Reference Wireless WiSA home theater system was recognized for its simple, high-resolution audio that can be easily transmitted from a growing number of devices, including LG TVs, PCs and Xboxes.
- 2019 Dealerscope IMPACT Awards: Editors' Choice: Enclave Audio CineHome HD WiSA home theater system was highlighted for its wire free 5.1 home theater experience that is seamlessly assembled with the press of a button. "The launch of the LG product lines and our partnerships with nine of the top speaker companies has already resulted in more industry recognition," said Brett Moyer, president and CEO of Summit Wireless Technologies. "We expect this to continue as we grow the WiSA ecosystem and expand our relationships with more top consumer electronics companies. In 2019, we're on track to see up to 60 million WiSA Ready™ platforms* in the market and grow revenue. Overall, we are very encouraged by the growing recognition of our brand leadership and our mission to deliver wireless, multichannel audio capabilities and authentic concert-quality sound to homes everywhere."

Why This Was Important: As we noted above, CES is an important showcase for consumer electronics products/brands. Since we initiated our coverage, CES recognition has certainly one of the bright spots in the story. Along with the addition of major brands to the WiSA/Summit ecosystem, we have viewed positive reviews from CES as further validation of the competitive value/posture of the technology.

- **March 26, 2019**

Summit Wireless and THX Partner to Bring Leading Wireless Sound Technology to Gaming, Esports and Home Entertainment

SAN JOSE, Calif.--(BUSINESS WIRE)-- Summit Wireless Technologies, Inc. (NASDAQ: WISA), the leading provider of immersive, hi-fidelity, wireless sound technology for intelligent devices and home entertainment systems, and a founding member of WiSA, the Wireless Speaker Audio Association, today announced a strategic partnership with THX Ltd., a leading developer of entertainment technologies and internationally recognized certification standards for world-class cinemas and consumer electronics.

The companies will work to develop and release modules that are Approved By THX™ and certifications for Summit customers and partners with an emphasis on gaming and esports. With this partnership, THX joins the WiSA member network with its first WiSA Certified™ products slated for launch later this year. "The audience for esports alone is massive -- attracting upwards of 200 million viewers for a single event, and rivaling traditional spectator sports like the Superbowl," noted Brett Moyer, president and CEO of Summit Wireless Technologies. "THX has been a leader in enabling best-in-class entertainment experiences for over 35 years, and our combined technology can deliver the ultimate shared home entertainment experience for these kinds of live events, with full multi-channel, wireless, stadium-quality sound. Equally exciting is the opportunity in the \$40 billion gaming hardware business, where we have already cultivated a growing ecosystem of WiSA Certified speakers, systems and intelligent devices from the world's top manufacturers."

Combining efforts with THX, Summit Wireless Technology and WiSA Certification provides gamers the opportunity to easily create premium audio environments with up to eight tightly synchronized audio channels of extremely low-latency and high-definition sound, which provides precise feedback for superior gameplay.

The Approved By THX™ program helps product manufacturers and brands deliver premium entertainment experiences by approving key components used to build complete electronic devices or systems. Components that are Approved By THX™ endure application specific THX laboratory testing to predict their performance when used in actual consumer products. Using Approved By THX™ components accelerates product development and time to market while minimizing the testing costs and engineering cycles necessary to achieve products that meet THX standards.

“Summit Wireless has developed some of the best technology in the world for low-latency, hi-fidelity multi-channel audio, which far surpasses the capability of standard wireless technologies like bluetooth and wifi,” stated Peter Vasay, GM and SVP of Home, THX Ltd. “With a like-minded vision and innovative approach, Summit and THX will deliver solutions that provide what gamers and entertainment enthusiasts demand – a superior, consumer-friendly, immersive experience backed by the most advanced technology available.”

- *About THX*

Founded by legendary filmmaker George Lucas in 1983, THX Ltd. and its partners provide premium entertainment experiences in the cinema, in the home and on the go. Over the past thirty-five years, THX has expanded its certification categories beyond studios and cinemas to consumer electronics, content, automotive systems and live entertainment. Today, THX continues to redefine entertainment, providing exciting new technologies and assurance of experiences, which provide consumers with superior audio and visual fidelity and ensure an artist's vision is truthfully delivered to audiences worldwide. For more information visit: <https://www.thx.com/>

Why This Was Important: One of the arguments we have made with respect to Summit’s value proposition, is that high quality audio is as important to the entertainment experience as the high definition video. We can’t take credit for that original thought, as it is from a common quote from George Lucas, the creator of Star Wars as well as the founder of THX Ltd., wherein he opines that “the sound and music are 50% of the entertainment in a movie”. The initial push behind the formation of THX was that Lucas was so particular about the contribution of the audio portion of his movies that he wanted to insure that they were precisely reproduced in cinemas, living rooms or wherever his movies were consumed. We think that notion represents what we see as the value proposition of WiSA. In short, we think the in-home consumption of programming is going through a technology evolution/progression that started with high definition video, which initially came at the expense of audio quality as new television designs required larger but flatter profiles with less room for quality audio. The next phase in that evolution has been the soundbar, which provides an easy solution to the loss of quality audio brought on by the thinner HD television form factors. We think WiSA wireless options complete that technology upgrade cycle by providing true immersive sound (the way content creators like George Lucas intended them) with a quick and easy installation and at what is quickly becoming price points that rival inferior soundbars. In our view, the basis for this THX validation *is the reason* we believe WiSA will ultimately become a successful standard. We also believe *that notion is the reason why WiSA certification has been adopted and implemented by high end television platforms like LG’s OLED and Nano Cell TV series*, which is the basis for the next announcement. In short, we think TV manufacturers like LG and others apparently share George Lucas’ view that audio is a major portion of the experience.

- *May 08, 2019*

HIGH END 2019: LG and WiSA Present Uncomplicated TV Audio Connection

SAN JOSE, Calif.--(BUSINESS WIRE)-- WiSA® LLC, the Wireless Speaker and Audio Association founded by Summit Wireless Technologies (NASDAQ:WISA) and comprised of leading consumer

electronics brands, announces the next step in its global collaboration with LG Electronics at the HIGH END 2019 trade show in Munich. This marks both the European launch of the WiSA Ready™* initiative and LG's 2019 OLED and Nano Cell TV series equipped with this special feature. The TVs are compatible with WiSA USB Transmitters and a range of intelligent WiSA Certified™ speakers that deliver unparalleled sound for home theater.

WiSA Ready TVs offer easy connectivity to external wireless speakers with very low latency and, as a result, the best HiFi sound thanks to a growing number of WiSA Certified intelligent speakers. All devices work seamlessly together to wirelessly transmit multichannel audio signals and deliver authentic concert quality sound that enhances enjoyment of movies, videos, music, gaming or sporting events. Unlike traditional wired audio systems, setup is straightforward and takes just minutes, even with more complex 5.1 and 7.1 configurations.

"Audio is a critical component for enjoying fantastic TV and movie content and enjoying our great display technology in gaming or esports," said Andreas Urbach, Head of Product Marketing Home Entertainment at LG Electronics. "Thanks to WiSA Ready, we're able to offer consumers powerful home entertainment sound that doesn't require cables. Together, we're setting the standard for display technology and audio experience."

Why This Was Important: Here again, we view the adoption/certification /launch of “WiSA ready” platforms by companies like LG as markedly validating. We submit, these have not immediately translated into acceptance by consumers (ie: sales and revenues) but we think each new certification speaks to the quality and ultimate ubiquity of the technology.

- **May 22, 2019**

WiSA's 2019 Momentum Continues with Certification of Platin's Monaco 5.1 Wireless Home Theater Speaker System

SAN JOSE, Calif.--(BUSINESS WIRE)-- [WiSA® LLC](#), the Wireless Speaker and Audio Association founded by Summit Wireless Technologies (NASDAQ: WISA) and comprised of leading consumer electronics brands, today announces the certification of the Monaco 5.1 Wireless Home Theater speaker system from Platin, a division of Hansong Technology. The Monaco 5.1 Wireless Home Theater solution is a “white label” product, available immediately for licensing and rebranding by consumer electronics and audio companies worldwide.

The Monaco 5.1 Wireless Home Theater speaker system features the ultimate marriage of performance, simplicity and convenience while delivering award-winning sound with room-filling clarity and bass response. With WiSA certification, the Monaco Speaker System will be able to play wireless, multi-channel audio with low-latency speaker synchronization with any WiSA compatible WiSA Certified™ or WiSA Ready™* sources. This includes new 2019 WiSA Ready LG OLED and Nano Cell (Super UHD) TVs.

Available now, the certification of the Monaco system includes satellite speakers, a center channel speaker and subwoofer. These wireless components can be mixed and matched to create powerful audio systems in any configuration from stereo (2.0) to a 7.1 theater experience. Interested CE and audio brands can contact the Hansong representative in their region for pricing and details.

“Today’s consumers desire high-quality, powerful and aesthetically-pleasing solutions that deliver uncompromised multi-channel sound without the complexity of wires,” said Helge Kristensen, Sr. VP,

Hansong Technology. “As the demand for wireless continues to grow, our Monaco speaker system exemplifies a major shift in how passionate listeners consume home entertainment while serving as an ideal product for the industry’s growing number of WiSA Ready platforms.”

All WiSA Certified and WiSA Ready components work together seamlessly to deliver wireless, multi-channel audio and authentic movie theater sound that immerses the listener into the middle of movies and video, music, sports, gaming/esports and more. As a result, consumers can expect an audiophile experience, but unlike traditional audio systems, set up is simple and takes just minutes even for larger 5.1 and 7.1 setups.

“We’re very excited to add the Monaco 5.1 Wireless Home Theater speaker system to our growing list of WiSA Certified and WiSA Ready products entering the market this year,” said Tony Ostrom, president of WiSA. “As we help our members bring more products to market, the Association continues to evolve the landscape of high-definition wireless audio.”

The Monaco 5.1 Wireless Home Theater System comes from Platin’s parent company Hansong Technology, which was established in 1998 as a manufacturer of high performance, premium audio equipment. Since then, Hansong has significantly expanded at a controlled pace to cover ODM and OEM manufacturing in multiple areas of consumer and commercial electronics. The company’s experience includes products such as such as home theater Hi-Fi and AV systems, custom installation product, professional audio, wireless technologies and commercial audio products.

About Hansong Technology

Hansong Technology was established in 1998 as a manufacturer of high performance, premium audio equipment. Since that time, the company profile has significantly expanded at a controlled pace to cover ODM and OEM manufacturing in multiple areas of consumer and commercial electronics. The current experience includes products such as home theater Hi-Fi and AV systems, custom installation product, professional audio, wireless technologies and commercial audio products.

Why This Was Important: We think this particular certification is important because it touches on one of the other major requirements that we see as necessary for broad adoption of WiSA products, which is retail price point. The Platin system referenced here retails for under \$700. This along with the Enclave Cinehome HD system makes two retail offerings around this price point. As we noted in the initial coverage and thereafter, we think Summit’s opportunity rests in part in arresting some portion of the existing soundbar market. However, in order for that to happen, we think that will require more aggressive price points from some portion of the WiSA enable systems in the market. With offerings like those from Enclave, and this system from Platin, WiSA is beginning to find its way into the market at price points that are competitive with many mid-tier soundbars. We would add, again for the sake of trying to establish timelines and rollouts, this particular certification lead to the launch of the Platin Monaco approximately 6 months later in November (2019).

- ***August 07, 2019***

Summit Wireless Provides Update on Addressable Market

SAN JOSE, Calif.--(BUSINESS WIRE)-- Summit Wireless Technologies, Inc. (NASDAQ: WISA), a leading provider of immersive, wireless sound technology for intelligent devices and next-generation home entertainment systems, provided an update on its addressable market based on investor inquiries.

On August 6, the Wireless Speaker and Audio Association (WiSA) announced it partnered with seven global TV brands, resulting in an expected 20 million WiSA Ready™* televisions to be available globally in 2020.

*“The WiSA standard is the trusted brand for TV manufacturers looking to provide immersive sound to customers,” said Summit Wireless President and CEO Brett Moyer. “The expected install base of 20 million WiSA Ready TVs creates a market opportunity for WiSA speaker members including top brands such as Bang and Olufsen, Harman, Klipsch, System Audio, Enclave and others. Based on customer feedback and our internal assumptions, WiSA’s TV partners are creating a total available market (TAM) opportunity for 20 million WiSA Certified™ speakers and 3 to 5 million WiSA transmitting devices. As WiSA, its members, and retailers roll out a new wave of innovative products with entry level price points under \$1,000 for a 5.1 immersive audio system, we believe a \$45 million** serviceable available market (SAM) is created for Summit Wireless in 2020 and beyond.”*

The addressable market analysis does not impact the company’s 2019 expected results beyond the previously announced LG WiSA ready TV expectations. As retailers and consumers become aware of WiSA products and the benefits of wireless immersive sound, Summit Wireless expects the addressable market to impact speaker growth and Summit Wireless’ revenue in 2020.

** WiSA Ready TVs, gaming PCs and console systems are “ready” to transmit audio to WiSA Certified speakers when a WiSA USB Transmitter is plugged in and a user interface is activated through an APP or product design like LG TVs.*

*** SAM calculation is based on 20 million WiSA Ready TVs, assuming 25% external audio attach rate and a 20% WiSA penetration.*

Why This Was Important: These numbers coincide with our allocation upgrade in mid-2019 and subsequent modeling. To frame the “addressable market” reference, the assumption here is that 25% of buyers of new WiSA ready TV’s will also buy an external sound device (soundbar, home theater etc.). Further, they estimate that 20% of those sales will be WiSA certified systems for a total of 1 million systems. These systems would vary in terms of the number of speakers (and in turn Summit receivers) that each system would utilize, but a \$45 million market would assume 4 to 5 receivers per system.

- **October 01, 2019**

WiSA Announces Commercial Launch of Klipsch’s WiSA Certified Reference Wireless Speaker Line

SAN JOSE, Calif.--(BUSINESS WIRE)-- WiSA® LLC, the Wireless Speaker and Audio Association, comprised of over 60 leading consumer electronics brands, and founded by Summit Wireless Technologies (NASDAQ: WISA), today announced commercial launch of the WiSA Certified™ Klipsch® Reference Wireless speaker series. This exciting new line of Klipsch speakers was awarded “Best of CES” from both *Digital Trends* and *Hi-Def Digest* at the 2019 Consumer Electronics Show (CES).

“The WiSA Certification of our new Reference Wireless line ensures best-in-class audio performance and wide compatibility with today’s most sophisticated intelligent devices and displays,” said Rob Standley, vice president of marketing and product development for Klipsch. “Klipsch Reference Wireless speakers are perfect for those who want the simplicity of a sound bar *and* high-performance multi-channel capable audio,” Standley continued. The new Klipsch Reference Wireless speakers work seamlessly with all

WiSA Certified and WiSA Ready™* products, including the new 2019 LG OLED and NanoCell 4K and 8K TVs. The Klipsch series includes the RW-34C center channel speaker (\$499 U.S. MSRP), the RW-51M front and rear monitors (\$699/pair U.S. MSRP), and the RW-100SW wireless subwoofer (\$599 U.S. MSRP). These speakers can be mixed and matched to create powerful audio systems in any configuration from stereo (2.0) to a big and bold 7.1 theater experience. When combined with the Axiim LINK Wireless Home Theater Transmitter, sold separately for \$199, users can connect their TV to any Klipsch Reference Wireless speaker. The Klipsch Reference Wireless speakers and the Axiim LINK are available now for purchase at Klipsch.com as well as other authorized retailers, both in-store and online. The Axiim LINK is also available at Axiim.com, and can be used with additional WiSA Ready systems, including Xbox gaming consoles as well.

Why This Was Important: Recognize, the new WiSA ready Klipsch “Reference Line” was certified in March 2019, so again, for the sake of understanding the timelines, it took about 7 months to get from certification to retail launch. We would also note, at the time this certification was completed, we believe the initial launch was slated for something closer to June (2109). As we understand it, Klipsch had some additional testing and certification that it required prior to launch. Whatever the case, it seems to us the Klipsch launch was a bit late for the 2019 holiday season, which likely impacted the expectations/missed 2019 sales.

- ***October 28, 2019***

WiSA Announces Nationwide Retail Launch and Point-of-Sale Promotion with Leading Partner Brands at Best Buy

WiSA® LLC, the Wireless Speaker and Audio Association, comprised of over 60 leading consumer electronics brands, and founded by Summit Wireless Technologies (NASDAQ: WISA), today announced the nationwide retail launch and in-store demonstration of WiSA Ready™ and WiSA Certified™ solutions from LG Electronics, Klipsch and Axiim via a point-of-sale promotion at nearly 300 Best Buy locations and select Best Buy/Magnolia Home Theater stores across the country. A full list of retail locations where WiSA solutions are available for purchase can be found [here](#).*

The promotion includes a hands-on point-of-sale display where shoppers can experience first-hand, best-in-class, high resolution wireless sound featuring WiSA Ready LG OLED and NanoCell 4K and 8K TVs, WiSA Certified™ Klipsch® Reference Wireless speakers and the Axiim LINK USB Wireless Audio Transmitter—all designed to the WiSA wireless audio standard. These products are fully interoperable and create amazing home entertainment systems for consumers to enjoy immersive music, movies/TV, games/esports, streaming content, and more.

LG’s 2019 OLED and NanoCell 4K and 8K TVs lead the industry as the first screens to embrace the WiSA Ready standard and make creating 2.0 and 5.1 audio systems easier than ever before by quickly connecting to WiSA Certified wireless USB transmitters and any WiSA Certified speakers. “Best Buy consumers will now enjoy the tremendous benefits of truly immersive, wireless sound that complements all kinds of big screen home entertainment from movies and video to games, esports, and more,” noted Tim Alessi, senior director, product marketing at LG Electronics USA.

The award winning Klipsch Reference Wireless speaker line is comprised of the RW-34C center channel speaker (\$574/each U.S. MSRP), the RW-51M front and rear speakers (\$799/pair U.S. MSRP), and the RW-100SW wireless subwoofer (\$689/each U.S. MSRP). These speakers can be mixed and matched to create powerful audio systems in any configuration from stereo (2.0) to a big and bold 7.1 theater experience to completely immerse listeners in powerful, detailed sound requiring no speaker wires and complicated receiver setup. “By combining our WiSA Certified Reference Wireless speaker line with

additional WiSA products, the simplicity of a sound bar and high-performance multi-channel capable audio has become a reality for Best Buy customers and beyond,” added Rob Standley, vice president of marketing and product development at Klipsch.

Tying these great products together is the Axiim LINK USB Wireless Audio Transmitter (\$229 U.S. MSRP). LINK works with all WiSA Certified speakers and is the world’s first and only multi-channel wireless USB device for 2019 LG OLED and NanoCell 4K and 8K TVs, and is designed for Xbox One and Windows 10. The LINK mobile application offers advanced control of the system, including bass management, channel audio level control, equalization, and more. “Axiim LINK transmitter allows users to take full advantage of their audio experience,” said James Hammer, CEO at Axiim. “This deployment with LG, Klipsch and WiSA is truly enabling the future of immersive wireless sound.”

Why This Was Important: As we will reiterate in the summary of this update, we think one of Summit’s challenges through 2019 and perhaps through 2020 as well, is related to informing and educating potential consumers about the ubiquity and the value proposition of Summit’s technology. We think this initiative represented the first attempt between Summit and other WiSA certified partners, to collaborate on concerted consumer outreach. Here again, we think the launch of the promotion may have been a bit behind the curve in terms of optimally impacting 2019 holiday sales, but we also think it was an important step in terms increasing awareness of WiSA certified products.

- *January 06, 2020*

WiSA Fuels the Growing Wireless Audio Category; CES Showcase Highlights the Future of Home Entertainment

LAS VEGAS--(BUSINESS WIRE)-- Consumer Electronics Show—WiSA® LLC, the Wireless Speaker and Audio Association, comprised of over 60 leading consumer electronics brands, and founded by Summit Wireless Technologies (NASDAQ: WISA), today unveiled its line-up of product demonstrations, showcasing WiSA’s superior wireless audio technology standard—already adopted by the world’s top consumer electronics manufacturers and brands. Newly launched and up-and-coming wireless home audio solutions will be demonstrated January 7-10 in WiSA’s suite (#29-236) at the Venetian Hotel.

“With the acceleration of WiSA Ready™ TVs and WiSA Certified™ products in market and coming to market in 2020, as well as new transmitter solutions, the future of wireless home audio is already here,” said Tony Ostrom, president of WiSA. “WiSA experienced tremendous traction in 2019 and that volume is anticipated to grow exponentially in 2020 and beyond. As a result, WiSA technology is truly the new gold standard of the industry, powering and connecting the most advanced devices and systems for wireless home audio.”*

WiSA Demos and Highlights at CES Include:

- ***LG Electronics:*** *continued support of the wireless audio movement, making its 2020 OLED and NanoCell TVs WiSA Ready*
- ***Harman Kardon:*** *launched its second WiSA Certified solution—The HK Surround 5.1, a simple, single box solution, aimed at the mid-level price market and delivering big sound*
- ***Savant Smart Audio:*** *launched its Smart Audio WiSA Certified product line, elegantly integrating intelligent, whole house control and an immersive multi-channel audio system based around a feature-packed sound bar and offering surround speakers and a subwoofer to complete the immersive experience*

- **Enclave:** launched three new home theater systems as well as its Cinesync application for smart TVs and smart devices that allows the user to set up, tune and control their wireless home theater system with their existing remote via a large range smart TVs and devices from multiple brands, including Apple, Amazon, Nvidia, Sony, Toshiba, and Insignia
- **Sharp:** exclusive sneak peek at a prototype of new WiSA Ready speakerless 8K TV, slated for release later this year
- **Monaco 5.1 Plus Axiim LINK System:** newly launched, updated system delivers immersive, theater-quality experiences leveraging the WiSA audio standard, as well as its Tuned by THX calibrations. This updated edition features the Axiim LINK, so users can take advantage of enhanced tuning capabilities—EQ, channel trim and bass management. For Xbox players in particular, this heightens the surround sound experience to pull gamers even deeper into the action within the ultimate, wireless audio environment
- **New WiSA Transmitter Solutions:** showcase of multiple, new and simple solutions that will make it seamless to connect to approximately one billion new and existing TVs – and vastly expand the market opportunity for delivering amazing and immersive audio experiences with ease

Why This Was Important: As we alluded to above, CES is one of the premier consumer electronics show in the world. Summit has showcased WiSA technology at the show for the past few years and typically follows that participation with an update/updates regarding that participation. What we think is worth noting about the announcement above, is that the highlights/WiSA certified partners they list above predominantly involve brands and/or projects that were largely certified following the 2019 holiday cycle. That is, they represent several new platforms that will be available in 2020 that were not available in 2019. Succinctly, the number of *WiSA ready* products available at retail in 2020 (especially for the all-important holiday season) should be considerably larger than 2019. In addition, we would highlight the “New WiSA Transmitter Solution” they alluded to above. This product called “SoundSend” is a WiSA branded product that they expect to retail for between \$99-\$149 and be available in 3Q 2020. We think the product will further improve the uniqueness, simplicity and overall price point for consumers looking to utilize WiSA wireless technologies.

- **February 26, 2020**

Consumer Interest Increases in WiSA Products

SAN JOSE, Calif.--(BUSINESS WIRE)-- **WiSA LLC**, the Wireless Speaker Audio Association, founded by **Summit Wireless Technologies, Inc.** (NASDAQ: WISA), reported noticeable growth in consumer interest, during the fourth quarter of 2019 and continuing into first quarter 2020.

The Association reported the following*:

- 560% growth in unique users (UU), which is defined as individuals who visited the site during a set period of time, on the WiSA Association website from Q3 2019 to Q4 2019
- 19,200+ UUs visited and utilized website in Q4 2019
- 3,400+ UUs visited and utilized the website in Q3 2019
- ~60% of the UUs clicked a member’s “Buy Now” or “Learn More” link
- The number of UUs visiting and utilizing the website through February 20, 2020, has surpassed Q4 2019’s UUs

* The Association is able to identify and measure the number of UUs using Google analytics.

“We believe that consumer interest in WiSA Certified technology is increasing noticeably,” said WiSA Association’s President Tony Ostrom. “As more products are launched and complete solutions are available, consumers are learning about what constitutes “immersive sound” and how WiSA Certified offerings compare to similarly priced soundbars. With the simplicity of setting up a WiSA Certified system, it’s easier than ever to enjoy an immersive sound environment. Based on the increase in website traffic and the length of time a visitor spends on the website, we believe our website is serving as an educational portal for our certified brands, providing a wealth of information for their consumers.”

For the 2019 holiday season, major well-known brands, including LG, Harman (a division of Samsung), Klipsch, Enclave Audio, Platin Audio, System Audio, Primare, Savant, Bang and Olufsen, and Axim, began marketing WiSA Certified products. The 5.1 immersive surround sound systems with price points ranging from \$499 to \$15,000+, are being marketed and positioned to a very broad range of consumers, which is leading to the increased website traffic. More importantly, the majority of visitors clicked through to their favorite brands, which the Association believes is helping to drive purchase decisions.

Why This Was Important: While 2019 financial results were below expectations, the Company believes the year included considerable progress in terms of raising consumer awareness of WiSA and Summit’s associated wireless technology. We think the above data support that view. The Company has been doing additional work in terms of building direct to consumer data and awareness for WiSA and related Summit technologies.

In conjunction, we believe that Company has seen marked traction in attracting new WiSA members that has eventually translated into the certification and retail launch of a growing number of WiSA ready products. We expect that momentum to continue through 2020 and beyond as well. In our view, the WiSA membership roster is impressive in terms of both the quality of the members as well as the growth of WiSA since our initiation in 2018 but perhaps more impressively over the past 12 months. For the sake of illustration, we have cut and pasted the member rosters below for review and the following URL provides the same information in a less condensed format:

<https://www.wisaassociation.org/about-wisa/our-members/>

WiSA Members

TV Members



Transmit Members



Transmit + Speaker Members



Manufacturer Members



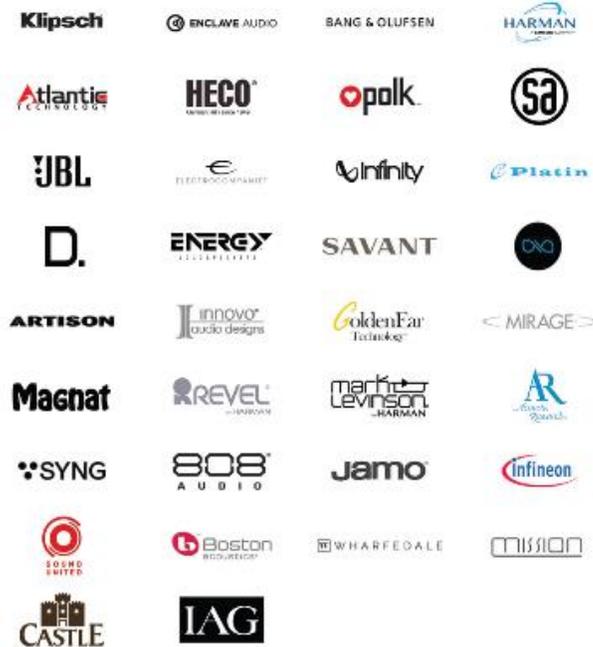
Transmit + Speaker Members



Strategic Members



Speaker Members



To reiterate, despite the Company’s success attracting new CE members and ultimately customers, revenues for 2019 were well below expectations and that dynamic was impacted by a handful of factors including some certifications that took a bit longer than anticipated and some launches that we think missed the 2019 holiday window. However, in our view the greater challenge here was and still is creating consumer awareness of WiSA branding and ultimately the purchase of “WiSA Ready” products. Succinctly, after some retrospective of 2019,

we think it is clear that Summit's biggest challenge is consumer awareness of the interoperability, simplicity quality and price of their wireless technology. We will unpack those attributes one at a time.

As we have repeated throughout our coverage, the end game for Summit is to make WiSA a wireless audio standard that people recognize like they recognize Bluetooth, Dolby etc. That standardization includes the interoperability that allows consumers to know that for instance, *WiSA Ready* televisions from LG work seamlessly with *WiSA Ready* speakers made by Klipsch and or by Enclave. Obviously, Summit has not reached that standard "status" and getting there will determine the acceleration of the business. While attaching names to WiSA like many of the consumer electronics companies listed above is certainly a big benefit, this is not an easy task for small a company and frankly it's a task that we underestimated in our initial and subsequent coverage of the Company, which brings us to our next adjective.

The Company built the technology to be simple to install. On some levels, the interoperability issues speak to that as well. We have spent some time reading reviews, and while you cannot please everyone, we think the general consensus among the reviews is that the system is simple to install. In our view, that is important in the context that while the technology is essentially in the home theater space, it is also aiming at the soundbar market and there are not many consumer electronic devices that are easier to install than a soundbar. Recognize, some of the new WiSA certified products are geared towards simplicity. For instance, the new *WiSA Ready* LG TV's allow users to access the home theater system from the LG television controller. That *is essentially* the functionality that is built into the television and is ubiquitous across any WiSA certified speakers. That is, the *WiSA Ready* LG television will find any and all WiSA certified speakers and automatically sync them. That is also some of the rationale behind the Company's new SoundSend Transmitter they will be launching shortly. The goal is to make *WiSA Ready* products *easily* integrated and interchangeable. We think they have done a good job of approaching that goal technically, but we are not so sure they have convinced and or made consumers aware of that just yet.

When we first heard the Summit story, one of our concerns was the quality of the technology as a true multichannel wireless offering. We heard the system demo briefly and it was impressive, but we are not sound engineers. That said, we believe our initial instincts regarding the technology's ability to deliver high fidelity true multichannel wireless audio with negligible latency was/is accurate. If that were not the case, we would not still be beating this drum. Moreover, we think that is validated by the quality of the CE companies that are continuing to develop, certify and sell *WiSA Ready* products. We think it is further validated by CES and other industry reviews regarding the performance of *WiSA Ready* products and platforms. Here again, we are confident of the superior quality of the product in terms of multichannel wireless audio, but that is clearly a message Summit (and its *WiSA Ready* partners) need to do a better job of sharing with the public. Certainly, the Best Buy point-of-sale promotion we addressed above was aimed at that, but we think they need more promotion in that regard and we believe they are developing more direct to consumer and other initiatives to approach that awareness.

Lastly, as we also covered above, several speaker companies have launched *WiSA Ready* packages and some of those have launched more than one program. For instance, we believe both Bang & Olufsen and Enclave each have three packages in the market, and our sense is that as we move forward there will be a growing number of brands each with multiple offerings at retail. Clearly, that would be a positive scenario for Summit. However, in our view, there is another dynamic emerging from new brands integrating *WiSA Ready* into their products that we think is highly encouraging and this is another point we illustrated above.

Summit's early adopters tended to be higher end speaker manufactures and include names like Klipsch, Bang & Olufsen and Harman Kardon. Economically, that makes sense. A low end manufacture selling a \$100 speaker will pay the same (roughly \$10) for a Summit/WiSA receiver as a high end manufacturer putting it into a \$1000 speaker. However, in order for Summit/WiSA to arrest market share from the soundbar market, they will most certainly have to attract adoption from brands willing to sell systems in the sub \$1000 market and more likely

the sub \$500 market. As we suggested above, there are currently more than one WiSA enabled 5.1 system at retail today in the sub \$1,000 category and we believe sub \$500 promotions are likely in the near term. While we have argued, and modeled for that matter, that we believe *WiSA Ready* immersive sound offerings will ultimately take market share from soundbars, we also think that will require price points that are more competitive with soundbars. We submit, given that there are many soundbars in the sub \$200 and even some in the sub \$100 range, we don't think *WiSA Ready* offerings can compete on price alone with that portion of the soundbar market. However, setting aside the low end "value range" of the soundbar market, we think many *WiSA Ready* systems will be highly competitive at even mid-range soundbar price points and we think that is especially true given the technology's superior attributes. We expect the Company to be able to further attack pricing as some of its "NextGen" technology advances. That said, here again, creating awareness of those superior attributes especially in conjunction with lower priced brands/systems, remains a challenge the Company will need to overcome if it is to be successful. We continue to believe that they have demonstrated and will continue to demonstrate progress to that end. As we noted, we believe the Company is becoming more active in addressing consumer awareness of the *WiSA Ready* platform.

- **The Mea Culpa**

We spend quite a lot of time in our research noting the lack of visibility in much of the microcap space. In that regard, modeling/projecting revenues and cashflow is a particularly difficult task with respect to companies that are pre-revenue and/or just emerging into commercialization. On a more granular level, it is perhaps even more difficult when these small companies' commercialization strategies depend on larger companies embracing and integrating their products/technologies into their processes and/or products. Anyone who has followed microcap companies for any period of time is likely quite familiar with that statement and we think it is topical to Summit on some levels.

Again, projecting revenues for small emerging companies entering the commercial phase is difficult to say the least, which brings us to a point of clarity that we think requires some discussion. Succinctly, we have taken a fair amount of criticism for our aggressive numbers on WISA, and to be clear, this is not the first coverage company we have missed badly on and it likely will not be the last. To that end we would reiterate something we try to highlight is the early stage stories we cover. First, our goal is not to hit initial commercialization numbers on the head. We are certainly not that good, and we are not sure anyone else is either. In this case, as with most others in this bucket, we rely on company guidance for a roadmap to these numbers because we tend to think that they are probably in the best seat to make these sorts of judgments for obvious reasons. That said, these companies (and as a result their guidance) often lack much of the same visibility we lack and while some would argue that companies that likely will require additional capital have an incentive to provide aggressive guidance, we tend to believe that they also generally provide guidance they believe at the time they can achieve. We can attest that the fallout of missing guidance is often stark, so they also have plenty of incentive to get it right or at least reasonably so. In most cases, they derive that guidance from sales efforts or other "pipeline" based metrics that they believe they can convert. Unfortunately, the pipeline data are rarely definitive and consequently misses are commonplace.

The above said, as a matter of process, we attempt to "smooth" the recognition that our estimates will likely be wrong, by applying steep discounts to our valuation conclusions and that notion in turn gets into another discussion about "cost of capital" and other germane metrics. While that approach is certainly susceptible to error, we have found that over longer periods of time, it has served us well. Put another way, what we are really trying to do with our models is to attempt to delineate a reasonably defensible sales *trend* that we think can play out over the next several quarters. That is, we submit that our initial (or even revised) timing may not be accurate, but we try to rationalize that sales trend in the context of the numerous variables that will ultimately impact it.

Those variables include a host of notions including the size of relevant markets, our view of the competitive posture of the company's products/services, access to capital to execute on those variables and a host of others.

To be clear, our "charter" at Trickle Research is to find and cover companies in these early stages, which on the face means our models, one quarter to the next are often inaccurate. We would like to think that does not mean we are bad at what we do, but rather it is the nature of analyzing (and investing in) companies at these stages. In our defense, we have also, covered many companies that included better revenue/earnings visibility from the start of our coverage or that reached that point over the course of our coverage, and in those cases, in our view, we generally do as good a job as most of modeling results much closer to actual results. We can provide plenty of examples of that, but we also submit that when we get to that place, we are often approaching the point where the "early stage" "undiscovered" nature of those companies is no longer as topical as it once way. To translate, when a company reaches a point where visibility has improved and revenue and earnings become more predictable, the company has probably attracted far more attention from investors as well as other analysts, which by definition no longer makes them so "undiscovered". Our expectation is that at that point, the valuation of the underlying shares will reflect that improved visibility, which will often result in us moving on to another story that better fits our "undiscovered" criteria.

To expand on our "undiscovered criteria" notion, it is not that we believe that companies with \$300 million, \$500 million or even billion dollar valuations cannot possess considerable additional valuation upside. We just tend to believe that preponderantly, microcap stocks lack the visibility and in turn lack the following that is often synonymous with pricing inefficiencies that afford the opportunity for extraordinary gains over the longer term if our "sales trend" thesis proves reasonably accurate, even if it takes longer than we initially model and/or expect. By the way, it seems as if few things in the microcap space happen when they are "supposed" to, which brings us to our next point.

We note quite often in our research that access to capital may be one of the single biggest challenges facing small emerging companies. They typically burn cash for measurable periods (some longer than others) and in most instances, that cash burn must be financed with equity and the associated dilution. While there are some exceptions, most small early stage companies do not have access to conventional debt financing and as such any debt they do procure is generally some sort of convertible that is really just equity in disguise. Again, that is not always the case, but in most instances that is the reality. As a result, while certainly many small emerging companies simply fail and fold up the tent, many others prove remarkably persevering and manage to attract equity of some kind to keep the balls in the air. We would argue that typically the difference between the two (failure versus added dilution) is often a function of the viability of the business plan in the first place. That is, while certainly some fail as a result of the changing macro and/or micro environments around them, which includes the state and/or accessibility of the equity markets when they most need the capital, others simply fail because the business plan was flawed to begin with.

Again, we would suggest that those that manage to stay in the game do so because they do have a viable business plan and the opportunities that plan affords allow them to continue to access the equity markets and frankly, that access is often predicated on management's abilities and aptitudes to continue to attract capital around that narrative. In that case, the question becomes one of what that additional capital will cost and when they can access it. To put that into perspective, we have seen many public microcap companies ultimately succeed in terms of getting the business to revenues and ultimately profits, even to levels originally anticipated, but the dilution added along the way was such that the investment of earlier investors in those companies still resulted in losses. In that case, "success" is a relative term, but on Wall Street success is measured by investors' profit and the absence of that profit is certainly not success, regardless of where the Company ultimately ends up fundamentally. Succinctly, we believed that the Company's technology would ultimately carve out meaningful market share in the consumer electronics space and we still believe that. **That is our mea culpa. In our original**

initiation, we anticipated further dilution but we did not see this kind of dilution coming. However, we think that requires some color as well.

As we alluded to above, we tend to believe that continued access to capital is a function of the perceived viability of the business. In the case of Summit, we submit adoption of the technology in terms of revenues and revenue growth has taken longer than either we or the Company has anticipated. Again, that is not atypical of the space. On the other hand, in our view, the Company has achieved major milestones in terms of attracting WiSA members and ultimately customers and those groups include some of the large and/or well established consumer electronics companies in the world. In fact, we would argue that outside of the revenue traction, Summit has managed to achieve much of what we believed they would. The progress the Company has made in terms of attracting meaningful players to the technology as well as the general reviews of the technology in the CE space are in our view highly positive and speak to the viability issue we addressed above. That said, the street has apparently been less impressed by that progress than we have because as we noted, the stock has traded to a small fraction of the relative valuation of that which it commanded at the time of our initiation. To reiterate, we are shocked by that given some of the progress we perceive, but Summit is not on an island when it comes to that reality.

Several months ago, we provided a general overview of the state of financing in the microcap space. To summarize that overview, over our 35+ years in the space, we cannot remember a period of time where financing for companies with reasonable prospects of success were done at deeper discounts. Granted, we certainly don't see everything that happens in the space so maybe we are just seeing part of the story. However, in our view there are some fundamental and perhaps systemic reasons for what we have been seeing, that we think support our assessment. On a broader scale, we think that notion has played out in larger equity markets as well where the (in our view) lofty valuations of major indices are largely a function of just a few associated companies. The minutia/complexities of that are beyond the scope of this update, but to the point, Summit Wireless is certainly not an exception when it comes to small companies in need of capital that have seen their market capitalizations decimated as a result of that need. To reiterate, in our view, that speaks to what we believe is considerable disfunction in the capital markets on a variety of levels. In a world awash with central bank liquidity it seems counterintuitive that many companies, even those with reasonable prospects for success cannot seem to access capital. The simple takeaway may be that there is clearly a *considerable premium* on profitability, which certainly makes some sense... to a point.

We understand discounting in the stock associated with additional capital requirements and from our end, we did a poor job of projecting cash needs largely because revenues did not materialize when we thought and those two things go hand in hand. What is surprising to us, is the lack of "value" the equity markets have placed on what we see as Summit's accomplishments over the past two years as manifested in the steep discounts associated with the subsequent financings. Even today, post splits and subsequent raises, the stock trades at a market cap of about \$17 million in spite having accumulated a deficit \$190 million getting to this point.

To summarize, we clearly anticipated a quicker adoption/rollout of *WiSA Ready* products. By extension we anticipated more revenues and *far less* dilution and while we are certainly willing to own our miscalculations in that regard, we remain perplexed by the magnitude of the dilution in the face of what we continue to argue has been progress by the Company. We cannot change that. Further, we had expected 2020 to reflect the revenue breakout we were looking for in 2019. Prior to the pandemic, we felt like 2020 revenues in or around \$10 million was a reasonable expectation. Unfortunately, we have no idea what the pandemic will do to 2020 CE sales, and as far as we can gather from remarks from other CE companies (which includes some of Summit's customers) they do not know either. Needless to say, we have cut our expectations for 2020 well below our initial projections. That said, perhaps we can frame some of the metrics we know to give investors a sense of what may ultimately drive the numbers.

We believe Company currently has about 10-12 systems in the market amongst 6 or 7 speaker brands. We also know that some of these have multiple systems in the market. We think the general expectations for manufacturers are that they will sell 25,000 to 30,000 systems for mid-range (\$1000-\$1500) priced units, and those number get larger as price points decline. For instance, manufacturers of \$200 retail soundbars might be anticipating more like 150,000 to 200,000 units. So then, we estimate that a \$700 retail system from Enclave might be a 35,000 unit opportunity, which would translate into roughly \$2 million worth of business to Summit. By extension, we also think that a customer like Enclave (that we believe already has multiple systems in the market) could ultimately be an \$8 million to \$10 million customer if they deploy multiple platforms at more moderate price points. That would contrast with platforms like System Audio's new Legend Silverback line, which is considerably more expensive and presumably would sell fewer units at retail. The point is, the addition of brands and new systems within those brands is in our view a significant indicator provided Summit and their customers' brands are able to raise consumer awareness and retail sell through.

We submit, this has been a disappointing descent, but again, we do not think the stock's decline is commensurate with their progress. Given the new capitalization, which includes the new cash resources we illustrated above, we are establishing a new 12-24 month price target of *\$14.00. Our inclination is to raise our allocation given what we believe is a marked disconnect between the current market cap and our target. However, given the uncertainty around Covid, we would like to see the 2Q results and some additional related color from the Company regarding the upcoming holiday pipeline before we cross that bridge. Further, we suspect the market will need to *digest* the newly issued shares so that could provide some headwinds in the near term as well. Regardless, to reiterate, we believe the value of the Company is markedly better than current prices suggest. We will revisit both our targets and our allocation assessments as more visibility becomes available.

Projected Operating Model

Summit Wireless Technologies, Inc.						
Projected Operating Model						
By: Trickle Research LLC						
	(Actual)	(Estimate)	(Estimate)	(Estimate)	(Estimate)	(Estimate)
	3/31/20	6/30/20	9/30/20	12/31/20	Fiscal 2020	Fiscal 2021
Revenue, net	\$ 411,480	\$ 192,024	\$ 1,194,816	\$ 1,045,464	\$ 2,843,784	\$ 11,526,000
Cost of revenue	\$ 347,800	\$ 232,497	\$ 924,423	\$ 821,370	\$ 2,326,090	\$ 6,258,820
Gross profit	\$ 63,680	\$ (40,473)	\$ 270,393	\$ 224,094	\$ 517,694	\$ 5,267,180
Operating Expenses:						
Research and development	\$ 1,133,600	\$ 632,681	\$ 697,793	\$ 691,819	\$ 3,155,892	\$ 3,061,040
Sales and marketing	\$ 697,600	\$ 626,920	\$ 636,948	\$ 635,455	\$ 2,596,923	\$ 2,615,260
General and administrative	\$ 892,600	\$ 606,975	\$ 627,733	\$ 624,641	\$ 2,751,949	\$ 2,587,765
Total operating expenses	\$ 2,723,800	\$ 1,866,576	\$ 1,962,473	\$ 1,951,914	\$ 8,504,764	\$ 8,264,065
Loss from operations	\$ (2,660,120)	\$ (1,907,049)	\$ (1,692,081)	\$ (1,727,820)	\$ (7,987,070)	\$ (2,996,885)
Interest expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in fair value of warrant liability	\$ 37,000	\$ -	\$ -	\$ -	\$ 37,000	\$ -
Change in fair value of derivative liability	\$ 19,000	\$ -	\$ -	\$ -	\$ 19,000	\$ -
Gain on extinguishment of convertible notes payable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other income (expense), net	\$ (2,000)	\$ -	\$ -	\$ -	\$ (2,000)	\$ -
Loss before provision for income taxes	\$ (2,680,120)	\$ (1,907,049)	\$ (1,692,081)	\$ (1,727,820)	\$ (8,007,070)	\$ (2,996,885)
Provision for income taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Preferred Dividend	\$ (20,000)	\$ -	\$ -	\$ -	\$ (20,000)	\$ (2,996,885)
Net loss Attributable to Common Shareholders	\$ (2,700,120)	\$ (1,907,049)	\$ (1,692,081)	\$ (1,727,820)	\$ (8,027,070)	\$ (2,996,885)
Net loss per common unit/share - basic and diluted	\$ (2.19)	\$ (0.25)	\$ (0.22)	\$ (0.23)	\$ (1.32)	\$ (0.39)
Weighted average number of basic common units/shares used in computing net loss per common unit/share	1,230,598	7,653,603	7,653,603	7,653,603	6,047,852	7,761,747
	1,230,598	7,653,603	7,970,885	8,334,314	6,297,350	9,514,066

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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. 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.