



WiSA Technologies, Inc.

Q3 miss and 2022 outlook tempered. Evaluating strategic alternatives. Lowering P/T to \$1.75.

Q3 miss: WiSA recently (on November 16) reported its Q3 2022 (ending September) results. Revenue was \$0.9 million (-48% y-o-y), compared with our and consensus estimates of \$1.4 – 1.6 million. EPS was \$(0.31), compared with our estimate of \$(0.22) and consensus of \$(0.23). Q3 guidance was for revenue to be higher than Q2's \$0.9 million.

Supply chain and demand issues: We believe the company again (like in Q2) had weak Q3 revenues (-48% y-o-y) as supply chain issues negatively affected its customers' end markets and consumer demand for consumer electronics have slowed in recent months (since early 2022).

2022 outlook tempered: The company did not provide any updated guidance but we believe its 2022 outlook is tempered as Q3's results were weaker.

Adjusting 2022 estimates: We are adjusting our 2022 estimates for revenue to \$3.6 million, from \$6.6 million, and for EPS to \$(0.71) from \$(0.94).

Strategic alternatives: In October, the company announced that it is pursuing strategic alternatives (specifically involving its IP and software), but there has been no update since.

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 \$25 million market opportunity for WiSA.

Products 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.

WiSA Wave growth to drive sales: WiSA Wave marketing program is driving strong consumer traffic and is expected to increase to 2 - 3 million visitors in 2022 (up to ~1 - 1.5x 2021's traffic). Large and increasing consumer awareness should drive WiSA product sales.

New products DS and E: WiSA DS technology, using a 2.4 GHz IoT Wi-Fi module from Espressif, is performing strongly in the testing and evaluation cycles at its target customers. 12 companies have 15 WiSA DS projects under consideration, and two projects are planned to go into production in Q4 2022. The company anticipates sampling WiSA E's technology (using its IP on 5 GHz Wi-Fi chips) to the first 4 - 5 Beta customers in Q4 2022.

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.

Capital raise: WiSA had \$3 million in cash and \$1 million in debt at the end of Q3. In December (current Q4), the company just raised ~\$8 million in stock (54 million shares at \$0.14/share). We believe WiSA has enough cash through 2023.

Current valuation attractive: We are maintaining our BUY rating, but lowering our 12-month price target to \$1.75 from \$4.50, 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 Beaverton, OR, WiSA Technologies (f.k.a. Summit Wireless Technologies) sells audio chips, modules, and license IP to enable WiSA Association interoperability standards to deliver immersive wireless sound.

United States
Technology

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COMPANY UPDATE

Rating: **BUY**

Ticker: WISA

Price: \$0.11

Target: \$1.75
(from \$4.50)

Stock Data

Exchange:	NasdaqCM
52-week Range:	\$0.10 – 1.63
Shares Outstanding (million):	70
Market cap (\$million):	\$8
EV (\$million):	\$(1)
Debt (\$million):	\$1
Cash (\$million):	\$10
Avg. Daily Trading Vol. (\$million):	\$1
Float (million shares):	15
Short Interest (million shares):	4
Dividend, annual (yield):	\$0 (NA%)

Revenues (US\$ million)

	<u>2022E</u> <u>(Cur.)</u>	<u>2022E</u> <u>(Old)</u>	<u>2023E</u> <u>(Cur.)</u>	<u>2023E</u> <u>(Old)</u>
Q1 Mar	0.6A		1.4E	
Q2 Jun	0.9A		2.0E	1.9E
Q3 Sep	0.9A	1.6E	2.2E	3.3E
Q4 Dec	<u>1.2E</u>	<u>3.5E</u>	<u>2.4E</u>	<u>5.5E</u>
Total	3.6E	6.6E	8.0E	12.0E
EV/Revs	N/A		N/A	

Earnings per Share (pro forma)

	<u>2022E</u> <u>(Cur.)</u>	<u>2022E</u> <u>(Old)</u>	<u>2023E</u> <u>(Cur.)</u>	<u>2023E</u> <u>(Old)</u>
Q1 Mar	(0.26)A		(0.05)E	(0.22)E
Q2 Jun	(0.27)A		(0.05)E	(0.21)E
Q3 Sep	(0.31)A	(0.22)E	(0.05)E	(0.18)E
Q4 Dec	<u>(0.07)E</u>	<u>(0.20)E</u>	<u>(0.04)E</u>	<u>(0.22)E</u>
Total	(0.71)E	(0.94)E	(0.19)E	(0.83)E
P/E	N/A		N/A	

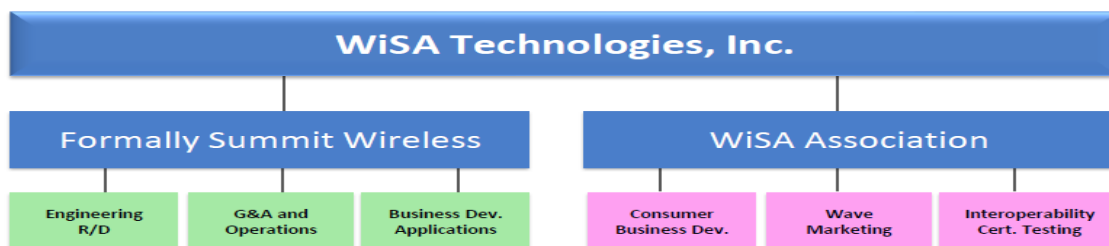
Important Disclosures

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 14.

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

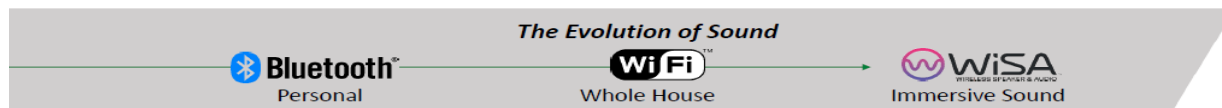
Summit Wireless and WiSA Association now under WiSA Technologies, Inc. umbrella



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.

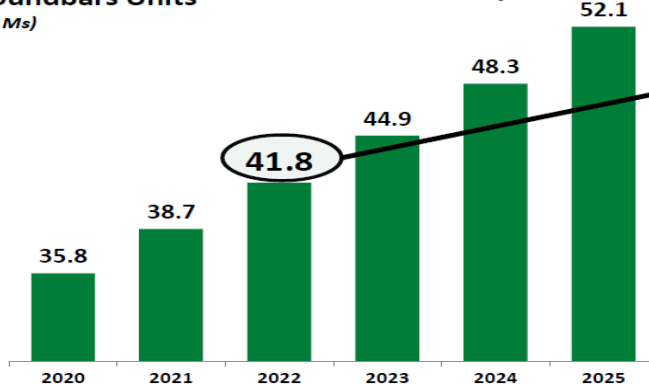
Exhibit 3: WiSA's Market Opportunity

Soundbars: Target Market of Discovery Technology



Soundbars Units*
(in Ms)

2022 Projected Soundbar SAM**



* Source: Infiniti Research September 2021

Audio Configuration	WiSAs
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

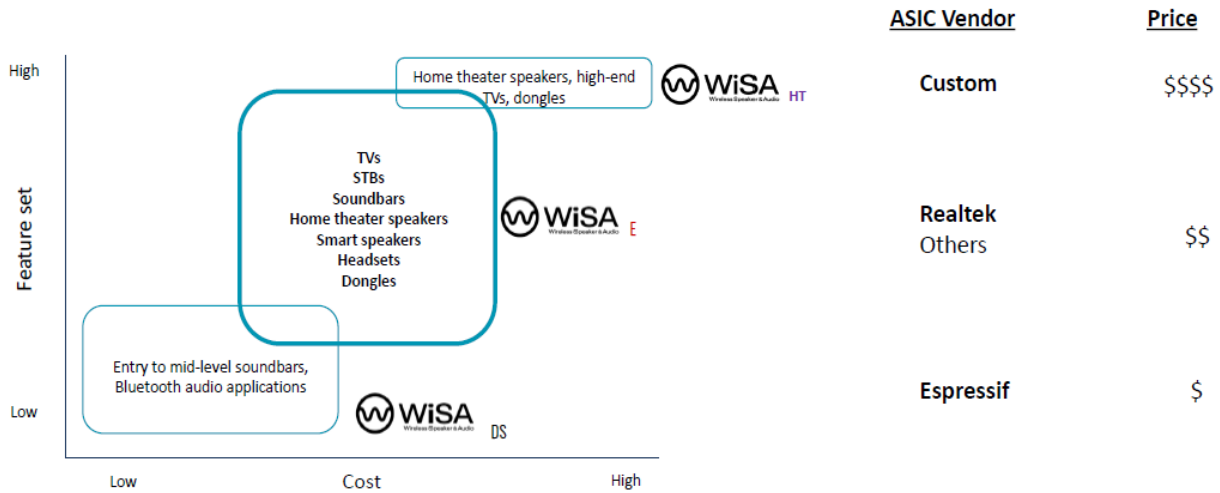
Source: Company reports.

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.

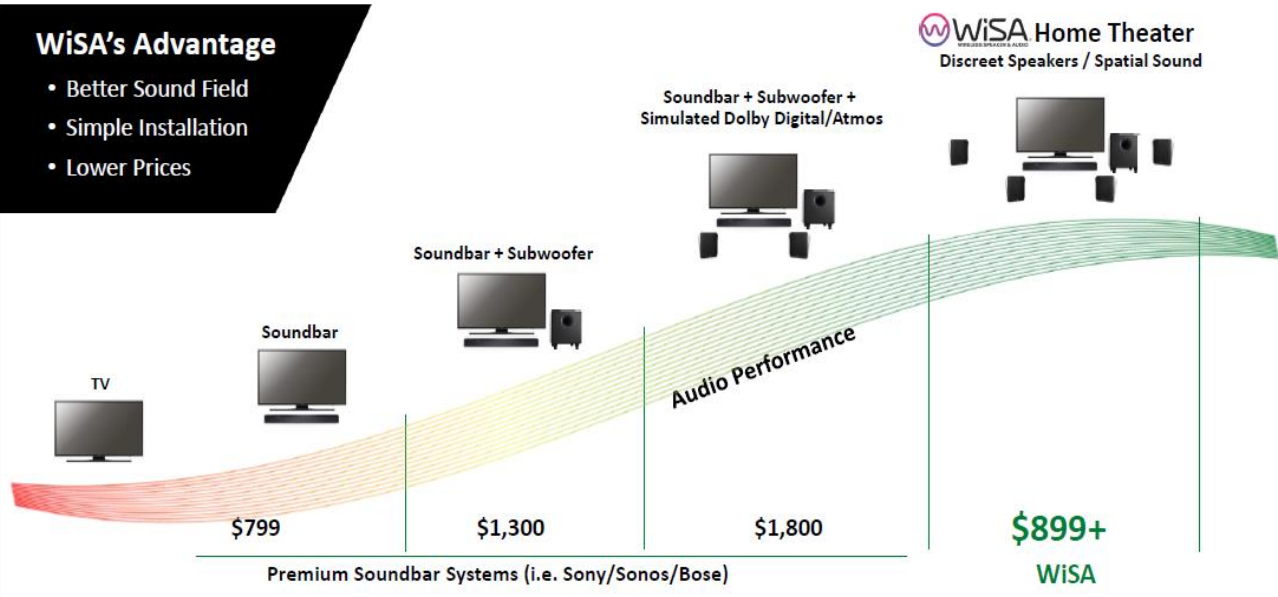
WISA Technologies' recent product and partnership announcements focus on bringing the same technical know-how to build and market wireless spatial technology for mass-market products.



Today's Sound Experience Options

WISA's Advantage

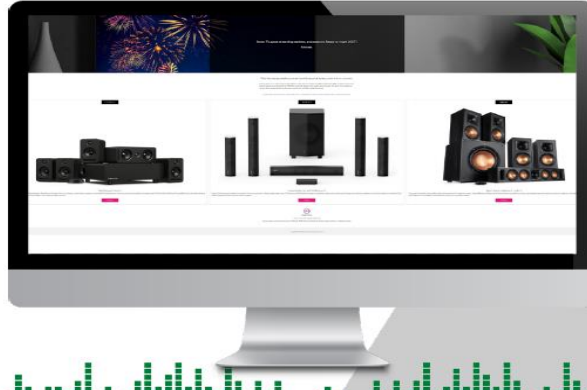
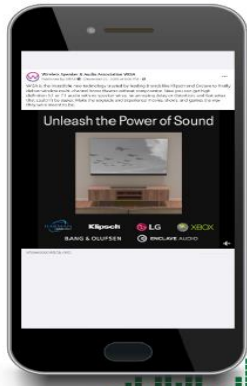
- Better Sound Field
- Simple Installation
- Lower Prices



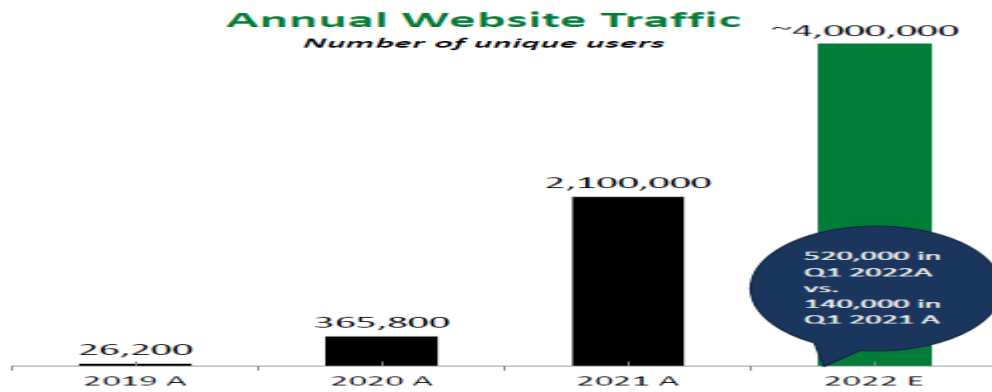
Source: Company reports.

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



Source: Company reports.

Exhibit 6: 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

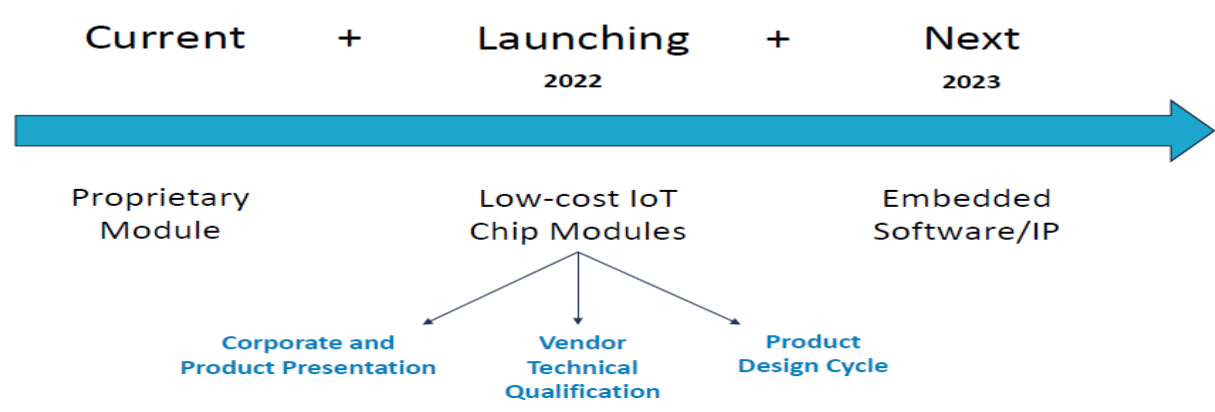


Reaching Broader Consumer Markets with Rapidly Dropping WiSA Transmission Costs



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

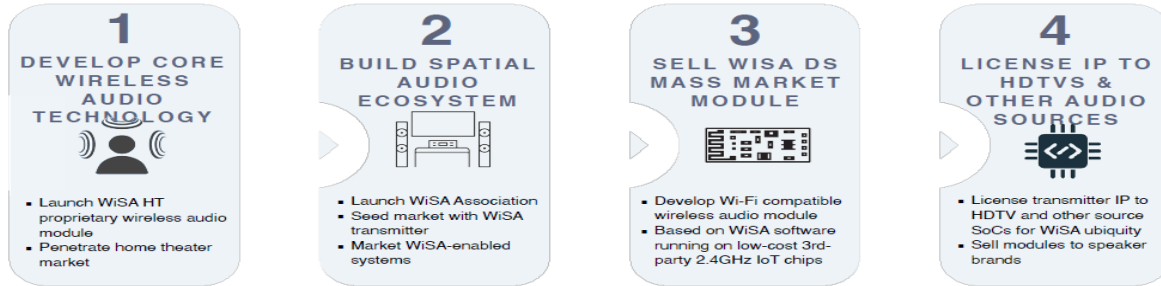
Moving Towards Lower Costs and Ubiquity



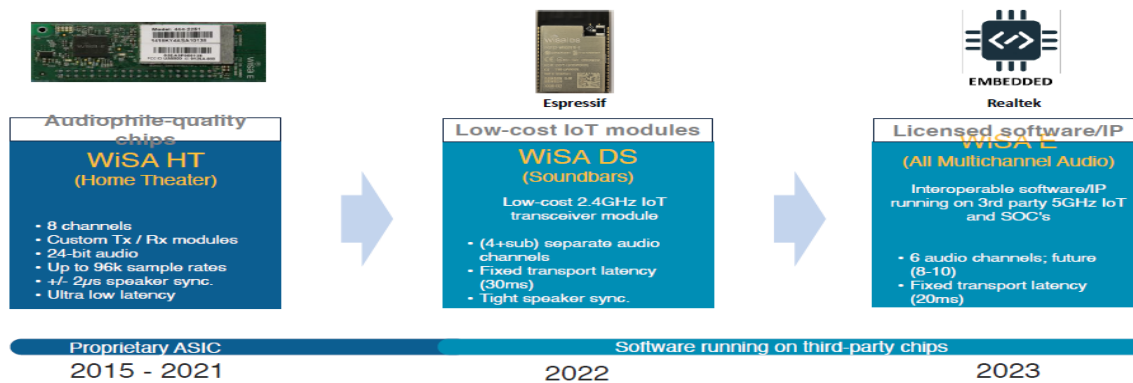
Source: Company reports.

Exhibit 7: WiSA Business Model and Potential Revenue

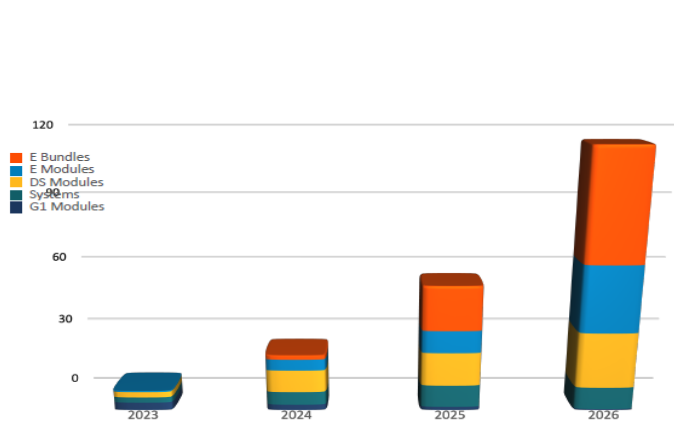
Business Model



Technology Designed for Entry-level to Audiophile



Revenue Opportunity: 2023 - 2026



Currently in 2022

- Continued HT module and system sales based on design activity through 2023 and consumer acceptance of wireless speakers
- First revenue - DS module (soundbars)

2023 Revenue Drivers

- DS module revenue growth based on soundbar and TV designs
- First revenue – WISA E modules in Platin Speakers

2024 Revenue Drivers

- Growth of DS modules and E modules
- First revenue E license with RX modules + bundles

2025 Revenue Drivers

- Continued growth in DS and E modules
- Strong growth of E license + bundles

2026 Revenue Drivers

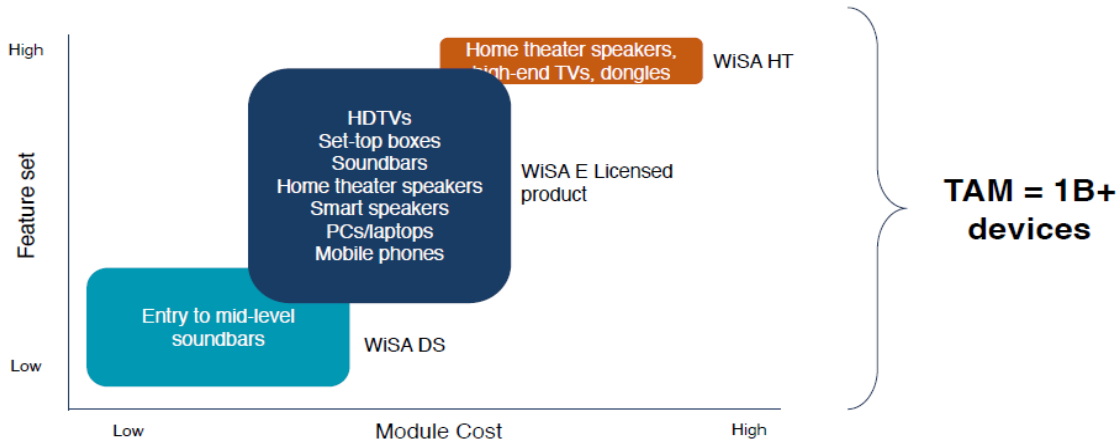
- Continued growth in module sales
- Continued strong growth of E license + bundles

Use of Projections and Illustrations: This page contains certain [financial forecasts] and illustrations. Neither [WISA's] independent auditors nor any other third-party auditors have audited any projections with respect to the

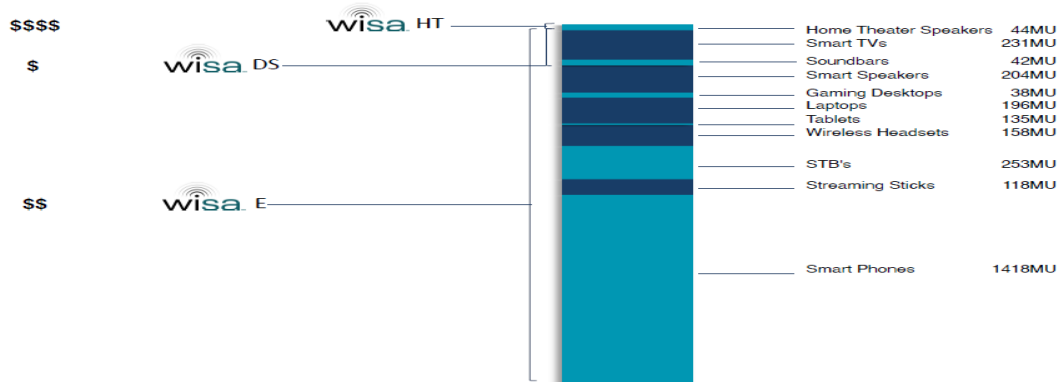
Source: Company reports.

Exhibit 8: WiSA Product Roadmap and Opportunities

Licensing Enables Broad Market Expansion



WiSA DS and E Growth Opportunities



WiSA DS – Customer Response

WiSA DS Tx

Relative to Primary Competitor:

- More audio channels
- Stronger wireless performance
- Lower Price < \$15 for wireless modules

Evaluations/Designs:

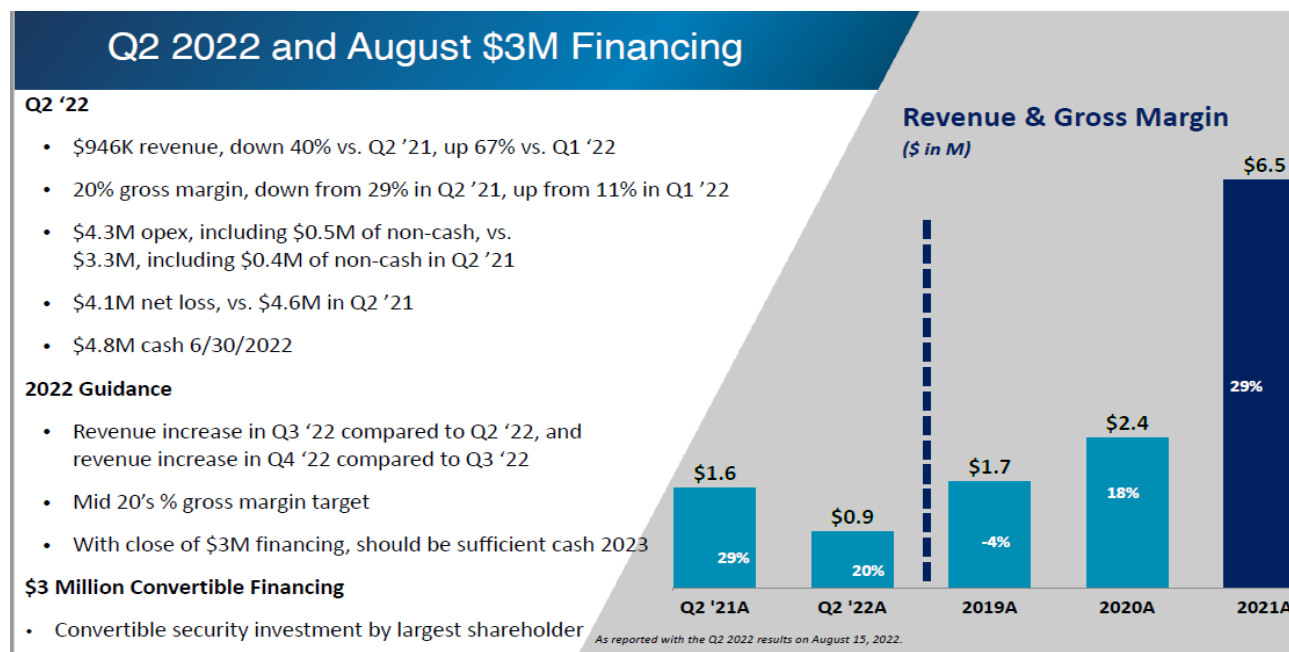
- Product and Potential Projects:
 - Soundbars 8
 - TVs 3
 - Auto. After market 1

Anticipated Production Start:

- 2 in 4Q 2022

Source: Company reports.

Exhibit 9: WiSA's Q2 Results and Outlook (as of August 2022)



Source: Company reports.

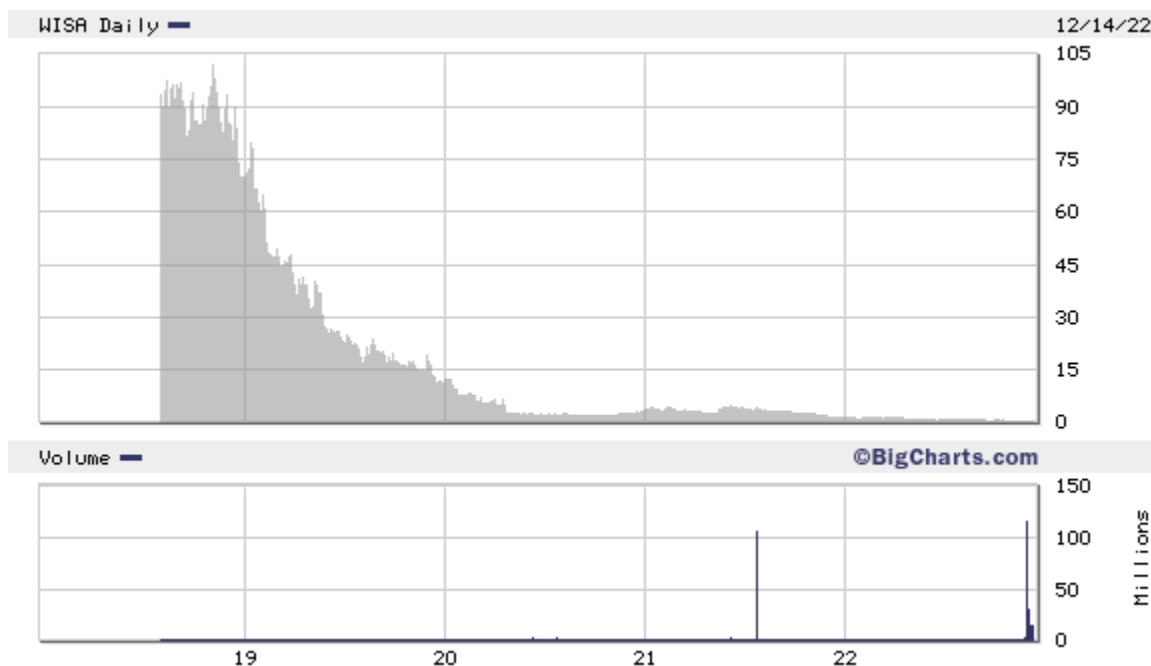
Exhibit 10: 2022 Anticipated Milestones (as of Q1 2022)

Summary Slide – WiSA Technologies, Inc.

- Technology roadmap expands WiSA from Audiophile market to broad immersive audio consumer market with 1+B unit TAM
- Strong customer engagement at all stages of sales cycle – evaluations, roadmaps, and designs
- Expanding IP portfolio with numerous IP software evaluations underway
- Initial revenue contributions from WiSAs products in 2H 2022
 - Initial customer feedback gives confidence in ability of WiSAs to drive revenue growth
- 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 11: 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 12: Consensus Expectations (as of November 16, 2022)

	Revenue (mils)			EPS	
	2022E	2023E		2022E	2023E
Q1 Mar	\$0.6A		Q1 Mar	\$(0.26)A	
Q2 Jun	\$0.9A		Q2 Jun	\$(0.27)A	
Q3 Sep	\$1.4E		Q3 Sep	\$(0.23)E	
Q4 Dec	\$2.4E		Q4 Dec	\$(0.22)E	
Total	\$5.3E	\$12.5E	Total	\$(0.98)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 (\$ 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	Q1A	Q2A	Q3A	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E
Total Revenue	0.4	0.3	0.6	1.0	2.4	1.2	1.6	1.8	2.0	6.5	0.6	0.9	0.9	1.2	3.6	1.4	2.0	2.2	2.4	8.0
Cost of Revenues	0.3	0.3	0.5	0.8	2.0	0.9	1.1	1.3	1.4	4.7	0.5	0.8	0.8	0.9	3.0	1.0	1.5	1.6	1.7	5.8
Gross Profit	0.1	0.0	0.1	0.2	0.4	0.3	0.5	0.5	0.6	1.9	0.1	0.2	0.1	0.3	0.7	0.4	0.5	0.6	0.7	2.2
Research and development	1.1	0.9	1.2	1.3	4.6	1.2	1.3	1.3	1.4	5.2	1.5	1.9	1.9	1.0	6.3	1.3	1.2	1.3	1.2	5.0
Sales and marketing	0.7	0.5	0.8	0.9	3.0	0.9	1.0	1.0	1.3	4.1	1.3	1.3	1.5	1.2	5.4	1.3	1.3	1.3	1.2	5.1
General and administrative	0.9	0.6	1.0	1.7	4.2	1.0	1.0	1.1	1.0	4.0	1.1	1.1	1.4	1.0	4.6	1.1	1.4	1.1	1.2	4.8
Restructuring and other					0.0					0.0					0.0					0.0
Total operating expenses	2.7	2.0	3.1	3.9	11.7	3.0	3.3	3.4	3.7	13.4	4.0	4.3	4.9	3.1	16.3	3.7	3.9	3.7	3.6	14.9
Operating income (loss)	(2.7)	(2.0)	(3.0)	(3.6)	(11.3)	(2.7)	(2.8)	(2.9)	(3.1)	(11.5)	(3.9)	(4.1)	(4.7)	(2.8)	(15.6)	(3.3)	(3.3)	(3.1)	(2.9)	(12.7)
Interest income (expense)	(0.0)	(1.4)	(0.0)	(0.1)	(1.5)	(0.0)	(0.0)	(0.0)	0.0	(0.0)	(0.0)		(0.2)	(0.0)	(0.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)
Other income (expense)	(0.0)	(0.2)	(0.0)	0.1	(0.2)	(0.6)	(1.8)	0.9	(0.0)	(1.5)	(0.0)	(0.0)	0.3	0.0	0.3	(0.1)	(0.1)	(0.1)	0.0	(0.3)
Income before income taxes	(2.7)	(3.5)	(3.0)	(3.7)	(12.9)	(3.3)	(4.6)	(2.1)	(3.1)	(13.0)	(3.9)	(4.1)	(4.6)	(2.9)	(15.5)	(3.4)	(3.5)	(3.3)	(2.9)	(13.1)
Income taxes	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 income (loss)	(2.7)	(3.6)	(3.0)	(3.7)	(12.9)	(3.3)	(4.6)	(2.1)	(3.1)	(13.0)	(3.9)	(4.1)	(4.6)	(2.9)	(15.5)	(3.4)	(3.5)	(3.3)	(2.9)	(13.1)
Nonrecurring/noncash adjustments					0.0					0.0					0.0					0.0
Net income (pro forma)	(2.7)	(3.6)	(3.0)	(3.7)	(12.9)	(3.3)	(4.6)	(2.1)	(3.1)	(13.0)	(3.9)	(4.1)	(4.6)	(2.9)	(15.5)	(3.4)	(3.5)	(3.3)	(2.9)	(13.1)
EBITDA																				
Shares, Basic	1.2	3.9	7.7	8.1	5.2	10.0	10.9	13.9	15.0	12.4	14.8	15.0	15.1	42.1	21.8	70.1	70.2	70.3	70.4	70.3
Shares, Diluted	1.2	3.9	7.7	8.1	5.2	10.0	10.9	13.9	15.0	12.4	14.8	15.0	15.1	42.1	21.8	70.1	70.2	70.3	70.4	70.3
EPS Basic (Pro forma)	(\$2.19)	(\$0.90)	(\$0.39)	(\$0.45)	(\$2.47)	(\$0.33)	(\$0.42)	(\$0.15)	(\$0.20)	(\$1.05)	(\$0.26)	(\$0.27)	(\$0.31)	(\$0.07)	(\$0.71)	(\$0.05)	(\$0.05)	(\$0.05)	(\$0.04)	(\$0.19)
EPS Diluted (Pro forma)	(\$2.19)	(\$0.90)	(\$0.39)	(\$0.45)	(\$2.47)	(\$0.33)	(\$0.42)	(\$0.15)	(\$0.20)	(\$1.05)	(\$0.26)	(\$0.27)	(\$0.31)	(\$0.07)	(\$0.71)	(\$0.05)	(\$0.05)	(\$0.05)	(\$0.04)	(\$0.19)
Margins																				
Gross margin	15.3%	3.4%	17.1%	23.9%	17.8%	25.6%	29.0%	28.0%	30.2%	28.5%	11.0%	19.9%	13.9%	25.0%	18.6%	26.0%	27.0%	28.0%	30.0%	28.0%
Research and development	275.9%	259.8%	204.3%	124.7%	190.2%	101.7%	82.5%	73.2%	71.8%	80.0%	271.6%	199.0%	206.9%	80.0%	173.2%	90.0%	60.0%	60.0%	50.0%	62.3%
Sales and marketing	169.8%	146.6%	137.6%	89.7%	123.7%	75.8%	61.7%	56.5%	62.7%	63.0%	229.7%	140.2%	164.2%	100.0%	147.0%	90.0%	65.0%	60.0%	50.0%	63.5%
General and administrative	216.8%	174.4%	167.1%	159.5%	173.4%	84.0%	62.5%	59.8%	49.0%	61.4%	198.9%	114.4%	149.4%	80.0%	125.2%	80.0%	70.0%	50.0%	50.0%	60.3%
Operating margin	-647.2%	-577.3%	-491.8%	-350.0%	-469.5%	-235.9%	-177.7%	-161.5%	-153.2%	-176.0%	-689.2%	-433.7%	-506.7%	#####	-426.7%	-234.0%	-168.0%	-142.0%	#####	-158.1%
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%	-689.8%	-434.2%	-496.2%	#####	-425.1%	-243.3%	-174.6%	-148.0%	#####	-163.5%
YY % change																				
Total Revenue	-12%	-1%	45%	141%	44%	181%	354%	198%	93%	172%	-51%	-40%	-48%	-40%	-44%	150%	110%	135%	100%	119%
Gross margin	9%	-45%	225%	-236%	-701%	368%	3725%	387%	144%	337%	-79%	-59%	-74%	-50%	-64%	493%	185%	374%	140%	230%
Research and development	-17%	-36%	-13%	5%	-16%	3%	44%	7%	11%	15%	31%	44%	47%	-33%	21%	-17%	-37%	-32%	25%	-21%
Sales and marketing	-7%	-25%	20%	30%	5%	25%	91%	22%	35%	39%	49%	36%	51%	-4%	30%	-2%	-3%	-14%	0%	-5%
General and administrative	45%	-8%	72%	71%	47%	9%	63%	7%	-41%	-4%	16%	10%	30%	-2%	14%	1%	29%	-21%	25%	6%
Operating income (loss)	0%	-26%	11%	17%	1%	2%	40%	-2%	-16%	2%	43%	46%	63%	-8%	35%	-15%	-19%	-34%	2%	-19%
Net income (loss)	5%	25%	10%	-8%	7%	23%	30%	-32%	-16%	1%	18%	-11%	126%	-7%	19%	-12%	-16%	-30%	2%	-16%
EPS Diluted (Pro forma)	-34%	-73%	-86%	-86%	-81%	-85%	-53%	-62%	-55%	-57%	-21%	-35%	108%	-67%	-32%	-81%	-82%	-85%	-39%	-74%

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	Q1A	Q2A	Q3A	Q4E	Q1E	Q2E	Q3E	Q4E
Assets																
Cash and cash equivalents	0.8	12.1	9.1	7.4	9.7	10.3	16.1	13.1	9.1	4.8	2.6	11.9	8.9	5.7	2.8	0.4
Short term investments												0.0	0.0	0.0	0.0	0.0
Accounts receivable, net	0.1	0.1	0.2	0.1	0.1	0.4	0.2	0.2	0.2	0.3	0.2	0.9	1.1	1.5	1.7	1.9
Inventory	2.7	2.7	2.6	2.7	3.3	3.6	4.0	4.8	6.2	6.2	7.3	1.4	1.6	2.2	2.4	2.5
Deferred income taxes												0.0	0.0	0.0	0.0	0.0
Prepaid expenses and other	1.0	0.6	0.9	0.9	1.4	1.4	1.5	1.1	1.0	0.5	1.0	0.6	0.7	1.0	1.1	1.2
Total current assets	4.5	15.5	12.8	11.1	14.6	15.7	21.7	19.2	16.5	11.8	11.2	14.8	12.3	10.4	8.0	6.0
Long term securities/investments												0.0	0.0	0.0	0.0	0.0
Property and equipment, net	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Intangibles, net	0.0	0.0	0.0									0.0	0.0	0.0	0.0	0.0
Deferred income tax												0.0	0.0	0.0	0.0	0.0
Other	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Total assets	4.6	15.6	13.0	11.3	14.8	15.9	21.9	19.4	17.0	12.2	11.6	15.0	12.4	10.5	8.1	6.1
Liabilities and stockholders' equity																
Accounts payable	2.3	1.5	0.9	0.7	1.1	0.7	0.8	1.5	2.1	1.2	2.6	0.9	1.1	1.5	1.7	1.8
Accrued expenses	1.3	0.7	0.9	1.4	1.8	2.7	2.0	1.4	1.7	1.5	1.2	1.2	1.4	2.0	2.2	2.4
Accrued interest												0.0	0.0	0.0	0.0	0.0
Deferred revenue												0.0	0.0	0.0	0.0	0.0
Deferred income tax												0.0	0.0	0.0	0.0	0.0
Other												0.0	0.0	0.0	0.0	0.0
Short term debt		0.3	0.1	0.2	0.3	0.8						0.0	0.0	0.0	0.0	0.0
Total current liabilities	3.7	2.4	2.0	2.3	3.2	4.2	2.9	3.0	3.8	2.7	3.9	2.1	2.5	3.5	3.9	4.2
Deferred income taxes												0.0	0.0	0.0	0.0	0.0
Warrant liabilities	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.2	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Other long term liabilities			0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Long term debt	0.7	0.6	0.8	0.7	0.6						1.3	1.3	1.3	1.3	1.3	1.3
Total other liabilities	1.1	0.9	1.2	1.1	1.0	0.1	0.1	0.0	0.2	0.1	2.4	2.4	2.4	2.4	2.4	2.4
Preferred stock	0.5	0.6	0.6	0.6	0.6							0.0	0.0	0.0	0.0	0.0
Common stock		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1	1.6	2.1	2.6
Additional paid-in capital	189.7	205.4	206.0	207.7	213.6	218.7	228.1	228.6	229.1	229.6	230.2	230.2	230.2	230.2	230.2	230.2
Retained earnings	(190.4)	(193.8)	(196.7)	(200.4)	(203.7)	(207.1)	(209.1)	(212.2)	(216.1)	(220.2)	(224.8)	(227.7)	(231.1)	(234.6)	(237.9)	(240.8)
Treasury stock												0.0	0.0	0.0	0.0	0.0
Accumulated other comprehensive income	(0.0)											0.0	0.0	0.0	0.0	0.0
Other												7.5	7.5	7.5	7.5	7.5
Total stockholders' equity	(0.1)	12.2	9.9	7.9	10.5	11.6	19.0	16.4	13.0	9.4	5.4	10.5	7.6	4.7	1.9	(0.5)
Total stockholders' equity and liabilities	4.6	15.6	13.0	11.3	14.8	15.9	21.9	19.4	17.0	12.2	11.6	15.0	12.4	10.5	8.1	6.1

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	Q1A	Q2A	Q3A	Q4E	Q1E	Q2E	Q3E	Q4E
Prepaid as % of total rev	253%	179%	142%	87%	123%	90%	82%	54%	173%	55%	110%	50%	50%	50%	50%	50%
Accounts payable as % of total rev	568%	433%	156%	65%	99%	42%	46%	77%	371%	125%	280%	75%	75%	75%	75%	75%
Inventories as % of cost of rev	761%	808%	512%	343%	384%	318%	304%	342%	1236%	824%	903%	150%	150%	150%	150%	150%
Accrued expenses as % of total rev	327%	188%	155%	138%	153%	168%	113%	71%	305%	160%	132%	100%	100%	100%	100%	100%
Activity Ratios																
A/R Days Sales Outstanding	11	18	36	7	11	24	10	10	39	24	23	70	70	70	70	70
Inventory Turnover	0.5x	0.5x	0.8x	1.2x	1.0x	1.3x	1.3x	1.2x	0.3x	0.5x	0.4x	2.7x	2.7x	2.7x	2.7x	2.7x
A/P Days Payable	604	403	169	77	119	54	57	100	375	141	293	90	91	92	94	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	\$0.88	\$0.62	\$0.36	\$0.25	\$0.11	\$0.07	\$0.03	-\$0.01
Cash per Share (diluted)	\$0.61	\$3.07	\$1.18	\$0.92	\$0.97	\$0.95	\$1.15	\$0.87	\$0.61	\$0.32	\$0.18	\$0.28	\$0.13	\$0.08	\$0.04	\$0.01
Net cash per Share (diluted)	\$0.05	\$2.86	\$1.07	\$0.81	\$0.89	\$0.87	\$1.15	\$0.87	\$0.61	\$0.32	\$0.09	\$0.25	\$0.11	\$0.06	\$0.02	-\$0.01

Source: Company reports and Ascendant Capital Markets estimates

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

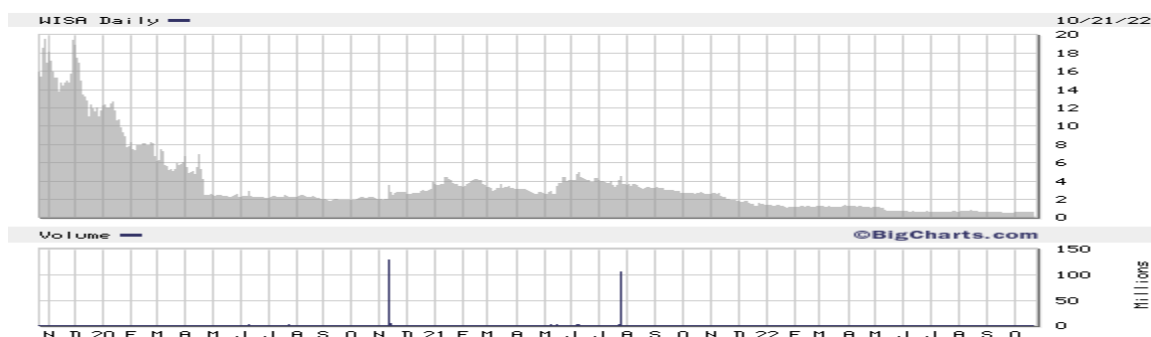
Cash Flow Statement (\$ mils)	Mar-20	Jun-20	Sep-20	Dec-20	2020	Mar-21	Jun-21	Sep-21	Dec-21	2021	Mar-22	Jun-22	Sep-22	Dec-22	2022	Mar-23	Jun-23	Sep-23	Dec-23	2023
Fiscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E
Cash flow from operating activities																				
Net income	(2.7)	(3.4)	(3.0)	(3.6)	(12.7)	(3.3)	(3.4)	(2.1)	(3.1)	(11.8)	(3.9)	(4.1)	(4.6)	(2.9)	(15.5)	(3.4)	(3.5)	(3.3)	(2.9)	(13.1)
Depreciation	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Amortization	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	0.0	0.0
Debt related amortization expen	0.0	1.4			1.4					0.0			0.2		0.2					0.0
Stock comp	0.1	0.1	0.8	0.9	1.9	0.3	0.4	0.3	0.5	1.4	0.5	0.5	0.5	0.5	2.0	0.5	0.5	0.5	0.5	2.1
Deferred rent					0.0					0.0					0.0					0.0
Deferred income taxes					0.0					0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0
Provision for bad debts					0.0					0.0					0.0					0.0
Reserves					0.0					0.0					0.0					0.0
Change in fair value of warrant l	(0.0)	0.1	(0.1)	0.0	(0.0)	0.6	0.6		0.0	1.1			(0.3)		(0.3)					0.0
Writedowns and impairments					0.0					0.0					0.0					0.0
Other gains/losses		0.0			0.0			(0.9)		(0.9)					0.0					0.0
Other					0.0					0.0					0.0					0.0
Changes in operating assets and liabilities:																				
Accounts receivable	0.1	(0.0)	(0.2)	0.2	0.0	(0.1)	(0.3)	0.2	(0.0)	(0.1)	(0.0)	(0.0)	0.0	(0.7)	(0.7)	(0.2)	(0.4)	(0.2)	(0.2)	(0.9)
Inventory	0.0	(0.1)	0.1	(0.1)	(0.0)	(0.6)	(0.3)	(0.4)	(0.8)	(2.1)	(1.4)	(0.0)	(1.0)	5.9	3.4	(0.2)	(0.6)	(0.2)	(0.1)	(1.2)
Prepaid expenses & other curre	(0.0)	0.4	(0.3)	0.0	0.1	(0.5)	(0.0)	(0.1)	0.4	(0.2)	0.1	0.5	(0.5)	0.4	0.5	(0.1)	(0.3)	(0.1)	(0.1)	(0.6)
Income tax					0.0					0.0					0.0					0.0
Other assets					0.0					0.0		0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.0
Accounts payable	0.5	(0.9)	(0.3)	(0.2)	(0.9)	0.5	(0.5)	0.2	0.7	0.9	0.6	(0.6)	1.1	(1.7)	(0.6)	0.2	0.4	0.2	0.1	0.9
Accrued expenses	0.2	(0.7)	0.3	0.5	0.3	0.4	0.9	(0.6)	(0.6)	0.0	0.2	(0.6)	0.1	(0.0)	(0.3)	0.2	0.6	0.2	0.2	1.2
Accrued interest					0.0					0.0					0.0	0.0	0.0	0.0	0.0	0.0
Deferred revenue					0.0					0.0					0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities					0.0					0.0	(0.0)	(0.1)	(0.0)	0.0	(0.1)	0.0	0.0	0.0	0.0	0.0
Net cash (used in) provided by	(1.8)	(3.0)	(2.7)	(2.4)	(9.9)	(2.8)	(2.6)	(3.2)	(2.9)	(11.5)	(4.0)	(4.3)	(4.6)	1.8	(11.1)	(3.0)	(3.2)	(2.8)	(2.4)	(11.5)
Cash flow from investing activities																				
Purchases of property and equip	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.0)	(0.0)	(0.1)	(0.0)	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)
Purchases of short-term investments					0.0					0.0					0.0					0.0
Acquisitions					0.0					0.0					0.0					0.0
Other					0.0					0.0					0.0					0.0
Net cash used in investing activ	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.0)	(0.0)	(0.1)	(0.0)	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)
Cash flow from financing activities																				
Issuance of debt	1.7	0.6			2.2					0.0				2.5	0.0	2.5	0.0	0.0	0.0	0.0
Repayment of debt	(0.1)	(2.0)		(0.0)	(2.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		(0.0)					0.0
Issuance of stock	0.7	15.8	(0.3)	(0.0)	16.2			9.0	0.0	9.0					0.0	0.0	0.0	0.0	0.0	0.0
Repurchase of common stock					0.0					0.0					0.0					0.0
Proceeds from stock option exercises		0.0		0.8	0.8	5.1	3.2	0.0		8.3					0.0					0.0
Other					0.0					0.0					7.5	7.5				0.0
Dividends and distributions					0.0					0.0					0.0					0.0
Cash provided by (used in) fina	2.3	14.4	(0.3)	0.7	17.0	5.1	3.2	9.1	(0.0)	17.3	(0.0)	(0.0)	2.5	7.5	10.0	0.0	0.0	0.0	0.0	0.0
Effect of exchange rate on cash					0.0					0.0					0.0					0.0
Net increase (decrease) in cash	0.5	11.3	(3.0)	(1.7)	7.1	2.3	0.6	5.8	(3.0)	5.7	(4.0)	(4.3)	(2.1)	9.3	(1.2)	(3.0)	(3.3)	(2.8)	(2.4)	(11.5)
Beginning cash and equivalent	0.3	0.8	12.1	9.1	0.3	7.4	9.7	10.3	16.1	7.4	13.1	9.1	4.8	2.6	13.1	11.9	8.9	5.7	2.8	11.9
Ending cash and equivalents	0.8	12.1	9.1	7.4	7.4	9.7	10.3	16.1	13.1	13.1	9.1	4.8	2.6	11.9	11.9	8.9	5.7	2.8	0.4	0.4

Source: Company reports and Ascendant Capital Markets estimates

ANALYST CERTIFICATION

Each analyst hereby certifies that the views expressed in this report reflect the analyst's personal views about the subject securities or issuers. Each analyst also certifies that no part of the analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report. The analyst who prepared this report is compensated based upon the overall profitability of Ascendant Capital Markets, LLC, which may, from time to time, include the provision of investment banking, financial advisory and consulting services. Compensation for research is based on effectiveness in generating new ideas for clients, performance of recommendations, accuracy of earnings estimates, and service to clients.

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



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

Report	Report Date	Rating	Price Target
1	10/10/2018	Buy	140.00
2	11/20/2018	Buy	135.00
3	1/26/2019	Buy	125.00
4	3/31/2019	Buy	100.00
5	6/3/2019	Buy	80.00
6	8/15/2019	Buy	60.00
7	11/16/2019	Buy	40.00
8	3/26/2020	Buy	30.00
9	5/28/2020	Buy	15.00
10	8/18/2020	Buy	11.00
11	11/11/2020	Buy	12.00
12	3/18/2021	Buy	13.00
13	5/13/2021	Buy	14.00
14	8/17/2021	Buy	15.00
15	11/20/2021	Buy	12.00
16	3/16/2022	Buy	10.00
17	5/18/2022	Buy	5.00
18	8/22/2022	Buy	4.50

- Ascendant Capital Markets, LLC has not received compensation for advisory or investment banking services from the company in the past 12 months.

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Risks & Considerations

Risks to attainment of our share price target include balance sheet/liquidity risks, changes in consumer demand for consumer products, changes to consumer electronics technologies, competition, changing macroeconomic factors, supply chain issues or costs, and investor sentiment for consumer/technology stocks.

Ascendant Capital Markets, LLC Rating System

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 October 7, 2022)

Rating	Count	Percent	Investment Banking Services Past 12 months	
			Count	Percent
Buy	43	98%	17	40%
Hold	0	0%	0	0%
Sell	1	2%	0	0%
Total	44	100%	17	39%

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