

WiSA Technologies, Inc.

Weak Q4 and tempered 2023 outlook. However, growth prospects remains high for digital audio market opportunities. Lowering P/T to \$20.

Weak Q4: WiSA recently (on March 15) reported its Q4 2022 (ending December) results. Revenue was \$0.9 million (-54% y-o-y), compared with our and consensus estimates of \$1.2 - 1.3 million. EPS was \$(10.58), compared with our estimate of \$(6.77) and consensus of \$(19.33). There was no Q4 guidance.

Supply chain and demand issues: We believe the company again (like the rest of 2022) had weak Q4 revenues (-54% y-o-y) as supply chain issues negatively affected its customers' end markets and consumer demand for consumer electronics have slowed (since early 2022).

Tempered 2023 outlook: The company did not provide specific 2023 guidance but expects 2023 revenue to grow from 2022's.

Adjusting 2023 estimates: We are adjusting our 2023 estimates for revenue to \$5.0 million, from \$8.0 million, and for EPS to \$(5.54) from \$(18.62).

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 2022 and this is expected to significantly increase over the next several years.

WiSA Wave growth to drive sales: WiSA Wave marketing program is driving strong consumer traffic and had 1 million visitors in 2022. 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. The company is also sampling WiSA E's technology using its IP on 5 GHz Wi-Fi chips.

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, 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 Q4. In the current Q1, the company raised ~\$8 million in stock. We believe WiSA has enough cash into 2024.

Reverse stock split: The company effected a 1:100 reverse stock split in January 2023

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.

Current valuation attractive: We are maintaining our BUY rating, but lowering our 12-month price target to \$20 from \$175, 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

March 28, 2023

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NacdagCNA

Stock Data

exchange:	ivasdaqcivi
52-week Range:	\$1.88 - 135.00
Shares Outstanding (million):	3.0
Market cap (\$million):	\$6
EV (\$million):	\$4
Debt (\$million):	\$1
Cash (\$million):	\$3
Avg. Daily Trading Vol. (\$million):	\$3
Float (million shares):	2
Short Interest (million shares):	0.1
Dividend, annual (yield):	\$0 (NA%)

Revenues (US\$ million)

	2023E	2023E	2024E	2024E
	<u>(Cur.)</u>	<u>(Old)</u>	<u>(Cur.)</u>	<u>(Old)</u>
Q1 Mar	0.6E	1.4E	0.9E	
Q2 Jun	0.9E	2.0E	1.5E	
Q3 Sep	1.6E	2.2E	2.6E	
Q4 Dec	<u>1.9E</u>	2.4E	3.0E	
Total	5.0E	8.0E	8.0E	
EV/Revs	0.8x		0.5x	

Earnings per Share (pro forma)

	2023E	2023E	2024E	2024E
	(Cur.)	(Old)	(Cur.)	(Old)
Q1 Mar	(2.17)E	(4.91)E	(1.27)E	
Q2 Jun	(1.31)E	(4.94)E	(1.20)E	
Q3 Sep	(1.13)E	(4.64)E	(1.15)E	
Q4 Dec	(1.21)E	(4.14)E	(1.09)E	
Total	(5.54)E	(18.62)E	(4.70)E	
P/E	N/A		N/A	

^{*}Reflects a 1:100 reverse stock split in January 2023

Important Disclosures

Ascendiant 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 15.

COMPANY UPDATE

Rating: BUY

Ticker: WISA

Price: \$1.96

Target: \$20.00 (from \$175)



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







Exhibit 2: WiSA Products

Expanding the Ecosystem: 7 Storefronts





Source: Company reports.

Exhibit 3: WiSA's Market Opportunity

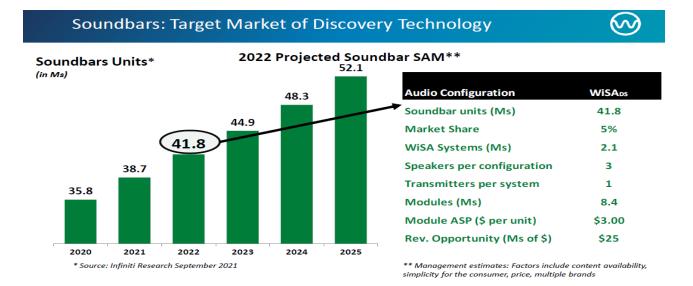




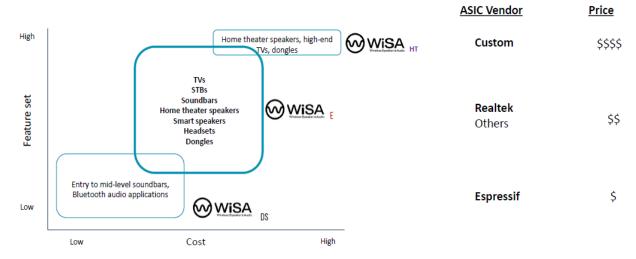
Exhibit 4: WiSA's Products

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.



CES Demo's and Asian Roadshow



- 22 separate companies
- WiSA HT 5.1.2 ATMOS
 - Still perceived as the industry leader for best performance for wireless audio





- WiSA DS 5.1.4 ATMOS Soundbar
 - Its 3D sound mesmerized, but its target price surprised everyone
- WiSA E 5.1
 - Blew their socks off with Top Gun
- Embedded 3.1 Android Proof of Concept

Korea, Japan, and Taiwan March Roadshow completed







Exhibit 5: WiSA Wave



WiSA Wave and Marketing

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- 2022 WiSA Wave results:
 - 1M+ visitors, 2.1M page views
- Mid-year 2022 marketing pivoted from WiSA to WiSA Certified with Platin Audio products
 - Increased consumer awareness of WiSA as measured through organic visitors
 - Streamlined buying process of Platin Audio speakers
- In 2023, tuning marketing messages to everything Atmos to support WiSA's technology strength in delivering more audio channels than other solutions: For example



Platin's updated Monaco 5.1.2 home theater system adds Dolby Atmos to its WiSA-powered offering to create an affordable yet impressive home cinema experience

Coming soon Platin Audio Soundbar with 5.1.4 enabled by WiSA DS



Exhibit 6: WiSA Future Roadmap

Beyond Premium Audio: Driving 2022 Growth SEMMUT ⊗WISA

- 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 Reciever	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

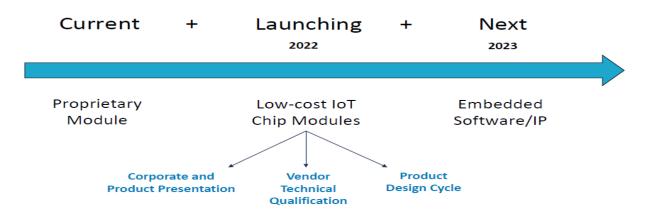




Exhibit 7: WiSA Business Model and Potential Revenue

Bringing Spatial Audio to the Mass Markets



WiSA's vision is to become the spatial audio standard across the audio marketplace and become natively embedded in OEM SoCs

Enter the marketplace by selling audiophile quality chips to early adopters within high-end audio

Leverage success in high-end market to gain mass market adoption through deployment of low-cost IoT modules

Establish WiSA as the standard for wireless spatial audio; become natively embedded in OEM SoCs

WISA HT

(Home Theater)

- · 5GHz with DFS support
- 8 channels
- · Fix Ultra low latency (5ms)
- Tight speaker sync
- 24-bit audio
- · Up to 96KHz sample rates

Wisa Ds

(Discrete Systems)

- Low-cost 2.4GHz IoT transceiver
- (4+Sub) audio channels
- · Fixed transport latency (40ms)
- Tight speaker sync
- 16-bit audio
- 48KHz sample rateSpatial audio support (audio support)
- Spatial audio support (audio plus data)

WiSA E

(Embedded Modules)

- 5GHz IoT transceiver
- 6 audio channels (future 8-10)
- · Fixed transport latency (20ms)
- · Tight speaker sync
- 24-bit audio
- . up to 192KHz sample rate
- Spatial audio support (audio plus data)

WISA E

(Embedded Software)

- 5GHz IoT transceiver
- 6 audio channels (future 8-10)
- · Fixed transport latency (20ms)
- Tight speaker sync
- 24-bit audio
- up to 192KHz sample rate
- Spatial audio support (audio plus data)

Proprietary Wireless

Wi-Fi Compatible (RTOS, Linux)

Embedded Software

2015 - 2021

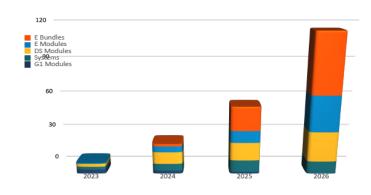
2022

2023

2024

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

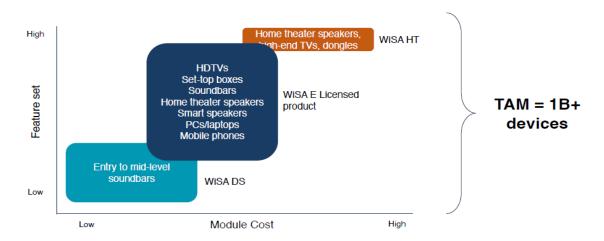
Use of Projections and illustrations: This page contains certain [financial forecasts] and illustrations. Neither [WISA's] independent auditors nor any of CONMINIA GLASTION G



Exhibit 8: WiSA Product Roadmap and Opportunities

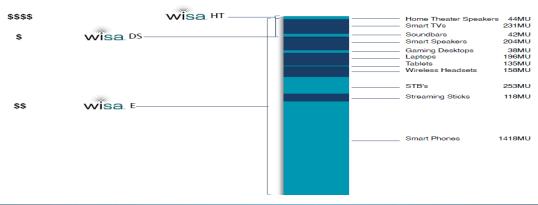
Licensing Enables Broad Market Expansion





WiSA DS and E Growth Opportunities





WiSA DS – Customer Response

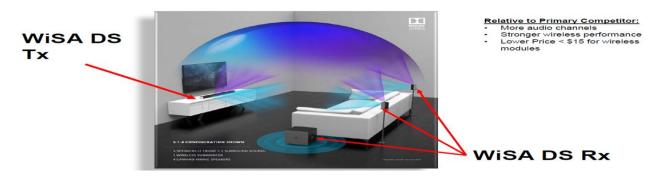
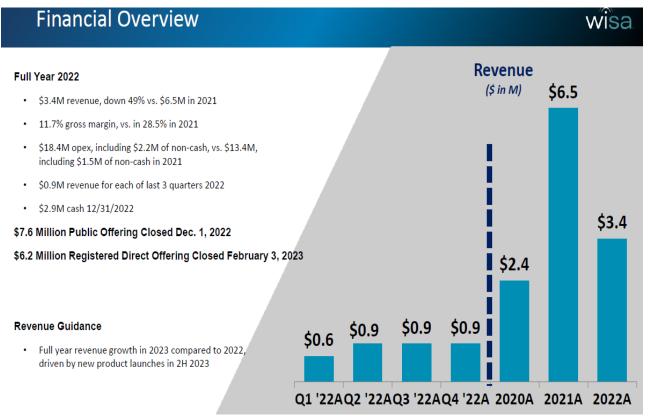




Exhibit 9: WiSA's Q4 2022 Results and Outlook (as of March 2023)



Q4 2022 and Recent Highlights

- Demonstrated Dolby Atmos Music was trending with the Dolby Atmos at the LD Micro Main Event XV.
- Premiered WiSA Association's latest category expansion at CEDIA Expo 2022, where members won multiple awards.
- Platin Audio debuted the world's first wireless Dolby Atmos enabled WiSA Certified speaker system.
- · Launched a new App delivering powerful and intuitive control of WiSA-Enabled TVs, Soundbars, and External Transmitters.
- Platin Audio showcased its New Monaco 5.1.2 at B&H Photo Video SuperStore in New York City.
- At CES 2023, demonstrated:
 - WiSA's multichannel audio software IP running on an Android TV SoC Platform
 - WiSA E 5GHz multichannel audio software running on a Realtek wireless chip
 - A wireless 5.1.4 Dolby Atmos soundbar system platform powered by WiSA DS.
- Began shipping WiSA E multichannel audio development kits to initial Beta customers. Mesanovic's latest studio monitor speaker earned WiSA HT Interoperability
- Certification. Pylon Audio's Jasper loudspeakers line earned WiSA HT Interoperability Certification.



Exhibit 10: Business Overview and Investment Highlights

Overview of Business



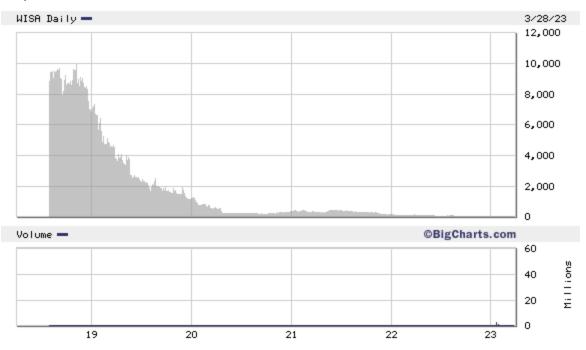
- WiSA E is a compelling technology advancement
- WiSA DS is being specified for design and building of SB
- Marketing focused immersive audio products with Atmos upfiring speakers
- Consumer electronics industry is still in a slump from overbuilding and weak consumer demand
- Operation Expenses will drop by \$1M+ from Q4 to Q1
- Expect Revenue growth YOY for full year 2023

Key Highlights

- Highly-differentiated multichannel wireless audio technology with implementations in premium audio brands
- World-class premium technology ported to low-cost IoT chips to address mass market audio systems with software roadmap to address TAM of over 2 billion units
- 3 Establishment and management of the Wireless Speaker and Audio Association with interoperability specification, testing, and compliance standard
- 4 30+ brands have designed WiSA technologies into their products
- 5 Strong IP position and significant patent coverage
- 6 Strong revenue growth from modules sales, audio systems sales, and licensing



Exhibit 11: WiSA Technologies's (f.k.a. Summit Wireless Technologies, Inc.) Stock Price (4-Years since IPO in July 2018)



^{*}Reflects a 1:100 reverse stock split in January 2023

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

Exhibit 12: Consensus Expectations (as of March 15, 2023)

	Revenue (mils) 2022E	<u>2023E</u>		EPS 2022E	<u>2023E</u>
Q1 Mar	\$0.6A	\$1.2E	Q1 I	* (, , ,
Q2 Jun	\$0.9A		Q2 .	Jun \$(27.3 ²	4)A
Q3 Sep	\$0.9A		Q3 S	Sep \$(30.8	5)A
Q4 Dec	\$1.3E		Q4 [Dec \$(19.33	3)E
Total	\$3.9E	\$10.5E	Tota	al \$(94.67	7)E \$(59.67)E

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

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

^{*}Reflects a 1:100 reverse stock split in January 2023

WISA: WiSA Technologies, Inc.



FINANCIAL MODEL

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

WiSA Technologies, I																				
Income Statement (\$ mils)	Mar-21	Jun-21	Sep-21	Dec-21	2021	Mar-22		Sep-22	Dec-22	2022	Mar-23	Jun-23	Sep-23	Dec-23	2023	Mar-24	Jun-24	Sep-24	Dec-24	2024
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	1.2	1.6	1.8	2.0	6.5	0.6	0.9	0.9	0.9	3.4	0.6	0.9	1.6	1.9	5.0	0.9	1.5	2.6	3.0	8.0
Cost of Revenues	0.9	1.1	1.3	1.4	4.7	0.5	0.8	0.8	0.9	3.0	0.5	0.7	1.2	1.3	3.6	0.7	1.1	1.9	2.1	5.7
Gross Profit	0.3	0.5	0.5	0.6	1.9	0.1	0.2	0.1	0.0	0.4	0.1	0.3	0.5	0.6	1.4	0.2	0.4	0.7	0.9	2.3
Research and development	1.2	1.3	1.3	1.4	5.2	1.5	1.9	1.9	1.8	7.1	1.4	1.2	1.5	1.7	5.7	1.4	1.5	1.4	1.5	5.8
Sales and marketing	0.9	1.0	1.0	1.3	4.1	1.3	1.3	1.5	2.0	6.1	1.4	1.4	1.5	1.7	6.0	1.4	1.5	1.4	1.5	5.8
General and administrative	1.0	1.0	1.1	1.0	4.0	1.1	1.1	1.4	1.5	5.2	1.4	1.4	0.8	0.9	4.6	1.4	1.1	1.4	1.5	5.3
Restructuring and other	1.0	1.0	1.1	1.0	0.0	1.1	1.1	1.4	1.5	0.0	1.4	1.4	0.0	0.5	0.0	1.4	1.1	1.4	1.5	
Total operating expenses	3.0	3.3	3.4	3.7	13.4	4.0	4.3	4.9	5.3	18.4	4.2	4.0	3.8	4.3	16.3	4.1	4.1	4.3	4.4	<u>0.0</u> 16.9
Total operating expenses	3.0	3.3	3.4	3.1	13.4	4.0	4.3	4.9	5.5	10.4	4.2	4.0	3.0	4.3	16.3	4.1	4.1	4.3	4.4	10.9
Operating income (loss)	(2.7)	(2.8)	(2.9)	(3.1)	(11.5)	(3.9)	(4.1)	(4.7)	(5.3)	(18.0)	(4.2)	(3.8)	(3.3)	(3.7)	(14.9)	(3.8)	(3.7)	(3.6)	(3.6)	(14.7)
Interest income (expense)	(0.0)	(0.0)	(0.0)	0.0	(0.0)	(0.0)		(0.2)	(0.7)	(0.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Other income (expense)	(0.6)	(1.8)	0.9	(0.0)	(1.5)	(0.0)	(0.0)	0.3	2.5	2.8	(0.1)	(0.1)	(0.1)	0.0	(0.3)	(0.1)	(0.1)	(0.1)	0.0	(0.3)
Income before income taxes	(3.3)	(4.6)	(2.1)	(3.1)	(13.0)	(3.9)	(4.1)	(4.6)	(3.5)	(16.1)	(4.3)	(3.9)	(3.4)	(3.7)	(15.3)	(4.0)	(3.8)	(3.7)	(3.6)	(15.0)
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	0.0	0.0
Net income (loss)	(3.3)	(4.6)	(2.1)	(3.1)	(13.0)	(3.9)	(4.1)	(4.6)	(3.5)	(16.2)	(4.3)	(3.9)	(3.4)	(3.7)	(15.3)	(4.0)	(3.8)	(3.7)	(3.6)	(15.0)
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Nonrecurring/noncash adjustme		(4.6)	(0.4)	(2.4)	0.0	(2.0)	(4.4)	(4.6)	(2.5)	0.0	(4.0)	(2.0)	(2.4)	(0.7)	0.0	(4.0)	(2.0)	(0.7)	(2.6)	0.0
Net income (pro forma)	(3.3)	(4.6)	(2.1)	(3.1)	(13.0)	(3.9)	(4.1)	(4.6)	(3.5)	(16.2)	(4.3)	(3.9)	(3.4)	(3.7)	(15.3)	(4.0)	(3.8)	(3.7)	(3.6)	(15.0)
EBITDA																				
Shares, Basic	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.2	2.0	3.0	3.0	3.1	2.8	3.1	3.2	3.2	3.3	3.2
Shares, Diluted	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.2	2.0	3.0	3.0	3.1	2.8	3.1	3.2	3.2	3.3	3.2
EPS Basic (Pro forma)	11				(\$105.20)						(\$2.17)	(\$1.31)	(\$1.13)	(\$1.21)	(\$5.54)	(\$1.27)	(\$1.20)	(\$1.15)	(\$1.09)	(\$4.70)
EPS Diluted (Pro forma)	(\$33.19)	(\$42.39)	(\$14.81)	(\$20.46)	(\$105.20)	(\$26.33)	(\$27.34)	(\$30.85)	(\$10.58)	(\$82.89)	(\$2.17)	(\$1.31)	(\$1.13)	(\$1.21)	(\$5.54)	(\$1.27)	(\$1.20)	(\$1.15)	(\$1.09)	(\$4.70)
Margins																				
Gross margin	25.6%	29.0%	28.0%	30.2%	28.5%	11.0%	19.9%	13.9%	1.6%	11.7%	15.0%	27.0%	28.0%	30.0%	27.1%	26.0%	27.0%	28.0%	30.0%	28.3%
Research and development	101.7%	82.5%	73.2%		80.0%	271.6%	199.0%	206.9%	194.9%	212.3%	250.0%	125.0%	90.0%	90.0%	114.7%	150.0%	100.0%	55.0%	50.0%	72.4%
Sales and marketing	75.8%	61.7%	56.5%		63.0%	229.7%	140.2%	164.2%		182.5%	250.0%	150.0%	90.0%	90.0%	119.5%	150.0%	100.0%	55.0%	50.0%	72.4%
General and administrative	84.0%	62.5%	59.8%	49.0%	61.4%	198.9%	114.4%	149.4%	168.9%	153.2%	250.0%	150.0%	50.0%	50.0%	91.5%	150.0%	70.0%	55.0%	50.0%	66.7%
Operating margin	-235.9%	-177.7%	-161.5%	-153.2%	-176.0%	-689.2%	-433.7%	-506.7%		-536.2%	-735.0%	-398.0%	-202.0%	-200.0%	-298.6%	-424.0%	-243.0%		-120.0%	-183.2%
Tax rate, GAAP	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%
Net margin	-287.3%	-291.2%	-114.1%	-153.5%	-199.4%	-689.8%	-434.2%	-496.2%	-381.0%	-480.0%	-754.7%	-409.8%	-208.8%	-200.6%	-305.5%	-436.3%	-250.4%	-141.2%	-120.4%	-187.6%
Y/Y % change																				
Total Revenue	181%	354%	198%	93%	172%	-51%	-40%	-48%	-54%	-49%	0%	0%	75%	102%	49%	60%	60%	60%	60%	60%
Gross margin	368%	3725%	387%		337%	-79%	-59%	-74%	-98%	-79%	37%	36%	253%	3601%	243%	177%	60%	60%	60%	67%
Research and development	3%	44%	7%	11%	15%	31%	44%	47%	24%	36%	-8%	-37%	-24%	-7%	-20%	-4%	28%	-2%	-11%	1%
Sales and marketing	25%	91%	22%	35%	39%	49%	36%	51%	58%	49%	9%	7%	-4%	-16%	-3%	-4%	7%	-2%	-11%	-3%
General and administrative	9%	63%	7%	-41%	-4%	16%	10%	30%	58%	28%	26%	31%	-41%	-40%	-11%	-4%	-25%	76%	60%	17%
Operating income (loss)	2%	40%	-2%	-16%	2%	43%	46%	63%	73%	57%	7%	-8%	-30%	-30%	-17%	-8%	-2%	9%	-4%	-2%
Net income (loss)	23%	30%	-32%	-16%	1%	18%	-11%	126%	14%	24%	9%	-6%	-26%	6%	-5%	-7%	-2%	8%	-4%	-2%
EPS Diluted (Pro forma)	-85%	-53%	-62%	-55%	-57%	-21%	-35%	108%	-48%	-21%	-92%	-95%	-96%	-89%	-93%	-42%	-8%	2%	-10%	-15%
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Source: Company reports and Ascendiant Capital Markets estimates.

*Reflects a 1-for-100 Reverse Stock Split in January 2023



WiSA Technologies, In	c. (f.k.a. Summit Wireless	Technologies, Inc.)
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Balance Sheet (\$ mils)	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-2
iscal 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	9.7	10.3	16.1	13.1	9.1	4.8	2.6	2.9	11.3	7.8	4.5	1.4	(1.6)	(5.2)	(9.1)	(12.3
Short term investments									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts receivable, net	0.1	0.4	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.7	1.3	1.4	0.7	1.2	2.0	2.3
Inventory	3.3	3.6	4.0	4.8	6.2	6.2	7.3	7.1	0.7	1.0	1.8	1.9	1.0	1.7	2.8	3.1
Deferred income taxes									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prepaid expenses and other	1.4	1.4	1.5	<u>1.1</u>	1.0	0.5	1.0	0.9	0.3	0.5	0.8	0.9	0.5	0.8	1.3	1.5
Total current assets	14.6	15.7	21.7	19.2	16.5	11.8	11.2	11.1	12.7	10.0	8.3	5.7	0.6	(1.6)	(2.9)	(5.4
Long term securities/investments									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property and equipment, net	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
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	0.0	0.0	0.0
<u>Other</u>	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total assets	14.8	15.9	21.9	19.4	17.0	12.2	11.6	11.5	13.0	10.3	8.6	5.8	0.7	(1.5)	(2.8)	(5.2
Liabilities and stockholders' equity																
Accounts payable	1.1	0.7	0.8	1.5	2.1	1.2	2.6	2.0	0.4	0.7	1.2	1.4	0.7	1.1	2.0	2.2
Accrued expenses	1.8	2.7	2.0	1.4	1.7	1.5	1.2	1.6	0.6	0.9	1.6	1.9	0.9	1.5	2.6	3.0
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
Deferred income tax									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Short term debt	0.3	0.8							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total current liabilities	3.2	4.2	2.9	3.0	3.8	2.7	3.9	3.7	1.0	1.7	2.9	3.2	1.6	2.6	4.6	5.2
Deferred income taxes									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Warrant liabilities	0.4	0.0	0.0	0.0	0.2	0.0	1.0	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
Other long term liabilities	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Long term debt	0.6						1.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total other liabilities	1.0	0.1	0.1	0.0	0.2	0.1	2.4	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Preferred stock	0.6								0.0	0.0	0.0	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	0.5	1.0	1.6	2.1	2.6	3.1	3.6	4.1
Additional paid-in capital	213.6	218.7	228.1	228.6	229.1	229.6	230.2	226.3	226.3	226.3	226.3	226.3	226.3	226.3	226.3	226.3
Retained earnings	(203.7)	(207.1)	(209.1)	(212.2)	(216.1)	(220.2)	(224.8)	(228.3)	(232.6)	(236.5)	(239.9)	(243.6)	(247.6)	(251.3)	(255.1)	(258.6
Treasury stock	(200.17)	(=0)	(200.1)	(= : = : 2)	(2.0.1)	()	,,	,,	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accumulated other comprehensive in	l come								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other									8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Total stockholders' equity	10.5	11.6	19.0	16.4	13.0	9.4	5.4	(2.0)	2.2	(1.1)	(4.0)	(7.2)	(10.7)	(13.9)	(17.1)	(20.2
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Balance Sheet Drivers

Balance Sneet Drivers																
	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Prepaid as % of total rev	123%	90%	82%	54%	173%	55%	110%	97%	50%	50%	50%	50%	50%	50%	50%	50%
Accounts payable as % of total rev	99%	42%	46%	77%	371%	125%	280%	223%	75%	75%	75%	75%	75%	75%	75%	75%
Inventories as % of cost of rev	384%	318%	304%	342%	1236%	824%	903%	785%	150%	150%	150%	150%	150%	150%	150%	150%
Accrued expenses as % of total rev	153%	168%	113%	71%	305%	160%	132%	178%	100%	100%	100%	100%	100%	100%	100%	100%
Activity Ratios																
A/R Days Sales Outstanding	11	24	10	10	39	24	23	27	70	70	70	70	70	70	70	70
Inventory Turnover	1.0x	1.3x	1.3x	1.2x	0.3x	0.5x	0.4x	0.5x	2.7x	2.7x	2.7x	2.7x	2.7x	2.7x	2.7x	2.7x
A/P Days Payable	119	54	57	100	375	141	293	204	79	92	94	96	91	92	94	96
Book & Cash Value (per share)																
Book Value per Share (diluted)	\$105.58	\$107.10	\$136.49	\$109.18	\$87.57	\$62.46	\$35.51	-\$6.05	\$1.14	-\$0.38	-\$1.33	-\$2.35	-\$3.42	-\$4.39	-\$5.32	-\$6.17
Cash per Share (diluted)	\$97.26	\$94.76	\$115.45	\$87.39	\$61.10	\$31.70	\$17.54	\$8.78	\$5.72	\$2.62	\$1.48	\$0.45	-\$0.51	-\$1.64	-\$2.82	-\$3.75
Net cash per Share (diluted)	\$88.78	\$86.96	\$115.45	\$87.39	\$61.10	\$31.70	\$9.07	\$7.39	\$5.49	\$2.47	\$1.33	\$0.30	-\$0.66	-\$1.79	-\$2.96	-\$3.89

Source: Company reports and Ascendiant Capital Markets estimates



ash Flow Statement (\$ mils)	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	Mar-24	Jun-24 S	Sep-24	Dec-24	202
iscal 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-I
Cash flow from operating activit	ies																			
Net income	(3.3)	(3.4)	(2.1)	(3.1)	(11.8)	(3.9)	(4.1)	(4.6)	(3.5)	(16.2)	(4.3)	(3.9)	(3.4)	(3.7)	(15.3)	(4.0)	(3.8)	(3.7)	(3.6)	(15.
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.
Amortization					0.0					0.0					0.0					0.
Debt related amortization expens	e				0.0			0.2	0.7	0.9					0.0					0.
Stock comp	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	0.5	0.5	0.5	0.5	2.
Deferred rent					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	0.0	0.0	0.
Provision for bad debts					0.0					0.0					0.0					0.
Reserves					0.0					0.0					0.0					0.
Change in fair value of warrant I	0.6	0.6		0.0	1.1			(0.3)	(2.5)	(2.8)					0.0					0.
Writedowns and impairments					0.0					0.0					0.0					0.
Other gains/losses			(0.9)		(0.9)					0.0					0.0					0.
Other					0.0					0.0					0.0					0.
Changes in operating assets and li	abilities:																			
Accounts receivable	(0.1)	(0.3)	0.2	(0.0)	(0.1)	(0.0)	(0.0)	0.0	(0.0)	(0.1)	(0.2)	(0.3)	(0.5)	(0.2)	(1.2)	0.7	(0.5)	(0.9)	(0.3)	(0.
Inventory	(0.6)	(0.3)	(0.4)	(0.8)	(2.1)	(1.4)	(0.0)	(1.0)	0.2	(2.3)	6.3	(0.3)	(0.7)	(0.2)	5.1	0.9	(0.7)	(1.2)	(0.3)	(1.
Prepaid expenses & other curre	(0.5)	(0.0)	(0.1)	0.4	(0.2)	0.1	0.5	(0.5)	0.1	0.2	0.6	(0.2)	(0.3)	(0.1)	(0.0)	0.5	(0.3)	(0.6)	(0.2)	
Income tax	(/	(/	(- /		0.0			(/		0.0		(- /	()	(- /	0.0		()	(/	(-)	0.
Other assets					0.0		0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.
Accounts payable	0.5	(0.5)	0.2	0.7	0.9	0.6	(0.6)	1.1	(0.6)	0.5	(1.6)	0.3	0.5	0.2	(0.7)	(0.7)	0.5	0.8	0.3	0.
Accrued expenses	0.4	0.9	(0.6)	(0.6)	0.0	0.2	(0.6)	0.1	0.4	0.1	(1.1)	0.4	0.7	0.2	0.2	(0.9)	0.6	1.1	0.3	1.
Accrued interest	0	0.0	(0.0)	(0.0)	0.0	0.2	(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.
Deferred revenue					0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Other liabilities					0.0	(0.0)	(0.1)	(0.0)	(0.0)	(0.1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Net cash (used in) provided by	(2.8)	(2.6)	(3.2)	(2.9)	(11.5)	(4.0)	(4.3)	(4.6)	(4.6)	(17.5)	0.4	(3.5)	(3.3)	(3.1)	(9.5)	(2.9)	(3.6)	(3.8)	(3.1)	1
itet dasii (used iii) provided by	(2.0)	(2.0)	(0.2)	(2.5)	(11.5)	(4.0)	(4.0)	(4.0)	(4.0)	(11.0)	0.4	(0.0)	(0.0)	(5.1)	(3.5)	(2.5)	(0.0)	(0.0)	(5.1)	(10.
Cash flow from investing activiti	••																			
-		(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)	(0.0)	(0.0)	(0.1)	(0.0)	//
Purchases of property and equip Purchases of short-term investm	(0.0)	(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)	(0.1)	(0.0)	(<mark>0</mark> .
Acquisitions	ents				0.0					0.0					0.0					0.
·																				0.
Other				(0.0)	0.0	()				0.0				(0.0)	0.0					_
Net cash used in investing activ	(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)	(0.0)	(0.0)	(0.1)	(0.0)	(0.
Cash flow from financing activiti	es																			
Issuance of debt	(0.0)	(0.0)	(0.0)	(0.0)	0.0	(0.0)	(0.0)	2.5	(0.0)	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Repayment of debt	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(1.5)	(1.5)					0.0					0.
Issuance of stock			9.0	0.0	9.0				6.4	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Repurchase of common stock					0.0					0.0					0.0					0.
Proceeds from stock option exe	5.1	3.2	0.0		8.3					0.0					0.0					0.
Other					0.0					0.0	8.0				8.0					0.
Dividends and distributions					0.0					0.0					0.0					<u>0.</u>
Cash provided by (used in) fina	5.1	3.2	9.1	(0.0)	17.3	(0.0)	(0.0)	2.5	4.9	7.3	8.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.
Effect of exchange rate on cash					0.0					0.0					0.0					0.
Not be a second of the second				(0.5)		(4.6)	(4.6)	(0.0		(40.5)		(0.F)	(0.6)	(0.0)	(4.5)	(0.6)	(0.0)	(0.0)	(0.6)	
Net increase (decrease) in cash Beginning cash and equivalents	2.3 7.4	0.6 9.7	5.8 10.3	(3.0) 16.1	5.7 7.4	(4.0)	(4.3)	(2.1) 4.8	0.3	(10.2)	8.4	(3.5)	(3.3)	(3.1)	(1.5) 2.9	(3.0)	(3.6) (1.6)	(3.9) (5.2)	(3.2) (9.1)	,
	1.4	9.7	10.3	16.1	1.4	13.1	9.1	4.8	2.6	13.1	2.9	11.3	7.8	4.5	2.9	1.4	(1.6)			1.

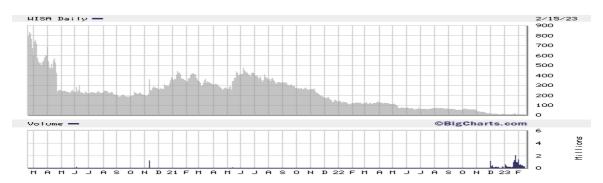
Source: Company reports and Ascendiant Capital Markets estimates



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 Ascendiant 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 Date		Price
Report	Date	Rating	Target
1	10/10/2018	Buy	14,000
2	11/20/2018	Buy	13,500
3	1/26/2019	Buy	12,500
4	3/31/2019	Buy	10,000
5	6/3/2019	Buy	8,000
6	8/15/2019	Buy	6,000
7	11/16/2019	Buy	4,000
8	3/26/2020	Buy	3,000
9	5/28/2020	Buy	1,500
10	8/18/2020	Buy	1,100
11	11/11/2020	Buy	1,200
12	3/18/2021	Buy	1,300
13	5/13/2021	Buy	1,400
14	8/17/2021	Buy	1,500
15	11/20/2021	Buy	1,200
16	3/16/2022	Buy	1,000
17	5/18/2022	Buy	500
18	8/22/2022	Buy	450
19	12/14/2022	Buy	175

 Ascendiant 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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appropriate, but the large majority of reports are published at irregular intervals as we consider appropriate and, in some cases, as constrained by industry regulations.

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Following are some general risks that can adversely impact future operational and financial performance and share price valuation: (1) industry fundamentals with respect to legislation, mandates, incentives, customer demand, or product pricing; (2) issues relating to competing companies or products; (3) unforeseen developments with respect to management, financial condition or accounting policies or practices; or (4) external factors that affect the interest rates, currency, the economy or major segments of the economy. Past performance is not a guide to future performance, future returns are not guaranteed, and loss of original capital may occur. Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Our report is disseminated primarily electronically, and, in some cases, in printed form. The information contained in this report is not incorporated into the contents of our website and should be read independently thereof. Copyright Ascendiant Capital Markets, LLC. No part of this material may be copied, photocopied or duplicated by any means or redistributed without the prior written consent of Ascendiant Capital Markets, LLC.

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.

Ascendiant 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.

Ascendiant Capital Markets, LLC Distribution of Investment Ratings (as of January 15, 2023)

Investment Banking Services

			Past 12 months						
Rating	Count	Percent	Count	Percent					
Buy	44	98%	18	41%					
Hold	0	0%	0	0%					
Sell	1	2%	0	0%					
Total	45	100%	18	40%					

WISA: WiSA Technologies, Inc.



Other Important Disclosures

Our analysts use various valuation methodologies including discounted cash flow, price/earnings (P/E), enterprise value/EBITDAS, and P/E to growth rate, among others. Risks to our price targets include failure to achieve financial results, product risk, regulatory risk, general market conditions, and the risk of a change in economic conditions.

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