



WiSA Technologies, Inc. (f.k.a. Summit Wireless Technologies, Inc.)

Q4 inline and strong 2022 guidance. We believe expected large ramp in WiSA products in 2022 should drive shares higher. Lowering P/T to \$10.

Q4 inline: WiSA recently (on March 11) reported its Q4 2021 (ending December) results. Revenue was \$2.0 million (+93% y-o-y), compared with our and consensus estimates of \$1.9 - 2.0 million. EPS was \$(0.20), compared with our estimate of \$(0.24) and consensus of \$(0.22). In January, the company preannounced Q4 revenue of \$2.0 million which was about inline with its prior guidance for \$1.8 – 2.0 million.

Strong growth: The company had strong Q4 revenue growth (+93% y-o-y) as its consumer electronic companies partners introduced and expanded WiSA products. Total 2021 revenue growth was +172% (y-o-y).

Strong 2022 guidance: The company initiated 2022 guidance for revenue of \$8.5 – 9.8 million (+30 – 50% y-o-y).

Adjusting estimates: We are adjusting our 2022 estimates for revenue to \$9.6 million, from \$12.0 million, and for EPS to \$(0.55) from \$(0.75).

35 million soundbar opportunity: We believe consumers’ interest in wireless immersive sound continues to grow thereby driving increased products by consumer electronic manufacturers. 35 million soundbar units are estimated to have shipped worldwide in 2020. Given WiSA technology superiority over soundbar, we believe WiSA should gain market share. If WiSA can get just a 5% market share, that would imply a \$100 million market opportunity for WiSA.

Revenue ramping up: Over 25 customers (brands) using WiSA’s technology shipped products into the market in 2021 and this is expected to significantly increase over the next year. We note 4 WiSA speaker systems launched priced <\$1,000 which we believe is the sweet spot for mass adoption including the WiSA distributed Platin’s brand speakers starting at \$799 (which may represent ~10% +/- of WiSA’s revenue).

WiSA growth should drive growth: WiSA membership is now over 70 brands. The WiSA Association (owned by WiSA) increasing membership is likely to increase products utilizing WiSA’s products and technology.

WiSA Wave growth to drive sales: WiSA Wave marketing program is driving strong consumer traffic and is expected to increase to over 4 million visitors in 2022 (up ~2x 2021’s traffic). Large and increasing consumer awareness should drive WiSA product sales.

Early stage, but large sales opportunity: We acknowledge that WiSA is still at an early stage in its product commercialization and revenue generation is still low (though fast growing), but believe key financial and product milestones and sales and design wins in the next year should be positive catalysts for the stock.

Positive high risks versus rewards: We believe that the current valuation for WiSA has already factored in many of its risks (principally its ability to grow sales) but is under valuing its overall growth prospects and product portfolio, resulting in a positive risk versus reward scenario for an investment in WiSA.

New corporate name: The company just announced the change of its name to WiSA Technologies from Summit Wireless Technologies.

Solid balance sheet: WiSA had \$13 million in cash and no debt at the end of Q4. We believe WiSA has enough cash into 2023.

Current valuation attractive: We are maintaining our BUY rating, but lowering our 12-month price target to \$10 from \$12, which is based on a NPV analysis. We believe this valuation appropriately balances out the company’s high risks with its high growth prospects and large upside opportunities.

Company Description

Based in San Jose, CA, WiSA Technologies (f.k.a. Summit Wireless Technologies) sells audio semiconductor chips, modules and license IP to enable the WiSA Association interoperability standards to deliver immersive wireless sound.

United States
Technology

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Edward Woo, CFA
(949) 259-4932
ewoo@ascendant.com

COMPANY UPDATE

Rating: **BUY**

Ticker: WISA

Price: \$1.17

Target: \$10.00
(from \$12)

Stock Data

Exchange:	NasdaqCM
52-week Range:	\$1.00 – 7.06
Shares Outstanding (million):	17
Market cap (\$million):	\$20
EV (\$million):	\$7
Debt (\$million):	\$0
Cash (\$million):	\$13
Avg. Daily Trading Vol. (\$million):	\$0.3
Float (million shares):	14
Short Interest (million shares):	0.2
Dividend, annual (yield):	\$0 (NA%)

Revenues (US\$ million)

	2022E (Cur.)	2022E (Old)	2023E (Cur.)	2023E (Old)
Q1 Mar	1.2E	2.0E	1.7E	
Q2 Jun	1.6E	2.7E	2.2E	
Q3 Sep	2.8E	3.1E	4.0E	
Q4 Dec	4.1E	4.3E	6.0E	
Total	9.6E	12.0E	14.0E	
EV/Revs	0.7x		0.5x	

Earnings per Share (pro forma)

	2022E (Cur.)	2022E (Old)	2023E (Cur.)	2023E (Old)
Q1 Mar	(0.08)E	(0.14)E	(0.12)E	
Q2 Jun	(0.09)E	(0.17)E	(0.13)E	
Q3 Sep	(0.17)E	(0.20)E	(0.24)E	
Q4 Dec	(0.21)E	(0.24)E	(0.31)E	
Total	(0.55)E	(0.75)E	(0.79)E	
P/E	N/A		N/A	

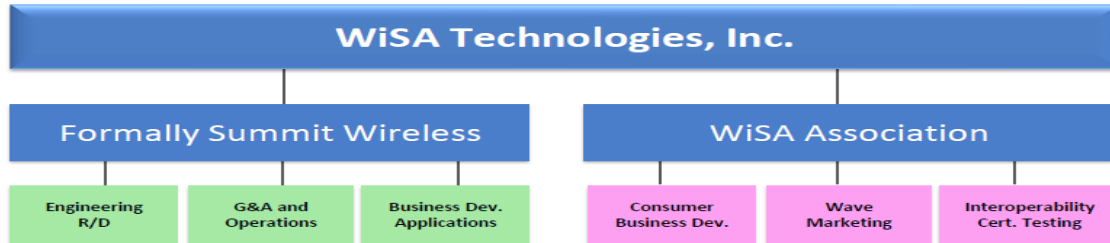
Important Disclosures

Ascendant Capital Markets LLC seeks to do business with companies covered by its research team. Consequently, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making an investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report, beginning on page 12.

Exhibit 1: WiSA Technologies, Inc. (f.k.a. Summit Wireless Technologies, Inc.) Overview

Summit Wireless and WiSA Association now under WiSA Technologies, Inc. umbrella



WiSA Association: Building a Standard



The WiSA Association has 70+ member brands implementing worldwide standards for high definition, multi-channel, low latency audio using our WiSA global interoperability standard



25+ Brands Shipping Summit Wireless' Technology



2021 Shipping Display Brands	2021 Shipping Soundbar & Speaker Brands
Strategic Partners	

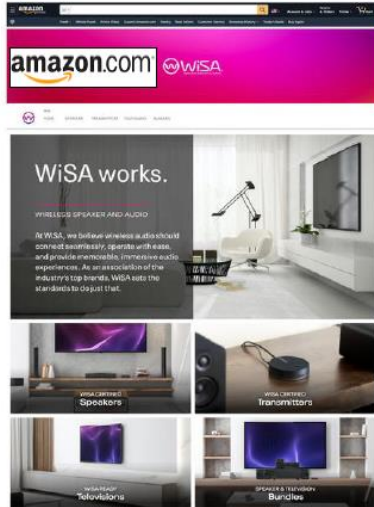
Source: Company reports

Exhibit 2: WiSA Products

Expanding the Ecosystem: 7 Storefronts



7 Online Retail Storefronts Opening



Establishing Various Price Points

Audiophile Brands
\$2,000 - \$20,000



Mainstream
\$1,098 - \$1,495

ENCLAVE



Entry Level
\$799 - \$999

Platin
Milan 5.1 with
WiSA SoundSend



15

Source: Company reports.

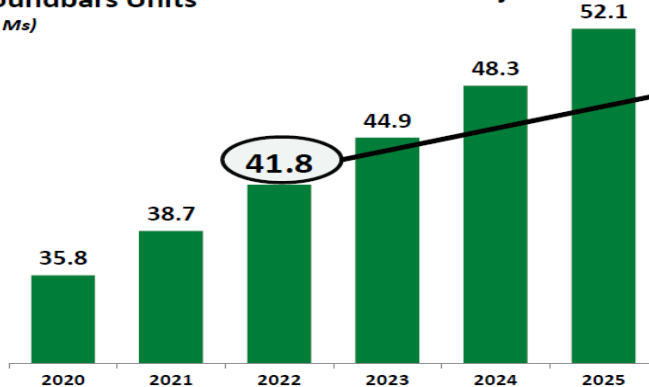
Exhibit 3: WiSA's Market Opportunity

Soundbars: Target Market of Discovery Technology



Soundbars Units*
(in Ms)

2022 Projected Soundbar SAM**



* Source: Infiniti Research September 2021

Audio Configuration	WISA _{DS}
Soundbar units (Ms)	41.8
Market Share	5%
WiSA Systems (Ms)	2.1
Speakers per configuration	3
Transmitters per system	1
Modules (Ms)	8.4
Module ASP (\$ per unit)	\$3.00
Rev. Opportunity (Ms of \$)	\$25

** Management estimates: Factors include content availability, simplicity for the consumer, price, multiple brands

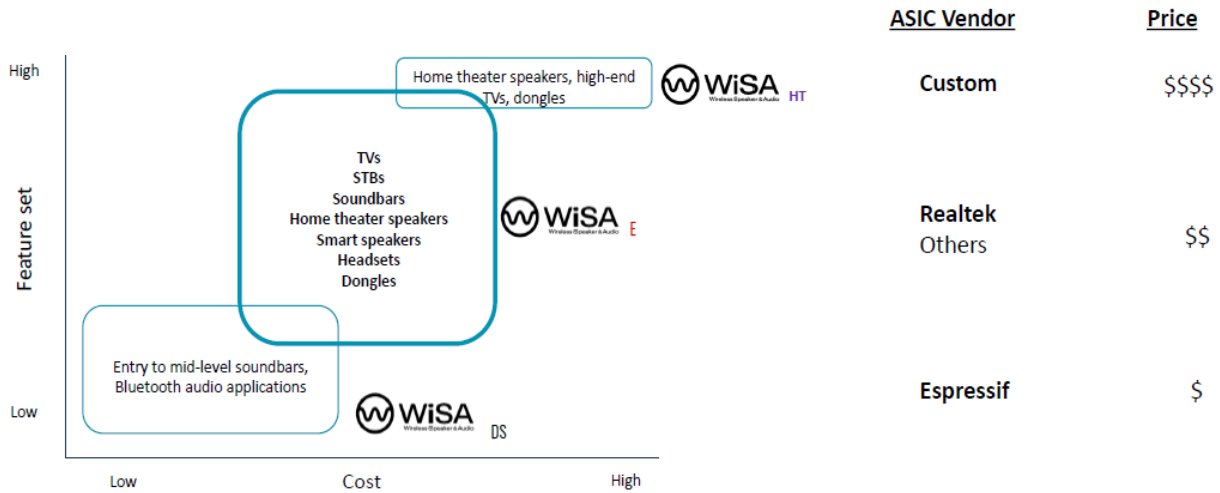
Source: Company reports.

Exhibit 4: WISA's Products

WISA Product Families

WISA Technologies has a 10-year history of providing feature-rich wireless spatial technology for the premium market.

WISA Technologies' recent product and partnership announcements focus on bringing the same technical know-how to build and market wireless spatial technology for mass-market products.



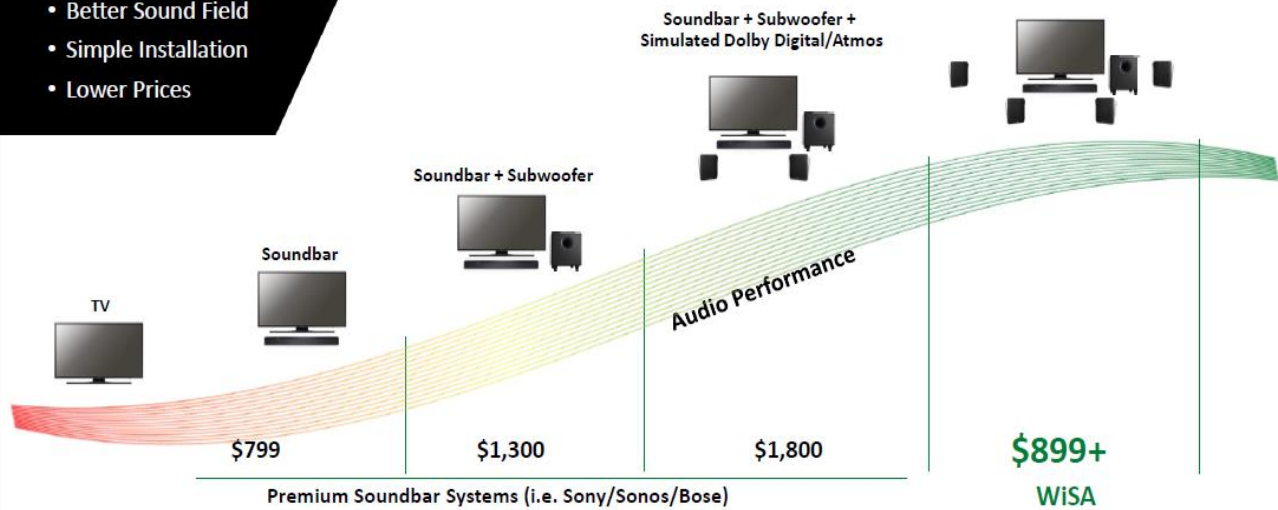
Today's Sound Experience Options



WISA's Advantage

- Better Sound Field
- Simple Installation
- Lower Prices

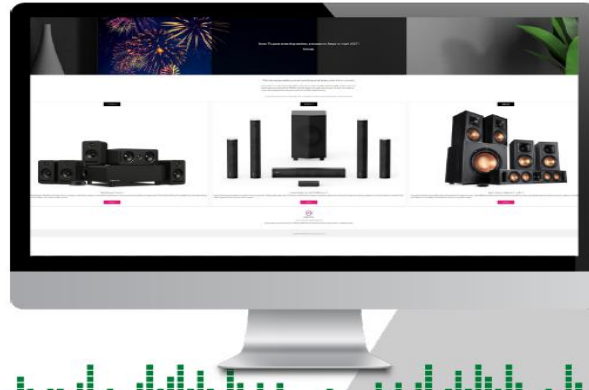
WISA Home Theater
Discreet Speakers / Spatial Sound



Source: Company reports.

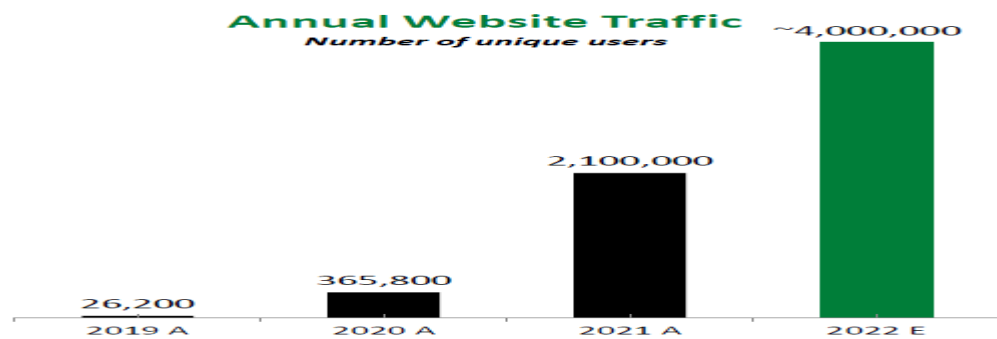
Exhibit 5: WiSA Wave

WiSA Wave Increasing Consumer Engagement



- SUMMIT** **WISA**
- Launching new website
 - Unveiling new features to launch products
 - Increasing promotions /giveaways
 - Adding brand member pages
 - Introducing WiSA Certified reseller program
 - Expanding consumer education

WiSA Growth Continues



Source: Company reports.

Exhibit 6: 2021 and Recent Highlights

2021 and Recent Highlights

- Partnered with Realtek to develop and launch a 5GHz multichannel immersive audio module.
- Hisense certified WiSA Ready™ in its TVs and projectors.
- Toshiba TVs certified WiSA SoundSend ready.
- Drove nearly 2.1 consumers to WiSA'S websites in 2021, including nearly 1.0 million during the holiday shopping season.
- Opened seven WiSA online storefronts.
- Established design team in India for porting WiSA's IP into embedded systems, initially focusing on smart TVs.
- Launched www.wisatechnologies.com January 2022.

Source: Company reports.

Exhibit 7: WiSA Future Roadmap

Beyond Premium Audio: Driving 2022 Growth



- **First Gen Technology** established WiSA as multi-channel wireless technology brand with a complete ecosystem of TVs/transmitters and speakers
- **Next Gen** extends WISA to all smart devices with massive TAM
- **Immersive Sound Expands to Wi-Fi enabled smart devices:**
 - Smart TVs
 - Smart Speakers
 - Smart Phones
 - Tablets
 - Gaming PCs and Consoles
 - IoT Devices
 - Headphones

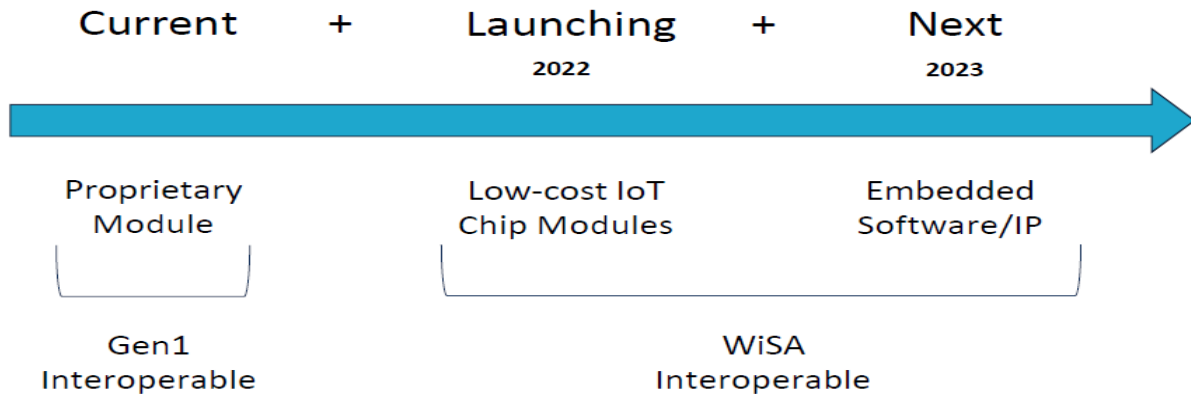


Reaching Broader Consumer Markets with Rapidly Dropping WiSA Transmission Costs



Product	Host Device	Retail MSRP	TV/Soundbar Integration Cost	Home Theater in a Box System
Axiim Q AV Receiver	All TVs/Set top Boxes	\$1,199		
Axiim Link	Xbox and WiSA Ready TV	\$229		\$999
WiSA SoundSend - Drops cost of Xbox support	All TVs	\$179		\$899
WiSA SoundSend USB* - Drops Dolby & HDMI royalties - Lowers tariffs	WiSA Ready TVs/Devices	\$99-\$119		\$799
WISA TX Module			\$13-\$16	
Next Generation Module	TVs, Soundbars, Projectors		80% Reduction	\$699-\$749

Moving Towards Lower Costs and Ubiquity



Source: Company reports.

Exhibit 8: WiSA's Q4 Results and Outlook

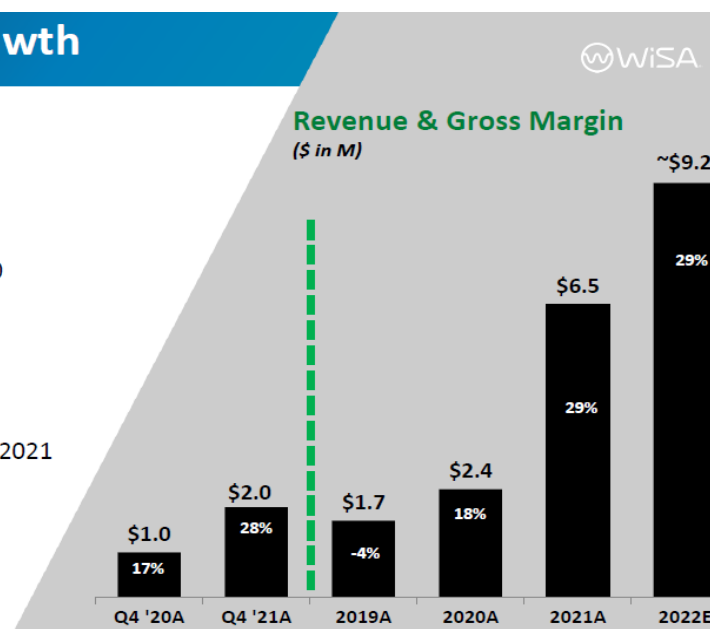
93% Q4 2021 Revenue Growth

Q4 '21

- \$2.0M revenue, up 93% vs. Q4 '20
- 30% gross margin, up from 24% in Q4 '20
- \$3.7M opex, including \$0.5M of non-cash, vs. \$3.9M, including \$0.9M of non-cash in Q4 '20
- \$3.1M net loss, vs. \$3.7M in Q4 '20
- \$13.1M cash 12/31/2021

2022 Guidance

- 30-50% full year revenue growth vs. full year 2021
- 28-30% gross margin target
- Sufficient cash through 2022



Source: Company reports.

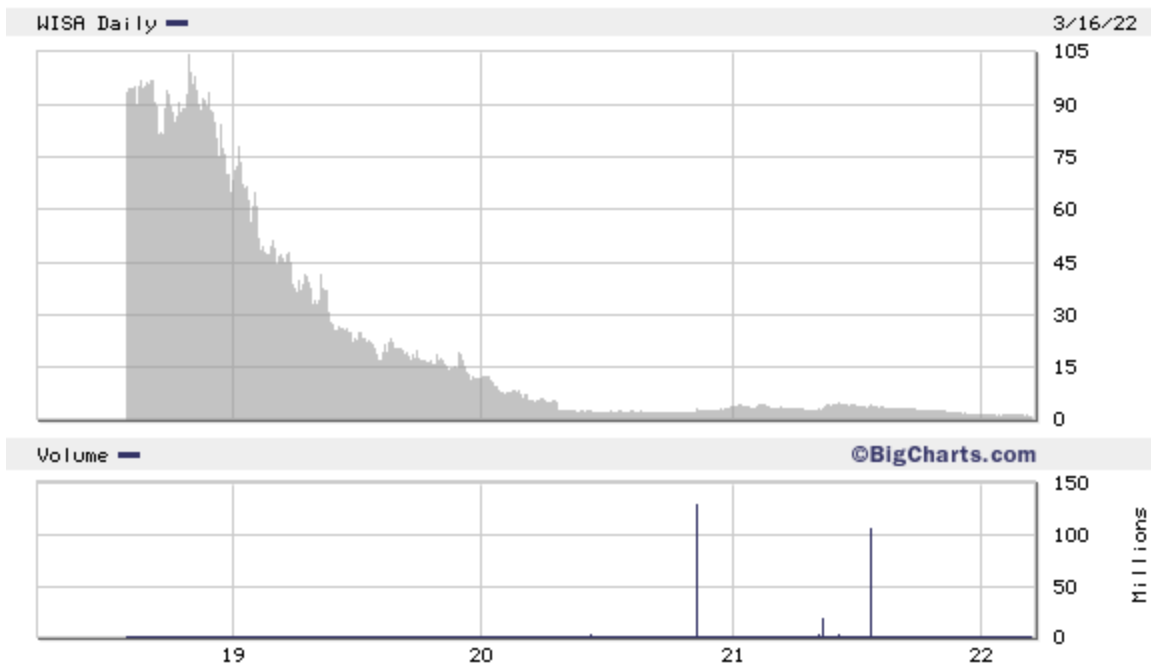
Exhibit 9: 2022 Anticipated Milestones

Summary Slide – WiSA Technologies, Inc.

- Technology roadmap expands WiSA from Audiophile market to broad immersive audio consumer market with 1+B unit TAM
- Exit 2022 with 4 product lines contributing revenue in 2023
- Revenue ramp continues with 30-50% YOY growth expected in 2022
- Balance sheet has sufficient cash to complete development of 2.4 GHz and 5 GHz IoT solutions and operate through 2022
- We believe the sum of:
 - Explosive growth in immersive audio in the consumer market
 - The industry's only comprehensive wireless product offering for immersive audio
 - A thriving WiSA Association with its Wave initiative and trademarks
 - ... solidly positions WiSA Technologies to drive anticipated growth through 2022 and increasing shareholder value

Source: Company reports.

Exhibit 10: WISA Technologies's (f.k.a. Summit Wireless Technologies, Inc.) Stock Price (4-Years since IPO in July 2018)



Source: <https://bigcharts.marketwatch.com/>

Exhibit 11: Consensus Expectations (as of March 11, 2022)

	Revenue (mils)			EPS	
	2021E	2022E		2021E	2022E
Q1 Mar	\$1.2A	\$1.7E	Q1 Mar	\$(0.33)A	\$(0.17)E
Q2 Jun	\$1.6A		Q2 Jun	\$(0.42)A	
Q3 Sep	\$1.8A		Q3 Sep	\$(0.15)A	
Q4 Dec	\$2.0E		Q4 Dec	\$(0.22)E	
Total	\$6.5E	\$14.3E	Total	\$(1.03)E	\$(0.65)E

*Quarterly estimates may not add to annual estimates due to variations in contributing estimates and rounding.

Source: Company report, Refinitiv, and Ascendant Capital Markets estimates

FINANCIAL MODEL

WISA Technologies, Inc. (f.k.a. Summit Wireless Technologies, Inc.)

Income Statement (\$ mills)	Mar-20	Jun-20	Sep-20	Dec-20	2020	Mar-21	Jun-21	Sep-21	Dec-21	2021	Mar-22	Jun-22	Sep-22	Dec-22	2022	Mar-23	Jun-23	Sep-23	Dec-23	2023
Fiscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1E	Q2E	Q3E	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E
Total Revenue	0.41	0.35	0.61	1.04	2.40	1.15	1.58	1.81	2.00	6.54	1.15	1.58	2.78	4.08	9.60	1.73	2.21	4.04	6.04	14.02
Cost of Revenues	0.35	0.34	0.50	0.79	1.98	0.86	1.12	1.30	1.40	4.68	0.81	1.11	1.95	2.86	6.72	1.21	1.55	2.82	4.23	9.81
Gross Profit	0.06	0.01	0.10	0.25	0.43	0.30	0.46	0.51	0.60	1.86	0.35	0.47	0.83	1.22	2.88	0.52	0.66	1.21	1.81	4.20
Research and development	1.13	0.90	1.24	1.29	4.57	1.17	1.31	1.32	1.44	5.24	0.58	0.71	1.25	1.63	4.17	0.86	1.00	1.82	2.42	6.09
Sales and marketing	0.70	0.51	0.84	0.93	2.97	0.87	0.98	1.02	1.25	4.12	0.53	0.73	1.34	1.63	4.23	0.80	1.02	1.94	2.42	6.17
General and administrative	0.89	0.61	1.01	1.66	4.17	0.97	0.99	1.08	0.98	4.02	0.58	0.63	1.11	1.59	3.91	0.86	0.89	1.61	2.35	5.72
Restructuring and other					0.00					0.00					0.00					0.00
Total operating expenses	2.72	2.02	3.09	3.88	11.71	3.02	3.27	3.42	3.67	13.38	1.68	2.07	3.70	4.86	12.31	2.53	2.90	5.37	7.19	17.98
Operating income (loss)	(2.66)	(2.01)	(2.99)	(3.63)	(11.29)	(2.72)	(2.81)	(2.92)	(3.06)	(11.51)	(1.34)	(1.60)	(2.87)	(3.63)	(9.43)	(2.01)	(2.24)	(4.16)	(5.37)	(13.77)
Interest income (expense)	(0.04)	(1.35)	(0.01)	(0.08)	(1.48)	(0.00)	(0.00)	(0.00)	0.00	(0.01)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other income (expense)	(0.00)	(0.19)	(0.02)	0.06	(0.15)	(0.59)	(1.79)	0.86	(0.00)	(1.52)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Income before income taxes	(2.70)	(3.55)	(3.01)	(3.66)	(12.92)	(3.31)	(4.60)	(2.061)	(3.07)	(13.04)	(1.34)	(1.60)	(2.87)	(3.63)	(9.43)	(2.01)	(2.24)	(4.16)	(5.37)	(13.77)
Income taxes	0.00	0.00			0.00		0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net income (loss)	(2.70)	(3.55)	(3.01)	(3.66)	(12.92)	(3.31)	(4.60)	(2.06)	(3.07)	(13.05)	(1.34)	(1.60)	(2.87)	(3.63)	(9.43)	(2.01)	(2.24)	(4.16)	(5.37)	(13.77)
Nonrecurring/noncash adjustments					0.00					0.00					0.00					0.00
Net income (pro forma)	(2.70)	(3.55)	(3.01)	(3.66)	(12.92)	(3.31)	(4.60)	(2.06)	(3.07)	(13.05)	(1.34)	(1.60)	(2.87)	(3.63)	(9.43)	(2.01)	(2.24)	(4.16)	(5.37)	(13.77)
EBITDA																				
Shares, Basic	1.2	3.9	7.7	8.1	5.2	10.0	10.9	13.9	15.0	12.4	16.9	17.0	17.1	17.2	17.1	17.3	17.4	17.5	17.6	17.5
Shares, Diluted	1.2	3.9	7.7	8.1	5.2	10.0	10.9	13.9	15.0	12.4	16.9	17.0	17.1	17.2	17.1	17.3	17.4	17.5	17.6	17.5
EPS Basic (Pro forma)	(\$2.19)	(\$0.90)	(\$0.39)	(\$0.45)	(\$2.47)	(\$0.33)	(\$0.42)	(\$0.15)	(\$0.20)	(\$1.05)	(\$0.08)	(\$0.09)	(\$0.17)	(\$0.21)	(\$0.55)	(\$0.12)	(\$0.13)	(\$0.24)	(\$0.31)	(\$0.79)
EPS Diluted (Pro forma)	(\$2.19)	(\$0.90)	(\$0.39)	(\$0.45)	(\$2.47)	(\$0.33)	(\$0.42)	(\$0.15)	(\$0.20)	(\$1.05)	(\$0.08)	(\$0.09)	(\$0.17)	(\$0.21)	(\$0.55)	(\$0.12)	(\$0.13)	(\$0.24)	(\$0.31)	(\$0.79)
Margins																				
Gross margin	15.3%	3.4%	17.1%	23.9%	17.8%	25.6%	29.0%	28.0%	30.2%	28.5%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Research and development	275.9%	259.8%	204.3%	124.7%	190.2%	101.7%	82.5%	73.2%	71.8%	80.0%	50.0%	45.0%	45.0%	40.0%	43.5%	50.0%	45.0%	45.0%	40.0%	43.5%
Sales and marketing	169.8%	146.6%	137.6%	89.7%	123.7%	75.8%	61.7%	56.5%	62.7%	63.0%	46.0%	46.0%	48.0%	40.0%	44.0%	46.0%	46.0%	48.0%	40.0%	44.0%
General and administrative	216.8%	174.4%	167.1%	159.5%	173.4%	84.0%	62.5%	59.8%	49.0%	61.4%	50.0%	40.0%	40.0%	39.0%	40.8%	50.0%	40.0%	40.0%	39.0%	40.8%
Operating margin	-647.2%	-577.3%	-491.8%	-350.0%	-469.5%	-235.9%	-177.7%	-161.5%	-153.2%	-176.0%	-116.0%	-101.0%	-103.0%	-89.0%	-98.3%	-116.0%	-101.0%	-103.0%	-89.0%	-98.3%
Tax rate, GAAP	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net margin	-656.9%	-1020.7%	-495.9%	-352.3%	-537.4%	-287.3%	-291.2%	-114.1%	-153.5%	-199.4%	-116.0%	-101.0%	-103.0%	-89.0%	-98.3%	-116.0%	-101.0%	-103.0%	-89.0%	-98.3%
Y/Y % change																				
Total Revenue	-12%	-1%	45%	141%	44%	181%	354%	198%	93%	172%	0%	0%	54%	104%	47%	50%	40%	45%	48%	46%
Gross margin	9%	-45%	225%	-236%	-701%	368%	3725%	387%	144%	337%	17%	3%	65%	103%	54%	50%	40%	45%	48%	46%
Research and development	-17%	-36%	-13%	5%	-16%	3%	44%	7%	11%	15%	-51%	-45%	-5%	14%	-20%	50%	40%	45%	48%	46%
Sales and marketing	-7%	-25%	20%	30%	5%	25%	91%	22%	35%	39%	-39%	-25%	31%	30%	2%	50%	40%	45%	48%	46%
General and administrative	45%	-8%	72%	71%	47%	9%	63%	7%	-41%	-4%	-40%	-36%	3%	63%	-3%	50%	40%	45%	48%	46%
Operating income (loss)	0%	-26%	11%	17%	1%	2%	40%	-2%	-16%	2%	-51%	-43%	-2%	19%	-18%	50%	40%	45%	48%	46%
Net income (loss)	5%	25%	10%	-8%	7%	23%	30%	-32%	-16%	1%	-60%	-65%	39%	18%	-28%	50%	40%	45%	48%	46%
EPS Diluted (Pro forma)	-34%	-73%	-86%	-86%	-81%	-85%	-53%	-62%	-58%	-57%	-76%	-78%	13%	3%	-47%	47%	37%	42%	45%	43%

Source: Company reports and Ascendant Capital Markets estimates. *Reflects a 1-for-20 Reverse Stock Split in April 2020

WISA Technologies, Inc. (f.k.a. Summit Wireless Technologies, Inc.)

Balance Sheet (\$ mils)	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
Fiscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Assets																
Cash and cash equivalents	0.76	12.09	9.10	7.42	9.71	10.29	16.07	13.11	14.64	13.25	10.06	6.14	5.87	3.77	(1.18)	(7.34)
Short term investments									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accounts receivable, net	0.05	0.07	0.25	0.09	0.14	0.42	0.21	0.21	0.90	1.23	2.16	3.17	1.35	1.72	3.14	4.70
Inventory	2.65	2.72	2.58	2.71	3.30	3.56	3.95	4.78	1.21	1.66	2.92	4.28	1.82	2.32	4.24	6.34
Deferred income taxes									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prepaid expenses and other	1.04	0.62	0.86	0.91	1.41	1.43	1.48	1.09	0.58	0.79	1.39	2.04	0.86	1.11	2.02	3.02
Total current assets	4.50	15.50	12.79	11.12	14.56	15.70	21.71	19.19	17.32	16.93	16.54	15.64	9.89	8.92	8.21	6.71
Long term securities/investments									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Property and equipment, net	0.07	0.07	0.13	0.14	0.15	0.14	0.17	0.16	0.19	0.19	0.26	0.29	0.37	0.40	0.60	0.67
Intangibles, net	0.02	0.01	0.00						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Deferred income tax									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.03	0.06	0.11	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00
Total assets	4.62	15.63	13.03	11.30	14.75	15.88	21.92	19.39	17.56	17.16	16.84	15.93	10.26	9.33	8.81	7.39
Liabilities and stockholders' equity																
Accounts payable	2.34	1.51	0.95	0.67	1.14	0.67	0.83	1.55	0.86	1.19	2.09	3.06	1.30	1.66	3.03	4.53
Accrued expenses	1.34	0.66	0.94	1.43	1.76	2.66	2.04	1.42	1.15	1.58	2.78	4.08	1.73	2.21	4.04	6.04
Accrued interest									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Deferred revenue									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Deferred income tax									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Short term debt		0.29	0.07	0.18	0.29	0.85			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total current liabilities	3.68	2.45	1.96	2.28	3.19	4.18	2.87	2.97	2.02	2.77	4.87	7.14	3.03	3.87	7.06	10.57
Deferred income taxes									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warrant liabilities	0.39	0.39	0.39	0.40	0.40	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Other long term liabilities			0.05	0.04	0.07	0.06	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Long term debt	0.69	0.56	0.78	0.67	0.56				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total other liabilities	1.08	0.95	1.21	1.10	1.03	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Preferred stock	0.54	0.56	0.58	0.60	0.62				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common stock		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.90	1.35	1.80	2.25	2.70	3.15	3.60
Additional paid-in capital	189.73	205.43	206.03	207.70	213.59	218.71	228.13	228.58	228.58	228.58	228.58	228.58	228.58	228.58	228.58	228.58
Retained earnings	(190.36)	(193.76)	(196.75)	(200.38)	(203.68)	(207.07)	(209.13)	(212.20)	(213.54)	(215.14)	(218.00)	(221.63)	(223.64)	(225.88)	(230.03)	(235.41)
Treasury stock									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accumulated other comprehensive in	(0.05)								0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total stockholders' equity	(0.13)	12.23	9.86	7.91	10.54	11.63	19.00	16.38	15.49	14.34	11.93	8.75	7.19	5.40	1.70	(3.23)
Total stockholders' equity and liabil	4.62	15.63	13.03	11.30	14.75	15.88	21.92	19.39	17.56	17.16	16.85	15.93	10.26	9.33	8.81	7.39

Balance Sheet Drivers

	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Prepaid as % of total rev	253%	179%	142%	87%	123%	90%	82%	54%	50%	50%	50%	50%	50%	50%	50%	50%
Accounts payable as % of total rev	568%	433%	156%	65%	99%	42%	46%	77%	75%	75%	75%	75%	75%	75%	75%	75%
Inventories as % of cost of rev	761%	808%	512%	343%	384%	318%	304%	342%	150%	150%	150%	150%	150%	150%	150%	150%
Accrued expenses as % of total rev	327%	188%	155%	138%	153%	168%	113%	71%	100%	100%	100%	100%	100%	100%	100%	100%
Activity Ratios																
A/R Days Sales Outstanding	11	18	36	7	11	24	10	10	70	70	70	70	70	70	70	70
Inventory Turnover	0.5x	0.5x	0.8x	1.2x	1.0x	1.3x	1.3x	1.2x	2.7x	2.7x	2.7x	2.7x	2.7x	2.7x	2.7x	2.7x
A/P Days Payable	604	403	169	77	119	54	57	100	96	96	96	96	96	96	96	96
Book & Cash Value (per share)																
Book Value per Share (diluted)	-\$0.11	\$3.11	\$1.28	\$0.98	\$1.06	\$1.07	\$1.36	\$1.09	\$0.92	\$0.84	\$0.70	\$0.51	\$0.42	\$0.31	\$0.10	-\$0.18
Cash per Share (diluted)	\$0.61	\$3.07	\$1.18	\$0.92	\$0.97	\$0.95	\$1.15	\$0.87	\$0.87	\$0.78	\$0.59	\$0.36	\$0.34	\$0.22	-\$0.07	-\$0.42
Net cash per Share (diluted)	\$0.05	\$2.86	\$1.07	\$0.81	\$0.89	\$0.87	\$1.15	\$0.87	\$0.87	\$0.78	\$0.59	\$0.36	\$0.34	\$0.22	-\$0.07	-\$0.42

Source: Company reports and Ascendant Capital Markets estimates

WISA Technologies, Inc. (f.k.a. Summit Wireless Technologies, Inc.)

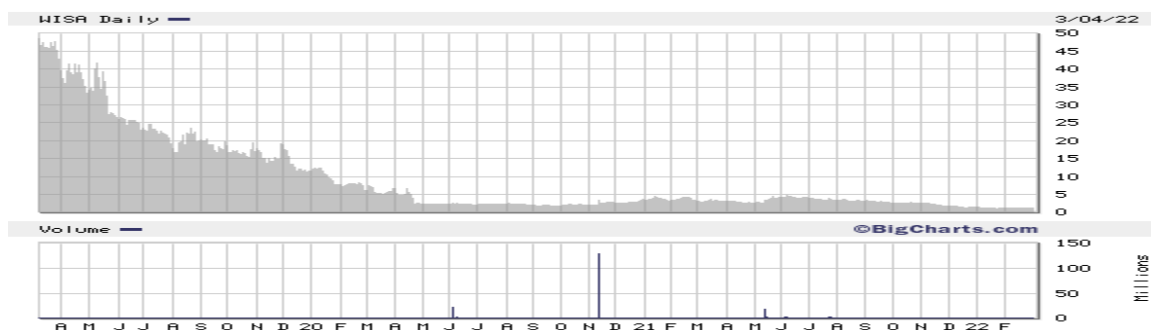
Cash Flow Statement (\$ mils)	Mar-20	Jun-20	Sep-20	Dec-20	2020	Mar-21	Jun-21	Sep-21	Dec-21	2021	Mar-22	Jun-22	Sep-22	Dec-22	2022	Mar-23	Jun-23	Sep-23	Dec-23	2023
Fiscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1E	Q2E	Q3E	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E
Cash flow from operating activities																				
Net income	(2.68)	(3.40)	(2.99)	(3.64)	(12.71)	(3.29)	(3.40)	(2.06)	(3.07)	(11.82)	(1.34)	(1.60)	(2.87)	(3.63)	(9.43)	(2.01)	(2.24)	(4.16)	(5.37)	(13.77)
Depreciation	0.01	0.02	0.02	0.02	0.07	0.02	0.02	0.02	0.02	0.08	0.02	0.02	0.02	0.02	0.08	0.02	0.02	0.02	0.02	0.08
Amortization	0.01	0.01	0.01	0.00	0.03					0.00					0.00					0.00
Debt related amortization expen	0.04	1.35			1.39					0.00					0.00					0.00
Stock comp	0.08	0.07	0.80	0.94	1.88	0.25	0.37	0.35	0.45	1.42	0.45	0.45	0.45	0.45	1.80	0.45	0.45	0.45	0.45	1.80
Deferred rent					0.00					0.00					0.00					0.00
Deferred income taxes					0.00					0.00					0.00					0.00
Provision for bad debts					0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reserves					0.00					0.00					0.00					0.00
Change in fair value of warrant l	(0.02)	0.13	(0.14)	0.01	(0.02)	0.57	0.58		0.00	1.15					0.00					0.00
Writedowns and impairments					0.00					0.00					0.00					0.00
Other gains/losses		0.05			0.05			(0.86)		(0.86)					0.00					0.00
Other					0.00					0.00					0.00					0.00
Changes in operating assets and liabilities:																				
Accounts receivable	0.06	(0.02)	(0.18)	0.16	0.02	(0.06)	(0.27)	0.21	(0.01)	(0.13)	(0.68)	(0.33)	(0.93)	(1.01)	(2.96)	1.83	(0.38)	(1.42)	(1.56)	(1.52)
Inventory	0.02	(0.07)	0.14	(0.13)	(0.04)	(0.59)	(0.27)	(0.39)	(0.83)	(2.07)	3.57	(0.45)	(1.26)	(1.36)	0.50	2.47	(0.51)	(1.91)	(2.10)	(2.06)
Prepaid expenses & other curre	(0.04)	0.40	(0.29)	0.02	0.09	(0.51)	(0.01)	(0.05)	0.39	(0.18)	0.51	(0.21)	(0.60)	(0.65)	(0.95)	1.18	(0.24)	(0.91)	(1.00)	(0.98)
Income tax					0.00					0.00					0.00					0.00
Other assets					0.00					0.00	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00
Accounts payable	0.51	(0.87)	(0.29)	(0.24)	(0.88)	0.47	(0.47)	0.15	0.72	0.88	(0.68)	0.32	0.90	0.97	1.51	(1.76)	0.36	1.37	1.50	1.47
Accrued expenses	0.20	(0.69)	0.26	0.50	0.26	0.37	0.89	(0.61)	(0.62)	0.03	(0.26)	0.43	1.20	1.30	2.66	(2.35)	0.48	1.82	2.00	1.96
Accrued interest					0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Deferred revenue					0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other liabilities					0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net cash (used in) provided by	(1.82)	(3.01)	(2.67)	(2.36)	(9.86)	(2.77)	(2.56)	(3.25)	(2.93)	(11.51)	1.58	(1.37)	(3.09)	(3.87)	(6.75)	(0.18)	(2.05)	(4.74)	(6.06)	(13.02)
Cash flow from investing activities																				
Purchases of property and equi	(0.00)	(0.01)	(0.01)	(0.04)	(0.05)	(0.03)	(0.01)	(0.05)	(0.01)	(0.10)	(0.05)	(0.01)	(0.10)	(0.05)	(0.21)	(0.10)	(0.05)	(0.21)	(0.10)	(0.46)
Purchases of short-term investments					0.00					0.00					0.00					0.00
Acquisitions					0.00					0.00					0.00					0.00
Other					0.00					0.00					0.00					0.00
Net cash used in investing acti	(0.00)	(0.01)	(0.01)	(0.04)	(0.05)	(0.03)	(0.01)	(0.05)	(0.01)	(0.10)	(0.05)	(0.01)	(0.10)	(0.05)	(0.21)	(0.10)	(0.05)	(0.21)	(0.10)	(0.46)
Cash flow from financing activities																				
Issuance of debt	1.67	0.58			2.24					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repayment of debt	(0.11)	(2.04)		(0.01)	(2.16)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)					0.00					0.00
Issuance of stock	0.73	15.78	(0.31)	(0.03)	16.16			9.03	0.00	9.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repurchase of common stock					0.00					0.00					0.00					0.00
Proceeds from stock option exercises		0.04		0.75	0.79	5.10	3.16	0.05		8.30					0.00					0.00
Other					0.00					0.00					0.00					0.00
Dividends and distributions					0.00					0.00					0.00					0.00
Cash provided by (used in) fina	2.28	14.35	(0.31)	0.71	17.03	5.09	3.15	9.07	(0.01)	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Effect of exchange rate on cash					0.00					0.00					0.00					0.00
Net increase (decrease) in cash	0.46	11.33	(2.98)	(1.69)	7.12	2.29	0.59	5.77	(2.96)	5.69	1.53	(1.39)	(3.19)	(3.92)	(6.97)	(0.28)	(2.10)	(4.95)	(6.16)	(13.48)
Beginning cash and equivalents	0.30	0.75	12.09	9.10	0.30	7.41	9.71	10.29	16.07	7.41	13.11	14.64	13.25	10.06	13.11	6.14	5.87	3.77	(1.18)	6.14
Ending cash and equivalents	0.75	12.09	9.10	7.41	7.41	9.71	10.29	16.07	13.11	13.11	14.64	13.25	10.06	6.14	6.14	5.87	3.77	(1.18)	(7.34)	(7.34)

Source: Company reports and Ascendant Capital Markets estimates

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WISA Technologies, Inc. (f.k.a. Summit Wireless Technologies, Inc.)



Source: <https://bigcharts.marketwatch.com/>

	Report Date		Price	
Report	Date	Rating	Target	
1	10/10/2018	Buy	140	
2	11/20/2018	Buy	135	
3	1/26/2019	Buy	125	
4	3/31/2019	Buy	100	
5	6/3/2019	Buy	80	
6	8/15/2019	Buy	60	
7	11/16/2019	Buy	40	
8	3/26/2020	Buy	30	
9	5/28/2020	Buy	15	
10	8/18/2020	Buy	11	
11	11/11/2020	Buy	12	
12	3/18/2021	Buy	13	
13	5/13/2021	Buy	14	
14	8/17/2021	Buy	15	
15	11/20/2021	Buy	12	

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BUY: We expect the stock to provide a total return of 15% or more within a 12-month period.

HOLD: We expect the stock to provide a total return of negative 15% to positive 15% within a 12-month period.

SELL: We expect the stock to have a negative total return of more than 15% within a 12-month period.

Total return is defined as price appreciation plus dividend yield.

Ascendant Capital Markets, LLC Rating System

Prior to January 31, 2014, ASCM used the following rating system:

Strong Buy: We expect the stock to provide a total return of 30% or more within a 12-month period.

Buy: We expect the stock to provide a total return of between 10% and 30% within a 12-month period.

Neutral: We expect the stock to provide a total return of between minus 10% and plus 10% within a 12-month period.

Sell: We expect the stock to provide a total return of minus 10% or worse within a 12-month period.

Speculative Buy: This rating is reserved for companies we believe have tremendous potential, but whose stocks are illiquid or whose equity market capitalizations are very small, often in the definition of a nano cap (below \$50 million in market cap). In general, for stocks ranked in this category, we expect the stock to provide a total return of 50% or more within a 12-month period. However, because of the illiquid nature of the stock's trading and/or the nano cap nature of the investment, we caution that these investments may not be suitable for all parties.

Total return is defined as price appreciation plus dividend yield.

Ascendant Capital Markets, LLC Distribution of Investment Ratings (as of January 15, 2022)

Rating	Count	Percent	Investment Banking Services Past 12 months	
			Count	Percent
Buy	40	98%	16	40%
Hold	0	0%	0	0%
Sell	1	2%	0	0%
Total	41	100%	16	39%

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