NEWS RELEASE

Perceive Corporation Launches to Deliver Data Center-Class Accuracy and Performance at Ultra-Low Power for Consumer Devices

3/31/2020

- Introduces breakthrough Ergo TM edge inference processor, delivering 4+ TOPS sustained and 55 TOPS/W, capable of processing large neural networks in 20mW
- Selected by two of the leading providers of smart connected camera and security products to integrate advanced neural network applications into future products

SAN JOSE, Calif. --(BUSINESS WIRE)-- **Perceive Corporation** , an edge inference solutions company, today launched the company and debuted its first product, the Ergo TM edge inference processor. Ergo brings breakthrough accuracy and performance to consumer devices such as security cameras, smart appliances, and mobile phones. The Ergo chip and reference board are currently being sampled to leading customers and are ready for mass production in the second quarter of 2020.

This press release features multimedia. View the full release here:
https://www.businesswire.com/news/home/20200331005134/en/

In an environment where consumers are demanding greater security and privacy, Ergo removes the need to send sensor data from devices to the cloud for analysis. Ergo's real-time, on-device inference processing makes it ideally suited for devices where consumer experience and privacy of data such as video and audio are of paramount importance. Whether it is reducing false notifications in a security camera, extending battery life in a mobile device, or simplifying the user interface of a home appliance, Ergo improves key device features by enabling comprehension and intelligent reactions to surroundings—without compromising consumer security.

"Everyone wants smarter devices—but until now, only the cloud has provided the requisite accuracy," said Steve Teig , Chief Executive Officer of Perceive. "Perceive has developed novel, mathematically rigorous methods for inference that redefine what is possible in an edge device. Our Ergo chip delivers data center-class accuracy and

performance in consumer devices, protecting privacy and security while running at ultra-low power."

Perceive was incubated by and is a majority-owned subsidiary of Xperi Corporation (Nasdaq: XPER), a leader in audio, imaging and semiconductor technology focused on creating innovative solutions for smart devices that enable extraordinary experiences for people around the world.

"Perceive's launch today represents the culmination of two years of focused innovation and investment within Xperi that combines Perceive's work on advanced machine learning with our unique experience in imaging, audio, and semiconductor technologies. The result is a truly game-changing smart device technology platform," said Jon Kirchner , Chief Executive Officer of Xperi . "With the potential to reach billions of devices across IoT in home, mobile, and automotive applications, the Perceive platform brings a new additional driver to our business and has the potential to unlock substantial future growth. We are dedicated to supporting Perceive as it comes out of stealth and accelerates its commercialization, partner engagement, and product rollout to realize the significant value of its technology."

Perceive Enables Customers to Deliver Groundbreaking Consumer Devices

There is a growing divergence between the limited capabilities of edge inference processors, or even applications processors, and the rising complexity of the most advanced neural networks, which until now could run only in data centers. Perceive bridges that gap by enabling multiple sophisticated networks such as YOLOv3, M2Det, and others to run on Ergo. By simultaneously providing high accuracy, high performance, and ultra-low power at the edge, Perceive enables device makers to provide a better experience with intelligent features for smart devices such as reducing incorrectly detected camera alerts for security customers, while extending battery life and improving privacy for consumers.

Along with the Ergo inference chip, Perceive is providing a complete solution to OEMs, including reference boards, as well as standard imaging and audio inferencing applications for common inferencing tasks. Customers can also tune the applications or create novel applications with support from Perceive. Recognized leaders in the connected camera and security industry have already selected Ergo to integrate advanced neural network applications into their future products.

"We have been working with industry leaders such as Arlo since our inception and look forward to supporting them as they build amazing products that take advantage of the capabilities of Ergo," said David McIntyre , Vice President of Marketing for Perceive. "We look forward to partnering with Arlo to reinforce our shared focus on privacy and customer-centric innovation."

No Compromises: Perceive Delivers Data Center-Class Accuracy, Performance, Security, and

Privacy at Ultra-Low Power

The Ergo edge inference processor delivers more than 4 sustained GPU-equivalent floating-point TOPS, with the ability to run heterogeneous, large neural networks simultaneously, powering applications such as video object detection, audio event detection, and speech recognition. For example, Ergo can run YOLOv3 at up to 246 frames per second (batch size = 1) at 30 frames per second while consuming about 20 mW. Ergo supports a wide variety of currently popular styles of neural network for video, audio, and other sensor processing, including CNNs (multiple sizes of convolutions and residual edges), RNNs, LSTMs, and others, providing developers of camera, security, and other consumer products ample options for solving real-world problems.

Ergo requires no external RAM and its small, 7x7 mm package makes it well suited for use in consumer electronics such as phones and cameras. By eliminating the need to send data to the cloud for inference and by encrypting the neural networks, software, and access to the chip, Ergo enhances device security and privacy.

The chip's ultra-high power efficiency of more than 55 TOPS/Watt—20 to 100 times the efficiency of alternatives—enables longer battery life and produces less heat, allowing for smaller and more versatile product packaging. The company has partnered with the leading specialty foundry, GLOBALFOUNDRIES, to manufacture the Ergo chip on their 22FDX® platform.

"Perceive's Ergo chip is perfectly positioned to support the explosive growth of high-performance, ultra-low power IoT and edge devices," said Mike Hogan , Senior Vice President and General Manager of Automotive, Industrial and Multi-Market at GLOBALFOUNDRIES. "The combination of Perceive's innovative architecture on GLOBALFOUNDRIES production proven 22FDX solution delivers superior performance, power and area efficiency, while accelerating time to market for its customer's smart IoT and edge products."

About Perceive Corporation

Perceive makes devices smarter. The company develops breakthrough neural network inference solutions that push the performance-accuracy-power envelope, while protecting the security and privacy of consumers. By bringing data center-class accuracy and performance to the edge, Perceive enables device makers to deliver smarter products that understand their environment and respond intelligently. Founded in 2018, Perceive is a majority-owned subsidiary of Xperi Corporation (NASDAQ: XPER). Perceive is based in San Jose, California . For more information, visit **https://www.perceive.io** .

About Xperi Corporation

Xperi Corporation (Nasdaq: XPER) and its brands DTS, IMAX Enhanced, HD Radio, and Invensas, are dedicated to

creating innovative technology solutions that enable extraordinary experiences for people around the world. Xperi's solutions are licensed by hundreds of leading global partners and have shipped in billions of products in areas including premium audio, automotive, broadcast, computational imaging, computer vision, mobile computing and communications, memory, data storage, and 3D semiconductor interconnect and packaging. For more information, please call 408-321-6000 or visit **www.xperi.com** .

Safe Harbor Statement

This news release contains forward-looking statements, which are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve risks and uncertainties that could cause actual results to differ significantly from those projected, particularly with respect to the launch of Perceive and the characteristics, benefits, and features of the Ergo edge inference processor. Material factors that may cause results to differ from the statements made include the plans or operations relating to the businesses of Xperi Corporation (the "Company"); market or industry conditions; changes in patent laws, regulation or enforcement, or other factors that might affect the Company's ability to protect or realize the value of its intellectual property; the expiration of license agreements and the cessation of related royalty income; the failure, inability or refusal of licensees to pay royalties; initiation, delays, setbacks or losses relating to the Company's intellectual property or intellectual property litigations, or invalidation or limitation of key patents; fluctuations in operating results due to the timing of new license agreements and royalties, or due to legal costs; the risk of a decline in demand for semiconductors and products utilizing our audio and imaging technologies; failure by the industry to use technologies covered by the Company's patents; the expiration of the Company's patents; the Company's ability to successfully complete and integrate acquisitions of businesses; the risk of loss of, or decreases in production orders from, customers of acquired businesses; financial and regulatory risks associated with the international nature of the Company's businesses; the impact to the Company's business from the coronavirus; failure of the Company's products to achieve technological feasibility or profitability; failure to successfully commercialize the Company's products; changes in demand for the products of the Company's customers; limited opportunities to license technologies due to high concentration in applicable markets for such technologies; the impact of competing technologies on the demand for the Company's technologies; pricing trends, including the Company's ability to achieve economies of scale; and other developments in the markets in which the Company operates, as well as management's response to any of the aforementioned factors. You are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this release.

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included herein and elsewhere, including the Risk Factors included in the Company's recent reports on Form 10-K and Form 10-Q and other documents of the Company on file with the Securities and Exchange Commission (the " SEC "). The Company's SEC filings are available publicly on the SEC's

website at **www.sec.gov** . Any forward-looking statements made or incorporated by reference herein are qualified in their entirety by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by the Company will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, the Company or its business or operations. Except to the extent required by applicable law, the Company undertakes no obligation to update publicly or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

XPER-P

View source version on **businesswire.com** : **https://www.businesswire.com/news/home/20200331005134/en/**

Perceive Media:

Josh Tammaro

Media Relations Manager

+1 860-306-3683

media@perceive.io

Xperi Investors :

Geri Weinfeld

Vice President, Investor Relations

+1 818-436-1231

IR@xperi.com

Xperi Media:

Stacy Roughan

Director, Corporate Communications

+1 818-436-1086

media@xperi.com

Source: Xperi Corporation