Lotus Eletre to debut ECARX's next-generation digital head unit

October 25, 2022 at 10:00 AM EDT

ECARX, a global mobility tech company, will debut its next-generation digital head unit (DHU) on the new Lotus Eletre Hyper-SUV.

The platform includes ECARX's first dual-chip system to enable server-level computing power for rapid processing, an immersive multi-screen user experience and capacity for continuous improvement over the lifetime of the car via future over-the-air (OTA) updates.

The ECARX digital head unit reconfigures the user's in-car experience by providing fully customisable displays, hosted on an advanced Driver Information Module (DIM) and 15.1-inch advanced ultra-slim floating one-billion-colour OLED touchscreen for more realistic graphics and a more futuristic visual effect.

The system uses Qualcomm's third-generation automotive grade chipset, the Snapdragon 8155 providing 12GB RAM, 128GB of storage and 7nm processors. The dual chip set-up uses one master chip to control all driving information functions, including the instrument display, Heads-Up Display (HUD), 360-view camera and functional safety features; while a secondary chip drives infotainment functions. It also carries one MCU chip and ECARX's self-developed software stack.

The HMI interface displays the charging status and vehicle control functions graphically through a 3D real-time rendering of the car, powered by computer graphics game engine, Unreal. By placing these functions at level-zero, the user experience is smoother and more convenient as key operations are done from the homescreen, without the need for secondary page views or apps.

The car's Advanced Driver Assistance System (ADAS), based on two NVIDIA Orin-X chips, connects with the DHU sharing real-time data with the driver via the main screen. The set-up allows the driver to safely monitor the vehicle condition and ADAS status while driving.

Commenting, ECARX Chairman and CEO, Ziyu Shen said: "The Lotus Eletre's digital head unit is our most advanced ever and our first based on a dual-chip system. The technical capabilities provide a seamless and immersive user experience and by working in close collaboration with Lotus's design team, we've delivered a solution that truly embodies the iconic Lotus brand.

Maximillian Szwaj, Vice President of Lotus Technology and Managing Director of Lotus Tech Innovation Centre, commented: "For the newest generation of Lotus cars, we are working together with the best engineering houses in Europe. The cooperation between LTIC and ECARX is an example of how to deliver the best technologies for the mobility of the future and guarantee excellence in quality and performance for our customers."

ECARX is poised for strong international growth as its technology and products, including a customisable full-stack automotive computing platform, enable global automotive brands to define unique user experiences and rapidly advance the design and development of smart EVs as the industry shifts towards more connected, automated, and electrified mobility.

The Lotus Eletre is the all-new and all-electric lifestyle model from Lotus. It was unveiled last March and goes into production later this year. It continues Lotus' transformation from a UK sports car company to a global performance car business and brand.

Eletre is the first of a new breed of pure electric SUVs. It takes the core principles and Lotus DNA from almost 75 years of sports car design and engineering, evolving them into a desirable all-new lifestyle car for the next generation of Lotus customers.

ENDS

Image: ECARX Lotus Eletre DHU, Credit: Group Lotus

About ECARX

ECARX is transforming vehicles into seamlessly integrated information, communications and transportation devices. It is shaping the interaction between people and cars by rapidly advancing the technology at the heart of smart mobility. ECARX's current core products include infotainment head units (IHU), digital cockpits, vehicle chip-set solutions, a core operating system and integrated software stack. Beyond this, ECARX is developing a full-stack automotive computing platform.

Over the last three years, ECARX's technology has been integrated into more than 3.7 million cars worldwide. ECARX was founded in 2017 and has since grown to nearly 2,000 team members globally. The co-founders are two automotive entrepreneurs, Chairman and CEO Ziyu Shen and Eric Li (Li Shufu), who is also the founder and chairman of Zhejiang Geely Holding Group (Geely), one of the largest automotive groups in the world that holds ownership interest and investment in international brands such as Lotus, Lynk & Co, Polestar, smart and Volvo Cars.

In May 2022, ECARX entered into a merger agreement with COVA Acquisition Corp. and, upon completion of the transaction, expects to be listed on Nasdaq. The closing of the transaction is expected to occur in the fourth quarter of 2022.

About Lotus

Lotus Cars is based in Hethel, Norfolk, UK, and is the global HQ for sports car and hypercar manufacturing operations, Lotus Advanced Performance and the iconic 2.2-mile test track. Lotus Cars builds world-class high-performance cars, born out of legendary success on the racetrack including 13 FIA Formula 1 world titles and many other championship honours. In July 2021 Lotus unveiled the all-new Lotus Emira, its last petrol-powered sports car and best-of-breed, and in July 2019 it launched the Evija, the world's first all-electric British hypercar. Customer deliveries of both cars will begin during 2022. In March 2022 Lotus revealed the Eletre, the world's first all-electric hyper-SUV. Customer deliveries will begin in 2023. The Lotus Type 135, an all-electric sports car, is currently being designed and engineered at Hethel.

Lotus Engineering provides comprehensive consultancy services to many of the world's OEMs and Tier 1 suppliers. It is internationally recognised for its long-standing contribution to ground-breaking engineering and innovative vehicle development. Its expertise extends beyond automotive; in August 2021 a Lotus Engineering-developed track bike helped Team GB’s cyclists win seven medals, including three golds, at the Tokyo Olympics. An international consultancy with offices around the world, Lotus Engineering is headquartered at the Lotus Advanced Technology Centre on the University of Warwick’s Wellesbourne Campus in the UK.

Lotus Tech is an affiliate company of Group Lotus, established as part of the Vision80 strategy established in 2018. With operational assets across China, the UK and Europe, Lotus Tech is dedicated to delivering smart lifestyle battery electric vehicles (BEVs) such as the Eletre. Lotus Tech is focused on R&D in next-generation automobility technologies such as electrification, digitalisation and more. In addition to the Lotus Eletre, Lotus Tech plans to launch further BEV models including a sports sedan (Type 133) another SUV (Type 134) and more, as Vision80 reaches maturity in 2028.

Group Lotus is either the parent company of or affiliated with the above. In 2017, Geely Holding Group, one of the fastest growing automotive group in the world, acquired a 51% stake in Group Lotus. The other 49% is owned by Etika Automotive, a Malaysian conglomerate.

SOURCE ECARX Holdings, Inc.