F R O S T *&* S U L L I V A N

2021 Frost & Sullivan
Company of the Year Award

Sensor Fusion for the Global Consumer Electronics Industry
Excellence in Best Practices

F R O S T *&* S U L L I V A N
BEST PRACTICES
AWARDS

CEVA, Inc.

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. CEVA, Inc. excels in many of the criteria in the Sensor Fusion space.

AWARD CRITERIA

Visionary Innovation & Performance	Customer Impact
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

Addressing Unmet Needs

Demand is rising for connected and smart devices that enable tasks to be performed swiftly and more efficiently, with greater autonomy. Smart mobile devices in the consumer market, Internet of Things (IoT)-enabled machines in industries, smart grids in the power industry, and intuitive monitoring machines in the healthcare industry, are creating huge demand for cognitive analytical devices.

> *"CEVA Inc's centralized sensor fusion platform enables data processing and fusion in a broad range of environmental conditions. This unique capability escalates technology growth across a wide variety of industrial applications."*
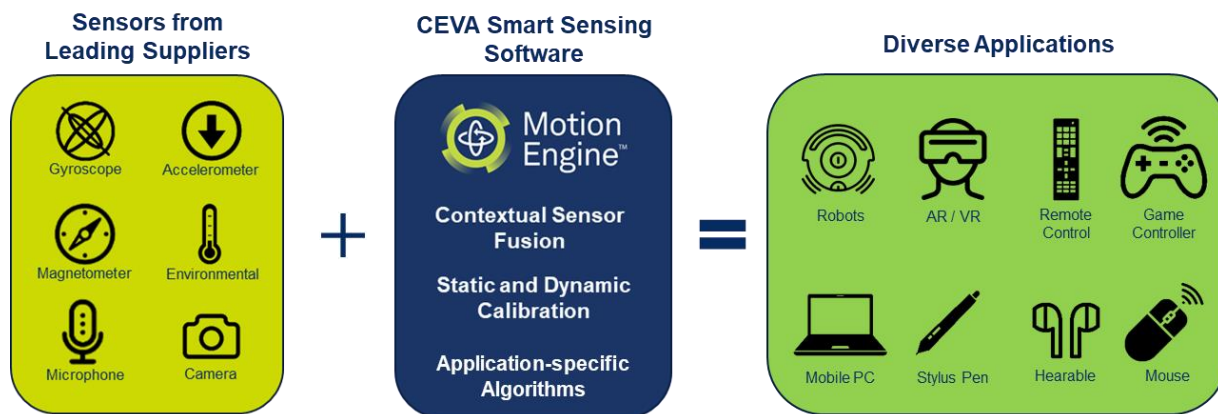>
> *-Ranjana Lakshmi,*
> *Senior Research Analyst*

The rising demand for these smart devices has resulted in semiconductor manufacturers facing growing pressure to meet the market requirement for economical, reliable, and high-performance sensors. In tandem, advancements in wireless technologies, communication networks, artificial intelligence (AI), computer vision, and sensors, require semiconductor companies to develop reliable and high-performance sensor software, and complimentary sensor hub and AI processors.

Addressing these challenges, semiconductor companies are adopting a range of measures, such as collaborating with technology start-ups or creating in-house solutions for various market requirements. But developing the right product for the right application still has a wide gap. In addition, the

development of smart sensing technologies that have improved device intelligence does not lie in the sensor's capability alone. Sensors are not perfect, which can lead to irregular results with several anomalies. Sensor fusion has been identified as an essential solution to overcome these challenges and irregularities by combining multiple sensors and fusing the data from these sensors to deliver more reliable insight and analysis.

With its high-level expertise in the sensor market, Maryland-based CEVA, Inc. (NASDAQ: CEVA) offers a comprehensive portfolio of solutions comprising wireless and smart sensing hardware and software IP. CEVA's wireless portfolio, including 5G, Bluetooth, Wi-Fi, and NB-IoT, together with its smart sensing portfolio, including Sensor Fusion, Audio, Vision and AI, addresses market challenges and demands across mobile, consumer, automotive, robotics, healthcare, industrial and IoT markets.

CEVA addresses the prominent challenges in these markets through its smart sensing MotionEngine™ technology and its SensPro™ family of sensor hub processors. CEVA strategically developed its smart sensing MotionEngine software platform, with sensor calibration, sensor fusion, context awareness and application-specific features, to meet the challenges of smart and connected devices. The firm's low-power, high-performance specialized smart sensing MotionEngine technology comprises application-specific software solutions combined with highly accurate 6-axis and 9-axis sensor fusion. MotionEngine has a variety of features, such as context awareness, cursor control, activity tracking, and gesture recognition, which can be configured for specific applications and integrated in distinct packages that can be installed in TV remotes, robots, hearables, XR headsets, PC's, gaming consoles, mobile phones, fitness trackers and other customized electronic products.

With this technology, CEVA provides users with a functional solution that can adapt easily to target applications, with the high potential to become an industry standard in the sensor fusion market. With multiple application features and highly accurate sensor fusion, MotionEngine is a viable option for various emerging use cases adopting high-accuracy sensor applications such as robots, livestock trackers, professional sports and 5G fixed wireless antennas. The sensor fusion solution's advantageous ability to adapt easily to end applications will highly influence industrial participants to shift from traditional sensor technologies to sensor fusion platforms. CEVA's SensPro sensor hub DSP family can work in tandem with its MotionEngine software, providing a single processor that can handle the various

workloads of sensor fusion and processing, from a wide variety of sensors, including IMUs, cameras, microphones, Radar, LiDAR and Time-of-Flight.

Industry-leading Best Practices Keep CEVA Ahead in the Sensor Fusion Market

CEVA creates awareness of its technology and services worldwide by maintaining strong, consistent relationships with customers. With constant development and by interacting with and gaining insights from Tier I participants and original equipment manufacturers (OEMs), CEVA offers solutions that can specifically meet market needs, highlighting the company's ability to understand the market's current unmet requirements. To meet the broad range of industrial requirements accurately, CEVA obtains valuable insights from its in-house research and development (R&D) team to create products and a substantial roadmap and then develop smart sensing solutions for potential future applications while still focusing on customers' current requirements. Moreover, strong customer relationships allow CEVA to deliver new products to the market at a faster rate compared to sensor fusion competitors that often take several years to offer a customized solution.

In addition to maintaining close relationships with existing clients, CEVA demonstrates its technology by presenting to key industry participants and analysts at tradeshows and conferences, such as CES, Mobile World Congress, Embedded Vision Summit, and other technology events. Planned participation in these targeted trade shows has opened up opportunities for CEVA with a large number of global companies that focus on mobile, consumer electronics, IoT, and automotive applications. CEVA's customer base includes Tier I consumer electronics OEM's and component suppliers, automotive component suppliers and other companies including LG, Samsung, Renesas and iRobot.

The company has successfully expanded its customer base using its MotionEngine and SensPro platforms and consistent communication from long-standing customers through regular service-related interactions. With a variety of marketing strategies to create demand and awareness of the sensor fusion technologies, CEVA showcases its products to customers that focus on high-performance, low-cost smart sensing solutions, thereby positioning the company as a competitive pioneer in the sensor fusion market for consumer electronics applications.

Visionary Scenarios through Mega Trends

The trend of adopting smart and connected devices will continue to grow with technology advancements and improvements. The future trend is for a smart and connected environment that requires miniaturized, flexible electronics with advanced characteristics. CEVA's versatile sensor fusion solution that uses powerful fusion algorithms is expected to fulfill this future trend. In addition, CEVA's MotionEngine™ sensor fusion technology has been used in over 200 million consumer electronic devices, in applications such as robotics, augmented reality/virtual reality (AR/VR), handheld controllers, smart TV, and 3D audio headsets.

The company's MotionEngine is the only sensor fusion platform that enables the transformation of human and machine movement into an application format that allows developers and manufacturers to program everyday products with high precision. The SensPro family of power-efficient sensor hub DSPs offers scalable performance, multiple precisions and high utilization for the increasingly complex and diverse AI/sensor workloads of smart and connected consumer electronic devices.

Impact of Human Capital on the Development of Innovative Solutions and Leadership Focus

CEVA's biggest asset that positions it competitively is its human capital. The company's multidisciplinary teams comprise research scientists, software developers, hardware engineers, algorithm specialists, and product design experts, in addition to an innovative sales and marketing team. With such a wide diversity of skills, CEVA's MotionEngine smart sensing solution offers contextual awareness or the algorithm's ability to capture user-specific information, such as location, temperature, orientation, and speed, thus providing a solution based on user requirements.

CEVA's R&D team of highly experienced engineers in the field of sensor processing and sensor fusion software development has enabled the company to expand its focus on new and untapped market opportunities. Market needs completely drive this expansion, with the help of over 335 engineers and various development centers worldwide, including in Israel, the United Kingdom, Ireland, France, and the United States. CEVA continues to encourage its employees to participate at international conferences that are responsible for establishing standards in the electronics industry. CEVA, therefore, remains well informed on market developments and stays abreast of any suitable solutions that meet industry standards.

CEVA's focus on sensor fusion technology developed around contextual awareness provides industry participants with a platform that is compatible with multiple applications. Due to its compatibility with multiple operating systems, processor architectures and sensors from multiple leading suppliers, the technology can be easily integrated into functional sensor systems without hindering the existing infrastructure. The following applications and market segments can benefit from CEVA's sensor fusion software and sensor hub DSPs:

- The technology has high potential in the AR/VR market, in addition to providing users with highly accurate head tracking capability and motion-controlled handheld controllers, thus offering an impressive realistic experience of the virtual world.

- MotionEngine has high potential in the robotics market. The solution comprises a software algorithm, multiple sensor components, and a microelectronic chip that can be configured to meet specific application requirements.

- CEVA's sensor fusion software enhances the user experience for TWS earbuds, audio headsets and hearables. MotionEngine's sensor-based user interface and activity tracking features improve device usability and its highly-accurate head tracking capability is essential for immersive 3D audio experiences.

- MotionEngine's cursor-and-gesture recognition software solution allows it to be used in handheld controllers for TV remotes, set-top box controllers, and gaming consoles. The TV's options and features can be changed by simply waving a handheld controller in the air. This method of interacting with the TV or PC is superior compared to pressing buttons on the remote control.

- MotionEngine software has high potential in portable computing markets, including laptops, tablets and convertible notebooks. The solution can quickly determine the current orientation

and operating state of a mobile computing device. For example, when the keyboard is removed to operate as a tablet, the operating system seamlessly adapts to the change.

- Sensor fusion that connects various devices and offers valuable solutions can be integrated with IoT-based technologies, such as AI, Big Data, and data analytics, into applications such as healthcare, logistics, and industrial monitoring.

- Automotive, including electric powertrain, battery management and ADAS can benefit from the SensPro family of sensor hub DSPs, which can process, analyze and fuse data from multiple sensors in these critical systems.

Frost & Sullivan commends CEVA's ability to offer a highly customizable solution with the contextual awareness that meets most consumer needs.

Customer Service Experience

In 2020, CEVA garnered over 20% of its total revenue from its smart sensing solutions. The company's mantra is that a good product that meets customers' critical needs will achieve resilient revenues. With a substantial number of licenses with relatively large semiconductor companies and OEMs as customers, the growth and awareness of CEVA's sensor fusion solutions have been wide and far reaching. The company has several case studies on successful implementations and excellent return on investment (RoI) results from customers after implementing its sensor fusion solutions.

Access to customized products that are specific to customers' requirements and the adoption of smart sensor fusion solutions across small- and mid-sized companies have largely improved. This strategic model of ensuring that a large variety of industrial participants has easy access to these solutions positions CEVA as a leader among providers of sensor fusion in the consumer electronics industry.

Conclusion

The consumer electronics market is moving toward more sophisticated, reliable, and economical solutions, such as sensor fusion, to provide users with an enhanced experience while exercising, watching TV or using gaming consoles.

With nearly 20 years of experience in the smart sensing solutions market, CEVA offers its MotionEngine platform that has the potential to meet the needs of a diverse range of applications across various industries, including consumer electronics, healthcare, robotics, automotive, and industrial. The platform integrates dynamic calibration sensor, in combination with contextual awareness, to offer contingent and quality solutions. The contextual awareness provides users with a unique experience when using devices installed with CEVA's MotionEngine software. Its SensPro sensor hub DSP family offers scalable performance, multiple precisions and high utilization for the increasingly complex and diverse AI/sensor workloads of contextually-aware devices. As CEVA continues to expand its technology features, Frost & Sullivan expects the company to continue serving a growing customer base and establish itself as one of the pioneers in sensor fusion in the consumer electronics market.

With its strong overall performance, CEVA, Inc. has earned Frost & Sullivan's 2021 Company of the Year Award for sensor fusion in the global consumer electronics Industry.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Award Analysis

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios Through Mega Trends: Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first to market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

Financial Performance: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create on-going growth opportunities and strategies for our clients is fuelled by the Innovation Generator™. Learn more.

Key Impacts:

■ **Growth Pipeline:** *Continuous flow of Growth opportunities*

■ **Growth Strategies:** *Proven Best Practices*

■ **Innovation Culture:** *Optimized Customer Experience*

■ **ROI & Margin:** *Implementation Excellence*

■ **Transformational Growth:** *Industry Leadership*

The Innovation Generator™

Our six analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

■ Mega Trend (MT)

■ Business Model (BM)

■ Technology (TE)

■ Industries (IN)

■ Customer (CU)

■ Geographies (GE)