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ClearOne.

ClearOne, Inc.

Ticker: (NASDAQ:CLRO)

Updated Research Report

as of November 22, 2021

s of November 22, 2021

COMPANY BACKGROUND

ClearOne, Inc. (the "Company")(NASDAQ: CLRO) is a global manufacturer and provider of audio-video ("AV") communications systems. www.ClearOne.com - The Company designs, develops and sells a complete line of integrated proprietary conferencing, collaboration and network streaming solutions for high-performance voice and visual communications across any organization, workspace or event. Leveraging its proven long-standing expertise in professional AV equipment technology, the Company offers a wide variety of scalable quality-tiered multimedia communication systems ranging from on-premise installations for enterprise-level commercial and institutional applications to out-of-the-box product sets for smaller group meeting venues and remote access in off-site scenarios. Distributed through a global network of over 300 independent specialized dealers and resellers in more than 50 countries, ClearOne products serve a full spectrum of commercial and governmental end users concentrated in healthcare, financial, technology, legal, and education sectors. Customers include some of the world's largest corporations, such as Apple, Walmart, Shell, Pfizer and Morgan Stanley, most prestigious universities, such as Harvard and Princeton, as well as administrative organizations like courts or police departments. Incorporated in Utah in July 1983 and reincorporated in Delaware in October 2018, the Company is headquartered in Salt Lake City, where it operates its primary research and development ("R&D") center, marketing, inventory fulfillment and repair hub. Strategic satellite R&D and sales support locations are in Austin, Texas and Gainesville, Florida; Zaragoza, Spain; Chennai, India; and Dubai, United Arab Emirates.

Having started in an era of budding digital audio applications with broadcast studio telephone interface equipment designed for radio and TV call-in talkshows, such as the Larry King Live show, the Company has established a prolific history of developing innovative products over nearly four decades of audiovisual technology advancements. While fortifying its leadership position in the domestic telephone interface market in the 1990s, the Company known at the



Clear One - Integrated Conferencing Solutions

time as Gentner Communications Corpora-

tion entered the professional audio conferencing space and significantly expanded its product portfolio in July 2000 through an asset purchase of ClearOne, Inc., a private Woburn, MA multimedia communications company organized under Massachusetts law in May 1997. In the decade following the acquisition, which contributed complementary audio offerings and in-process intellectual properties for video conferencing systems, the Company dominated the enterprise audio conferencing market, achieving significant global market share. By continuing to improve its product and intellectual property portfolio internally and through a multiple of video-related acquisitions, in November 2020 ClearOne leveraged its enterprise-level technology for use in home office settings to address the shift towards remote working and learning experiences caused by the COVID-19 pandemic.

Sector: Technology Industry: Communication Equipment

www.ClearOne.com

Updated Target Price: \$2.50-\$3.00

Key Statistics

•	
Price 11/22/2021	1.35
52 Week High	4.28
52 Week Low	1.25
Avg. Vol (3month)	223,217
Market Cap (Interday)M	30.24
Price/Sales	1.0
Common Shares Outstanding (M)	22.4
Float(M)	9.55
EPS(9Months)	(0.28)
Beta (5y)	1.21
C V-1 E: / N/	CDAO

Source: Yahoo Finance / NASDAQ

Recent Highlights

- November 12, 2021, the Company reported financial results for the three and nine months ended September 30, 2021. "ClearOne continued to achieve solid revenue growth in core audio conferencing and microphone products, driven by our innovative BMA 360 and BMA-CT based solutions. Revenue from video products did not meet last year's demand levels boosted by CARES Act stimulus funding and caused the year over year revenue decline. " said Zee Hakimoglu, CEO and Chair of ClearOne
- November 4, 2021, the Company announced that a jury in the U.S. District Court for the District of Delaware has found that ClearOne's innovative Ceiling Tile Beamforming Mic Array line of products do not infringe Shure Incorporated's U.S. Patent No. D865,723 (the "'723 patent"). The jury also found that the '723 patent is invalid.
- October 28, 2021 announced that its
 groundbreaking BMA 360 has been
 awarded the 2021 Installation Product
 Award for Most Innovative Audio
 Hardware by Systems Contractor News
 (SCN), the industry-leading systems
 integration trade magazine relied upon by
 decision-makers across the AV technology
 industry.



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opportunity among predominantly private providers of comprehensive integrated AV solutions.



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For the nine months ended September 30, 2021, the Company reported 6.1% revenue growth to \$21.77 Million from \$20.50 Million in the comparable period last year. For the year ended December 31, 2020, the Company's revenue increased 16.1% to \$29.1 million compared to \$25.0 million in calendar year 2019. A public company since March 1985 and trading on NASDAQ ("CLRO") since August 2007, ClearOne provides a one-stop source for high-quality AV conferencing and collaboration. It represents a compelling investment

PRODUCTS

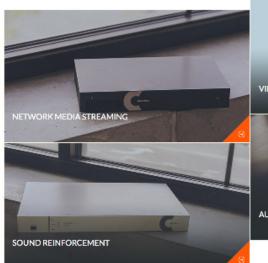
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ClearOne offers a large variety of audio and video conferencing and collaboration solutions. The unique family of products and solutions combine advanced software and hardware to deliver the best audio and video collaboration and conferencing performance. The Company has focused on serving business, non-profit organizations and governmental entities in the past, but recently has expanded the product line to home offices because of the growing work-from-home, learn-from-home and hybrid trends. The conferencing solutions are designed to deliver the highest quality and efficiency in transmitting audio and video signals, and data.

Audio-conferencing and Microphones. The audio-conferencing solutions include products such as digital signal processing ("DSP") mixers, conference call phones, amplifiers, microphones, speakerphones, and AV Network Management Software. The CONVERGE® Pro 2 and CONVERGE Pro product lines are the ClearOne flagship products of the professionally installed audio solutions. CONVERGE Pro 2's broad DSP platform offers features like advanced audio processing through echo and noise cancellation, feedback elimination, are designed to support a vast amount of microphones and a scalable connection of peripheral devices such as ClearOne's Beamforming Microphone Array or DIALOG 20 Wireless Microphone System. The systems can also be used with a ClearOne 10-inch touch screen Conference Controller and can be combined with ClearOne's COLLABORATE® Live video conferencing room systems. Another one of ClearOne's leading technologies is the Beamforming Microphone Array ("BMA") technology, which employs advanced spatial filtering techniques for concentrated directional signal transmission. BMA 2, the next generation of the product, is one of the most advanced microphones in the industry, featuring advanced echo cancellation, fast adaptation to room background noise ambiance and changes in room acoustics, and better microphone pickup with augmenting microphone signal recognition to better detect softer voices. In 2019, the Company started shipping Beamforming Microphone Ceiling Tile ("BMA-CT"), which makes the AV integrator's job easier and more profitable by transforming and simplifying system design for ceiling tile installations. The Company announced BMA 360, the most technologically advanced BMA-CT, in October of 2020. ClearOne also offers mid-tier, lower cost product lines for smaller conferencing rooms as well as for small and medium sized businesses, which include the INTERACT product line and CONVERGE HUDDLE. There

is also the CHAT product line of affordable USB based personal and group speaker-phones. They are designed for a variety of applications and provide great quality, handsfree audio and playback. The MAX brand is ClearOne's line of conference phones for tabletop conferencing. Other than the BMA professional microphone solution, the Company offers additional professional microphones to serve the client's needs. The Ceiling Microphone Arrays provide rich sound and 360-degree room coverage, combining affordability with great audio quality. ClearOne also has wireless microphone systems to offer more flexibility and scalability without compromising sound quality.

Video-conferencing and Cameras. The Company offers a suite of products for





ClearOne Audio & Visual Streaming and Distribution over IP Network



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videoconferencing and collaboration. These products include the UNITE® webcams that enhance the ease and visual quality of online collaboration beyond the capabilities of integrated laptop and PC cameras. Ranging from basic entry level to professional grade cameras with high resolution, optical zoom, and wide-angle capabilities, the varied tiered equipment is designed to provide solutions for many different room sizes, environments, and price points. The webcams in combination with the audio product lines are bundled into complete COL-LABORATE branded solutions. These bundles include the essential hardware and software for specific applications, creating the perfect

combination for the needs of a small conference room and all the way up to

a large auditorium or a lecture hall.

During the first quarter of 2021, ClearOne introduced two new powerful USB cameras: UNITE 10, the Company's most affordable camera supporting up to 1080p video quality and autofocus capability; and the feature-rich remote-controlled UNITE 50 4K AF, which includes Auto-Framing technology that maximizes screen use through intelligent image algorithms and electronic pan, tilt and zoom ("PTZ") automation for single- or multiperson capture. While the small UNITE 10 can capture five-megapixel images with a field of view up to 87 degrees, the UNITE 50 4K AF has more than eight megapixels of total resolution and an ultra-wide 110-degree field of view, as well as 4K video quality at 30 Hz, superior auto-focus capability and 4x digital zoom, illustrating the wide range of performance levels. Both of the new ClearOne cameras enable life-like video quality to



ClearOne - Audio Visual Product for Conferencing

web-based conferencing applications, including ClearOne's COLLABORATE Space, bEx™, Google Meet, Zoom™, GoToMeeting™, and Microsoft® Teams.

We-

Unified Communications Platforms. The COLLABORATE packages also include the subscription to COLLABORATE Space, the com-

plete cloud solution for messaging, calls, and meetings. The users can connect with colleagues and contacts via audio and video meetings and use a wide range of tools that the system offers. The software allows for integrated file sharing, white boarding, annotation, meeting minutes, scheduling, and many more features that allow participants to work and collaborate efficiently and creatively. As an alternative to using email, users can also create searchable private and public channels, which can be organized by topic and accessed from anywhere. In 2020, the platform also added a feature for hosting large webinars for up to 1000 participants that allows participants to connect with no required downloads or plug-ins. There is also a new feature that expands the capabilities of Microsoft Teams collaboration within the platform. COLLABORATE Space works on any device and is available in "Basic", "Pro", and "Enterprise" versions, with extended functionality for the more robust versions.

Network Streaming. ClearOne also sells AV networking solutions under the VIEW® brands. These solutions allow for streaming time sensitive high definition audio and video and control over TCP/IP (Transmission Control Protocol/Internet Protocol) networks. AV over IP, has many benefits over traditional AV infrastructure, including ease of installation, scalability, and digital quality preservation. The signal is taken from an AV device and then passed through an encoder, travels through the network, and then is converted back to a comparable AV signal using a decoder at the destination device. The Company offers complete solutions to implement AV over IP networks for any organization or home.

Home Office Solutions. In November 2020, the Company introduced the Aura[™]



ClearOne Aura Audio Solutions enables fatigue free and natural-sounding audio for extended conversations.



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range of packages for audio and video conferencing and collaboration specifically tailored for the home office. The Company can leverage its expertise in the commercial and organization office environment and serve this growing market as the global pandemic accelerated the shift towards work-from-home and hybrid work. ClearOne organizes the devices into Good, Better, and Best categories to offer the best solution for different price points. Some of the devices come from the commercial solutions product lines and are modified or grouped to fit the home office environment. The customer can pick individual devices like speakerphones or webcams, or they can buy a package that combines the products into a complete solution. For example, the "Good" Versa 20 package includes a CHAT® personal speakerphone and a smaller webcam, while the "Best" Xceed BMA Room package includes the Company's best products like the flagship BMA CTX, a 4k webcam, Versa USB hub and wall speakers. The Aura product range also includes a free COLLABORATE Space lifetime subscription.

STRATEGY

Product Innovation. Amidst constant technological innovation, research and product development is a key ingredient to the Company's long-term business strategy of providing state-of-the-art professional-AV solutions. Regularly modernized and upgraded, ClearOne products excel in providing top-level communications experience with cutting-edge functionality and exceptional reliability for end-users, and at the same time offering wide-ranging compatibility and full scalability for efficient system integration, as well as superior aesthetics fitting the most demanding high-status professional environments. Continuing its unyielding commitment to best-quality products, the Company devoted approximately \$5.5 million and \$5.8 million to R&D activities during the last two years ending on December 31, 2020 and 2019, respectively. Its 2021 product line has been regularly praised by reviewers from leading authorities on technology design, performance and value, such as *The Gadgeteer, Laptop Magazine, PC Gamer, SMB Nation, TechRadar, Tom's Hardware and 9to5Toys.* In addition to featured product reviews, the Company's new BMA 360 Beamforming Microphone Array Ceiling Tile was named a 2020 Innovation Product Award winner by the readers of *Sound & Video Contractor* magazine, and received a 2021 Top New Technology Award from the commercial microphone category in an annual contest hosted by *CE Pro* and *Commercial Integrator*, leading industry publications popular among AV systems integrators and installers worldwide.

Intellectual Property Protection. In order to protect its intellectual property rights in a fiercely competitive industry, ClearOne relies on a combination of patent, copyright, trademark, and trade secret laws, as well as confidentiality and non-disclosure agreements. Over the years, the Company has amassed a strong portfolio of 82 patents issued and 11 patent applications pending, counting foreign counterparts, covering a wide range of technologies, including adaptive sound enhancement systems for acoustic echo and noise cancellation, spatial audio and other digital signal processing, as well as video processing, networked multimedia streaming and wireless conferencing methods, among others. It has also proven the value of its technology portfolio with successful litigation, claiming favorable judgements in excess of \$60 million in technology related cases over the past decade.

Most recently, the Company has been involved in an industry-prominent drawn-out series of patent infringement lawsuits against Shure Incorporated, based in Chicago, IL, a direct competitor in the installed audio conferencing market. Having started litigation in April 2017, the legal proceedings concern ClearOne's Beamforming Microphone Array ("BMA") technology introduced in 2012, which is protected by over a dozen patents and pending applications, and Shure's Microflex® Advance™ product suite brought to market in 2016. Along the way, ClearOne achieved several intermediate victories affirming the patentability of many of its patented claims covering primarily the integration of acoustic echo cancellation techniques in a January 2019 decision by the Patent Trial Appeal Board ("PTAB") of U.S. Patent and Trademark Office, which was upheld by the U.S. Court of Appeals for the Federal District in October the same year. In contrast, the PTAB in August 2020 affirmed only two and amended another eleven of 40 claims in a Shure patent regarding the form and structure of its nested ring microphone design in MXA910 ceiling arrays. Most importantly, ClearOne obtained a preliminary injunction issued against Shure ordered by the U.S. District Court of the Northern District of Illinois in August 2019, which requires Shure to stop manufacturing, marketing and selling the MXA910 in infringing flush-mounted drop-ceiling configuration based on another ClearOne patent. The court held Shure in contempt in September 2020 for violating the preliminary injunction order by introducing a redesigned but still infringing MXA910-A enjoined arrangement. Having spent nearly \$25 million in capitalized legal costs from 2016 through the end of Q3 2021, the Company is preparing for a jury trial expected in the first half of 2022.



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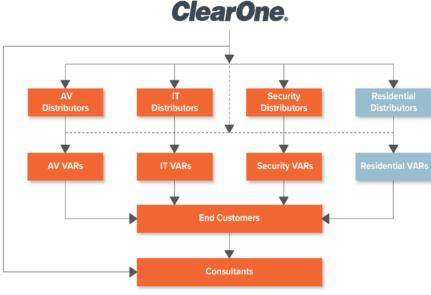
If a favorable court ruling is achieved, this could lead to a substantial judgement against Shure for damages, legal fees, and court costs, which would have a material impact on the Company's finances.

Distribution. With product innovation expertise and global brand name recognition, ClearOne has built a strong position and extensive relationships within the conventional two-tier distribution channel serving the pro AV industry for many decades. The Company supplies its products through a worldwide network of distributors, who facilitate step-down sales to a large number of independent systems integrators, dealers, and value-added resellers ("VARs") of professional audiovisual, information technology, telecommunications, security and other residential electronic systems, who add design and engineering services in conjunction with the selling of physical components. The Company provides sales and technical support, including product education and training, to the channel participants, who work directly with end-users for product fulfillment and installation, if needed.

Overall, ClearOne maintains relationships with approximately 312 distributors and resellers in 56 countries, as well as additional worldwide consultants contracted by final customers. Recently, the Company has bolstered its global sales channels with several distribution agreements for several regions, including:

- United States ADI Global Distribution, a wholesale distributor in Chicago of more than 350,000 security, AV and low-voltage products from more than 1,000 manufacturers with about \$3 billion in annual sales to more than 100,000 contractors and VARs in 17 countries, owned by Resideo Technologies, Inc. (NYSE: REZI);
- Middle East Redington Group, a \$7.3 billion supply chain solutions provider to over 235 international brands serving 37 regional emerging markets through 33,950+ channel partners;
- India Trustech Audio Visual Solution LLP with 400+ channel partners nationwide; and

DISTRIBUTION CHANNEL STRUCTURE



Source: ClearOne, Inc.

Forming an efficient market penetration effort, ClearOne's pro-AV distribution network provides significant leverage in reaching existing and prospective customers worldwide, even for the recently released price-and-scale-curated consumer-level Aura suite, as emerging work-from-home products are supplied predominantly through the professional channel, according to a survey for an October 2020 "Emerging Trends" research feature in *AV* magazine.

Manufacturing. The Company outsources the manufacturing process to electronics manufacturing services ("EMS") providers located outside the U.S. Flex Ltd. (NASDAQ: FLEX), its primary outsourced manufacturer, a \$9.3 billion market cap company previously known as Flextronics International Ltd., is perhaps the largest global electronics contract manufacturer.



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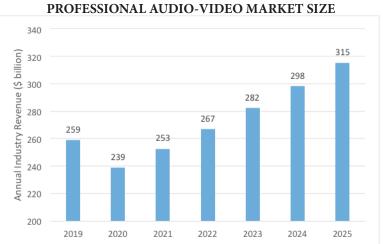
MARKET

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ClearOne is well positioned to serve the growing professional AV industry. According to the 2020 Industry Outlook and Trends Analysis report by the Audiovisual and Integrated Experience Association ("AVIXA"), the pro AV market is expected to reach sales of over \$315 billion in 2025, up significantly from \$239 billion in 2020. The industry sales have peaked in 2019 at \$259 billion and dropped in 2020 due to the global pandemic impact. The report shows the overall industry recovering to pre-pandemic levels in 2022 and growing by \$56 billion beyond the 2019 level in 2025 at a 5.8% five-year compounded annual growth rate ("CAGR"). In the region of ClearOne's highest sales concentration, AVIXA expected the Americas pro AV market to drop 8% to \$86 billion in 2020, with North America accounting

for 87% share, after reaching \$93 billion in 2019. In 2022, revenue for the Americas will rise to \$95 billion and reach \$108 billion in 2025, amounting to about 34% share of the global pro AV market, compared to \$126 billion in Asia Pacific and \$81 billion for Europe, Middle East and Africa.

The pandemic has accelerated trends towards remote work and collaboration, video conferencing, and unified communications. As serving corporate clients in these areas is the Company's focus, it will continue to benefit from these trends. Even as workers return to offices, the need for remote collaboration has become prevalent in business workflows and will keep driving demand for the Company's products. Conferencing and collaboration solutions remain the largest segment of the industry, generating \$38 billion in sales globally in 2020. According to PricewaterhouseCoopers Remote Work Survey of 127 US executives from January 2021, 72% are planning increased investment in tools for virtual collaboration. Furthermore, according to the Capgemini Research



Source: AVIXA and WallStreet Research.

Institute, three-quarters of organizations expect 30% or more of their employees to be working remotely.

According to a Grand View Research report from June 2021, the global video conferencing market was valued at \$4.21 billion in 2020, with the hardware segment, including cameras, microphones and headphones, amounting to 47% of the total, and is expected to expand at a CAGR of 11.4% from 2021 to 2028. But a concurrently released report by MarketsandMarkets estimated the 2021 global video conferencing market size at \$9.2 billion and expected it to grow at 19.7% CAGR to \$22.5 billion by 2026. This further illustrates the shift to remote collaboration and remote working models. ClearOne provides complete solutions for video-audio conferencing and remote collaboration. The Company is positioned to service this growing market both on the corporate and the home office front.

These changes are not limited to just business and remote work. In schools, the pandemic accelerated the shift towards more technology in classrooms. According to Coherent Market Insights' analysis, the global smart learning market was estimated to be worth \$23.7 billion in 2019 and is expected to grow to \$65.5 billion by 2027, with CAGR of 22.1% during the forecast period. Another area driving demand for pro AV solutions is telemedicine services. The lack of direct contact provided a boost to the industry during the pandemic. The global telemedicine services market is expected to reach \$196.3 billion by 2027 from \$36.7 billion in 2019, according to the same report.

COMPETITION

The professional-AV industry is very dynamic and highly competitive, with a large number of global and regional participants offering a wide range of strategies to expand adoption in the various product categories served by ClearOne. The Company competes based on the breadth and depth of its attractively priced product lines with high-quality performance resulting from a combination of proprietary and highly advanced audio signal processing and networking technologies, as well as wide compatibility and deployment of its systems.



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The Company's most intense and direct challenge comes from larger similarly integrated multinational providers with comprehensive AV product portfolios, strong electronics supply legacies and wide brand recognition, many of which remain privately-owned, such as Crestron Electronics, Extron Electronics, Biamp Systems, Shure, and Kramer Electronics (controlled by Fortissimo Capital Fund, a private equity fund based in Israel since February 2021). Some competitors are owned publicly as foreign entities, like Harman International Industries, currently a subsidiary of Korean conglomerate Samsung Electronics (KRX: 005930), Taiwan-based AVerMedia Technologies (TPE: 2417) or Barco (EBR: BAR) in Belgium, and a few trading domestically in the U.S., including Plantronics Communications (NYSE: POLY) and Avaya Holdings (NYSE: AVYA). Furthermore, ClearOne faces competition from various-size companies with limited product lines specilizing in different product segments and regions, including Audix, Avlex, Sennheiser, and Clockaudio in microphones, BOSE and Logitech International (NASDAQ: LOGI) in speakers and headphones, Rane in sound mixers and other suppliers of select audio conferencing equipment. Finally, the most rapidly evolving video collaboration market is dominated by software based domestic solutions from Zoom Video Communications (NASDAQ: ZM), Microsoft Teams and Skype from Microsoft (NASDAQ: MSFT), Google Meet from Alphabet (NASDAQ: GOOGL), WebEx from Cisco Systems (NASDAQ: CSCO) and Amazon Chime from Amazon (NASDAQ: AMZN), as well as foreign providers, such as Yealink (SSE: 300628) or ZTE (SSE: 000063), both based in China.

MANAGEMENT AND DIRECTORS

Zee Hakimoglu, President, CEO and Chairwoman of the Board, joined the Company in December 2003 as VP of Product Line Management, was appointed President and CEO in July 2004, has served as a Director since April 2006 and was named Chairwoman Board in July 2007. In January 2007, Ms. Hakimoglu received the North American Audio Conferencing CEO of the Year Award from Frost & Sullivan. Prior to joining ClearOne, Ms. Hakimoglu has held senior executive level positions for a variety of high-tech Silicon Valley firms in such areas as business development, product marketing, engineering and product-line management. She served as VP of Product Line Management for a publicly traded developer of fiber optic subsystems and components, from December 2001 to December 2002; and, President of a manufacturer of fiber optic test equipment and components, from August 2000 to November 2001. From October 1998 to August 2000, she was VP of Business Development for Kaifa Technology and was instrumental in its acquisition by E-Tek Dynamics and later by JDS Uniphase. From May 1982 until it was acquired in September 1996, Ms. Hakimoglu held various positions including VP of Wireless Engineering and VP of the Wireless Business Unit for Aydin Corp., a global telecommunications equipment company that formerly traded on the NYSE. Ms. Hakimoglu earned a Bachelor of Science Degree in Physics from California State College, Sonoma, and a Master's Degree in Physics from Drexel University.

Narsi Narayanan, Senior VP of Finance, who joined ClearOne in July 2009, has more than two decades of professional experience in the areas of accounting, finance and taxes. Prior to joining the Company, he managed the SEC reporting, US GAAP accounting research, Sarbanes-Oxley Act compliance and other financial reporting functions from August 2007 through February 2009 at Solo Cup Company, an international consumer products company. Prior to that, Mr. Narayanan managed similar accounting and finance functions, from June 2004 through August 2007 at eCollege.com, a leading technology company serving private educational institutions, which traded on NASDAQ before being acquired by Pearson Education, Inc. in 2007. In addition to being a Chartered Accountant, Mr. Narayanan has extensive experience working in public accounting and in senior finance positions with a large conglomerate in India. He is a Certified Public Accountant with a Masters degree in accounting from the University of Utah and an MBA in Finance from the University of Illinois.

Craig Paller, Senior Director for Sales Development, has over 20 years of pro AV industry experience with a strong background in sales, marketing and key customer development. Prior to joining ClearOne in July 2020, Mr. Paller has held leadership positions with ClearOne's closest competitors, including Harman Professional, a unit of Harman International, and Shure, Inc.; an audio technology company Listen Technologies, which was founded by Russell Gentner following his 1997 departure from Gentner Communications Corporation; and most recently served as General Manager, Americas and Global Business Development for Music Tribe.

ClearOne management team is supported by several outside directors on the Board of Directors, including Larry R. Hendricks, a CPA with a 30-year career in accounting who served as VP of Finance and General Manager of Daily Foods, Inc., a national meat process-



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ing company, prior to joining the Company in June 2003; Eric. L Robinson, an attorney with nearly 15 years of corporate and securities counsel experience who joined ClearOne in July 2015 with a strong track record in public and private offerings, corporate partnering, mergers and acquisitions, licensing technology transfers and other contracts in private practice and as in-house counsel and CFO of several companies; Bruce Whaley, who came onboard in April 2019, and has worked as a financial advisor for nearly five decades, and since 1988 with Wilson & Davis, a regional brokerage firm based in Salt Lake City, Utah; and finally Lisa B. Higley, the daughter of Edward D. Bagley, ClearOne's former Chairman of the Board, who prior to joing the Company in July 2020 has worked as a self-employed CPA since June 2009 and served as CFO at Daisy D's Paper Company and Tunex International earlier in her career.

FINANCIALS

First Nine Months. For the nine months ended September 30, 2021, ClearOne Total Revenues increased by 6.1% to \$21.76 million from \$20.50 million in the first nine months of the previous year. The 2021 growth was led by Audio Conferencing with a 7.8% growth; Microphones with a 27.2% growth; and Video products with a 19.6% decline. The Company's products experienced 48.4% growth in Asia; 80.4% growth in Europe and Africa; and a 22% decline in North and South America.

The Company's Gross Profit in the first nine months of 2021 increased to \$9.3 million from \$8.9 million in the same period a year earlier, while the resulting Gross Profit margin decreased from 43.7% to 42.6%. Net Loss for the first nine months was \$5.4 million in 2021 compared to \$5.0 million in 2020, and Net Cash Used in Operating Activities was \$1.5 million during the first nine months of 2021.

As of September 30, 2021, ClearOne had Cash and Equivalents of \$9.2 million, Net Working Capital of \$23.7 million, Shareholders' Equity of \$53.7 million and Total Assets of \$68.2 million.

Last Year. During 2020, the Company's Revenue increased to \$29.1 million compared to \$25.0 million in 2019, representing a 16.1% growth, and exceeded the level of \$28.2 million generated in 2018 by 3.2%. This growth was achieved while the global pro-AV market shrunk by 7.7%, according to AVIXA industry statistics, and despite the Company spending 15.2% less on Sales & Marketing Expenses comparing to 2019, due to savings on tradeshows and employee travel, which serves as an indication that its product line is well aligned with shifting market trends that emerged during the COVID-19 pandemic.

Broken down by product segment, the increase in 2020 Revenue was primarily attributable to Video products, which grew 95% fueled by demand for media collaboration, and to some extent to a 4% increase in Microphones, which benefitted from significant growth in BMA products despite a slight decline in other microphone categories. These increases were partially offset by a 6% decline in Audio Conferencing solutions, among which personal audio conferencing products registered rapid growth against the falling segment trend. As a result, the share of Audio Conferencing products declined from 46% in 2019 to 38% in 2020, Microphones in the revenue mix dropped from 35% in 2019 to 31% in 2020, and the Video segment gained significantly from an 18% share in 2019 to 31% in 2020. Geographically, U.S. sales contributed 61.9% of 2020 Revenue, with the remaining 38.1% generated internationally, which represents a substantial shift from a more balanced 2019 mix, when the domestic market accounted for 53.8%. During 2020, Revenue increased significantly in North America and Europe, while it declined considerably in China and the Middle East. Asia Pacific, including the Middle East, decreased by 23%, Europe and Africa increased by 47%, and the Americas increased by approximately 30%.

The Company's Gross Profit during 2020 was \$12.6 million, or 43.2% of Revenue, compared to \$11.2 million at a 44.7% margin in 2019. Although ClearOne achieved Net Income of \$0.5 million, or \$0.03 earnings per share in 2020, versus a Net Loss of \$8.4 million, or \$0.51 loss per share in 2019, the change was primarily due to recognition of income tax refund receivable of \$7.1 million arising out of the carryback of net operating losses that became possible due to the enactment of the Coronavirus Aid, Relief, and Economic Security



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Act ("CARES Act") enacted in March 2020. Finally, Net Cash Used in Operating Activities was less than \$1.0 million during 2020, an improvement from \$4.7 million during 2019.

Capital Formation and Shareholder Structure. The Company has been able to successfully raise capital to support its operations during the last 3 years through various equity and debt financing rounds netting nearly \$30 million, which mitigated the burden of the patent litigation with Shure on ClearOne's cashflow.

- In December 2018, the Company completed a \$10.0 million rights offering to existing shareholders resulting in purchase 8,306,5356hares of Common Stock at \$1.20 per share for net proceeds of \$9.9 million, after approximately \$85 thousand in stock issuance costs.
- In December 2019, the Company sold a \$3.0 million aggregate principal amount of 48 month maturity variable interest Secured Company Standing Common Stock. The Notes are convertible to shares of ClearOne Common Stock at an initial conversion price of \$2.11 per share, and the Warrants bear an initial exercise price of \$1.76 per share. The net proceeds from the placement were approximately \$2.7 million, after discount and issuance costs of \$346 thousand.
- In April 2020, the Company entered into a \$1.5 million loan agreement with U.S. Bank National Association pursuant to the Paycheck Protection Program of the CARES Act. Capitalizing on the favorable two-year term with interest payments at 1.0% per annum deferred for sixteen months after disbursement, the Company intended to use the entire principal amount for qualifying expenses and to apply for forgiveness of the loan in accordance with the terms of the CARES Act.
- In September 2020, the Company issued 2,116,050 shares of Common Stock in a registered direct offering managed by H.C. Wainwright & Co. at a price of \$2.4925 per share for net proceeds of approximately \$4.8 million, after approximately \$0.5 million in placement agent fees and related offering expenses. As part of the offering, the Company issued five-year Warrants exercisable for an aggregate of 1,058,025 shares of Common Stock at \$2.43 per share to participants of the direct offering. In September 2021, the Company completed a \$10 Million unit offering led by H.C. Wainright of 3,623,819 shares and warrants at \$2.76 per share, and the warrants excersisable \$2.64 per share.

On November 11, 2021, the total number of shares of ClearOne Common Stock outstanding was 22,402,970, which included 892,955 shares, collectively held by Directors and Executive Officers of the Company; and 8,348,357 shares, held by the Company's largest shareholder, Edward D. Bagley; 1,236,630 shares, held by his son, E. Bryan Bagley; 2,252,636 shares, that are deemed to be owned by his wife, Carolyn Bagley, as a result of her acting as one of four co-trustees of a trust, and an additional 355,257 shares, which she owns individually. Subsequently, in May Edward D. Bagley disclosed a series of public market transactions acquiring shares of Common Stock at \$2.20 per share, which brought his beneficial ownership level to 8,412,869 shares, confirming strong insider commitment beyond full participation in the Company's direct private equity offerings. Finally, Yahoo Finance reports that approximately 16.4% of the Company's shares are currently owned by 16 different institutions, with Renaissance Technologies, LLC and Vanguard Group, Inc. leading the way.

GROWTH OUTLOOK

With tested intellectual property, innovative demand-driven solutions, and a vast sales channel penetration developed over several decades, the Company's strong underlying assets form a solid foundation for long-term business expansion with expectations for improved financial results in the near future. Having successfully emerged from the pandemic, ClearOne appears well positioned to resume its sales growth leading to potential profitability during 2022 or 2023. The recent growth has been fueled by highly strategic and differentiated solutions introduced to the market in the past few months, such as the BMA 360 ceiling tile and UNITE series cameras, and could intensify as other recently released software solutions gain traction and pull other equipment sales. These sales-promoting tools include the CONVERGENCE AV Cloud platform, which expands AV practitioners' recurring revenue opportunities for remote, real-time Management-as-a-Service ("MaaS"),



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and a truly-free lifetime subscription to COLLABORATE Space messaging application featuring world-class video and audio with unlimited meeting time, in contrast to other popular platforms, such as Zoom or Microsoft Teams. The Company's strategy of combining Collaborate Space, its cloud-based video conferencing product, Collaborate Live, the appliance-based media collaboration product, the high quality professional cameras, and high-end audio conferencing technology should generate high rates of growth going forward due to elevated demand for personal conferencing and video products. Although the installed audio conferencing market for ClearOne flagship products was negatively impacted due to the pandemic, postponement of projects and restrictions on installers to visit commercial sites, it also shows signs of revival led by the BMA-CT and the newly introduced BMA 360.

Focused on developing new products for new markets, the Company has specific plans to further expand its product pipeline, with several more scheduled releases during 2022. ClearOne continues to recruit new distribution channel partners to strengthen its presence in key emerging growth markets, where it simultaneously keeps improving product localization with country-specific documentation and marketing materials complying with regional environmental regulatory standards.

Having implemented company-wide cost reduction measures in recent years, which resulted in permanent reductions of Operating Expenses from \$24.1 million in 2016 to \$16.4 million in 2020, or more than \$7 million per year, ClearOne is within two years of approaching necessary revenue volume to reach break-even levels and subsequently return to operating profitability last witnessed prior to Shure's patent infringement. The ongoing lawsuit itself has the potential to significantly improve the Company's cashflow and balance sheet, if ClearOne prevails.

VALUATION

Although the COVID-19 pandemic temporarily dampened merger and acquisition ("M&A") activity in the fragmented pro-AV industry, the general consolidating trend of the past few years is expected to intensify as companies seek access into new vertical and geographical markets and new technologies, especially in the rapidly evolving video collaboration solutions segment. As a potential acquisition target itself, ClearOne appears undervalued versus prevailing M&A valuation metrics of several noteworthy deals in the industry, which involved public companies and disclosed terms.

In one of the larger transactions in recent years, Plantronics (NYSE: POLY), an established audio products manufacturer specializing in lightweight headsets and other communication endpoints, which started in 1961 with solutions for the aviation industry, acquired privately-owned Polycom, an integrated AV solutions provider founded in 1990, which developed its product line from audio conferencing speakerphones to content sharing, video conferencing, networking, and system monitoring and management tools. Valued at \$2.2 billion, the transaction was completed in July 2018. *The Silicon Valley Business Journal* article from March 28, 2018, reported Polycom's revenue at \$1.1 billion upon announcement of the anticipated transaction. Independent WallStreet Research confirmation of additional revenue contributed to Plantronics financial results filed with the SEC following the acquisition for the fiscal year ended March 31, 2019 deemed comparable results, hence the Polycom purchase price reflected a Price-to-Revenue ratio of about 2x. Interestingly, regularly profitable prior to the acquisition, Plantronics reported a significant loss of over \$135 million for that year and has not returned to profitability since, hinting that Polycom operations were most likely generating losses pre-merger.

The Price-to-Revenue ratio in transactions involving companies focused on cloud-based collaboration technologies generally reach even higher levels, when acquired by major communication technology giants. Building its video conferencing product portfolio, Cisco Systems (NASDAQ: CSCO) acquired Acano Limited, a privately-held company founded in 2012, headquartered in London and employing 170+ staff across four continents, in a January 2016 transaction valued at \$700 million. The acquisition of Acano was completed at a Price-to-Revenue ratio of 3.5x (given that Cisco's Collaboration segment revenue rose from \$1.019 billion for the pre-acquisition quarter ended January 23, 2016 to \$1.069 billion for the next post-acquisition quarter ended April 30, 2016, the sales contributed by Acano must have been less than \$50 million quarterly, or less than \$200 million per annum). The Acano transaction yields a Price-to-Revenue ratio in excess of 3.5x based on \$700 million purchase price. In a more extreme and recent case closing in May 2020, Verizon Communi-



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cations (NYSE: VZ) purchased BlueJeans, a private Silicon Valley based firm founded in 2009, which crossed the \$100 million recurring annual revenue mark for the fiscal year ending January 31, 2019. CNBC reported the deal's value at around \$400 million, while the Wall Street Journal estimated the price at less than \$500 million, at 4 to 5 times the annual revenue level.

With ClearOne's growing expertise in the multimedia collaboration infrastructure and software, the Company could be argued to deserve valuation of at least 1.5 times annual trailing revenues of \$30.33 million, or \$45.5 million, considerably higher than the current market capitalization of \$30.7 million, which is currently at a 1.0 revenue multiple.

Based on the Company's improved revenue levels over the past year and improved earnings outlook, as well as historical values in the marketplace noted above, WallStreet Research is assigning an updated target price in the range of \$2.50 to \$3.50. Finally, assuming this revenue growth continues, the Company's shares could achieve significant gains from the current levels.



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CLRO Daily -	11/22/21	CLRO Daily -
Figure 1: CLRO 1 Year Price Char	4	F
Volume — ©BigC	harts.com	Volume -
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/22/21	CLRO	Daily -						11/22/	21
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All figures below are quoted in US Dollars and in Thousands							
Income Statement	12/31/19		12/31/20	9M 9/30/21			
Revenue	\$	25,042	29,069	21,765			
Oper Loss	\$	(8,562)	(5,567)	(5,019)			
Net Loss	\$	(8,408)	505	(5,410)			
Loss Per Share	\$	(0.51)	0.03	(0.28)			

1	Balance Sheet	12/31/19	12/31/20	as of 9/30/21	Cash Flow Statement	12/31/19	12/31/20	9M 9/30/21
65	Current Assets	_{\$} 25,183	29,282	34,061	Operating Cash Flow	(4,656)	(982)	(1,477)
9)	Total Assets	\$ 55,110	62,323	68,237	Investing Cash Flow	(5,127)	(5,544)	(4,162)
.0)	Totall Liabilities	\$ 10,632	12,509	14,472	Financing Cash Flow	2,677	6,277	11,030
28)	Total Shareholder's Equity	^{\$} 44,478	49,814	53,765	Cash at end of period	4,064	3,803	9,161



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ADDITIONAL DISCLOSURES

Receipt of Compensation:

The featured company engaged ASC / Wall Street Research for an updated Profile Report and has paid a fee of \$10,000 in cash to Alan Stone & Company LLC for preparation and distribution of this updated Corporate Profile, including other potential fees associated with various consulting and investor relation services. Future fees will be due for updated reports and other services.

Ownership and Material Conflicts of Interest:

The author(s) of this report do *not* hold a financial interest in the securities of this company.

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The author(s) does not act as an officer, director or advisory board member of the subject company.

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Ratings Guide:

Banks or Investment Firms often rate companies as a BUY, HOLD or SELL. A BUY rating is often given when the security may deliver absolute returns of 15% or greater over the next 12 month period, and recommends that investors consider taking position assuming it meets their risk profile. A SELL rating is given when the security is expected to deliver negative returns over the next 12 months, while a HOLD rating implies flat returns over the next twelve months.

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