

Arbe Announces Availability of the First 2K High Resolution Imaging Radar Development Platform

Arbe-Based Imaging Radar Systems to be Road Ready as Early as 2022

TEL AVIV, Israel, Oct. 28, 2020 /PRNewswire/ -- Arbe, the provider of next-generation 4D Imaging Radar Solutions, announced today the roll out of their Radar Development Platform empowering customers to revolutionize their imaging radar systems. Tier 1s, OEMs, and new mobility players are enhancing their perception algorithms based on the 2K high resolution Imaging Radar Development Platform, or A Sample as referred to in the automotive industry.



Arbe is currently collaborating with over 20 tier-1 and OEM customers in The United States, Europe, China, Korea and Japan that are developing their next-generation radar systems

based on this Imaging Radar Development Platform. This launch will enable Arbe technology-based radars to be implemented in vehicles on the road as early as 2022.

Highlighting the advancement of Arbe's Radar Development Platform, current radars on the market process 12 channels, and industry radars in development are promising 192 channels. Right now, Arbe's chipset processes 2304 (48x48) channels, providing 2K ultrahigh resolution, far beyond what any other radar can provide. Arbe's imaging radar solution, with its superior resolution and object detection in all environment conditions prevents the causes of some of the recent ADAS road accidents, as it tracks vulnerable road users such as pedestrians, bicycles, scooters, and can detect stationary objects like a parked vehicle in a lane, or road construction on the highway. It also eliminates false alarms, that are common with current generation radars, so that ADAS and AV systems can finally trust the reading from the radar.

"Until now, our solution demonstrated tremendous potential to the industry promising both the highest standards of safety for ADAS and unmatched levels of perception for autonomous vehicles," says Kobi Marenko, CEO of Arbe. "With the launch of our Radar Development Platform, our solution is now a reality for the road – moving from a theory to an actuality that is being implemented by customers across the globe. Meeting this milestone puts Arbe ahead of the automotive radar industry."

Additionally, the Development Platform for 4D Imaging Radar serves as a base for advanced perception capabilities including accurate real time inference of the vehicle's ego-velocity and in lane localization. Post processing the radar data allows tracking and classifying objects in the entire field of view of the vehicle and determines their orientation and motion vector, as well as provides precise and accurate free space mapping to distinguish drivable from non-drivable environments in any weather or lighting condition.

Arbe's Imaging Radar Development Platform includes:

- The entire Arbe imaging radar chipset with RF transmitter and receiver chips of 2K channels (48 receiving by 48 transmitting channels). And the patented imaging radar processor capable of processing 30Gbps of radar data. The patented chipset provides ultra-high resolution and supports over 100,000 detections per frame.
- A radar antenna with the densest channel array in the industry, delivering a form factor designed to perfectly fit automakers' current sizing and vehicle mounting specifications.
- A software layer that abstracts the hardware access and scheduling.
- A reference design to guide tier-1 and OEM customers' radar system development.

About Arbe

Arbe, the provider of next-generation Imaging Radar Chipset Solutions, is leading a radar revolution, enabling truly safe driver-assist systems today while paving the way to fully autonomous-driving. Arbe's technology produces detailed 4D images, separates, identifies, and tracks objects in 2K high resolution in both azimuth and elevation in a long range and a wide field of view, and is complemented by Al-based post-processing and SLAM (simultaneous localization and mapping). Arbe's patented technology empowers automakers and Tier 1 companies in development of a next-generation radar that is 100 times more detailed than any other radar on the market. Founded in 2015 by an elite team of semiconductor engineers, radar specialists, and data scientists, Arbe has secured \$55

million from leading investors, including Canaan Partners Israel, iAngels, 360 Capital Partners, Catalyst CEL, Al Alliance (Hyundai, Hanwha, SKT), BAIC Capital, MissionBlue Capital, O.G. Tech Ventures, Maniv Mobility, Taya Ventures and OurCrowd. Arbe is based in Tel Aviv, Israel, and has offices in the United States and China.

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