Launching of Cortus ULYSS automotive MCU family

Date: June the 8th, 2023

Location: Montpellier, France

Cortus, an innovative French fabless semiconductor manufacturing group today announces the launching of its secure low power RISC-V automotive microcontrollers (MCUs) **ULYSS family**.

- **ULYSS 1: Body control and energy management**

- **ULYSS 2: Chassis and safety**

- **ULYSS 3: Networking, power system and cockpit**

- **ULYSS 4: Advanced Driver Assistance System (ADAS)**

The integration of the RISC-V solution automotive products is becoming a natural choice for the automotive industry. RISC-V is an open standard instruction set architecture, which provides flexibility, customisation and long-term evolution, perfectly suited to long life cycles. The global RISC-V ecosystem is growing rapidly and becomes one of the world's largest.

The Cortus ULYSS range will comply with safety standards and certifications including ISO 26262 ASIL-B, ASIL-D, IEC 61508/62061, AEC-Q100/1, AUTOSAR, ISO/SAE 21434, etc. Using process technologies from 130nm to 12nm, from single to eight-core design, all with floating point and CAN, and clock speeds from 240MHz to 1.5GHz, Cortus matches all the technical requirements for the different classes of automotive electronic systems.

To fasten integration, Cortus offers a complete solution, from chip to Software Development Kit (SDK) with full support to the final product.

Cortus ULYSS 1 handles any functions related to a vehicle's body and energy control. It manages features such as lighting, climate control, power windows and mirrors, central locking audio systems and more. ULYSS 1 plays an important role in optimizing power consumption and ensuring efficient operation to reduce energy consumption during periods of inactivity and can be triggered at any time (wake up and event detection). It actively participates to enhance overall system reliability while meeting performance requirements. CAN facilitates real-time data exchange, LIN for connecting peripheral devices and sensors.

Cortus ULYSS 2 covers the management and coordination of crucial functions for maintaining vehicle stability, enhancing safety and providing a seamless driving such as ABS, electronic stability control (ESC), traction control, adaptive suspension systems.

Cortus ULYSS 3 is responsible for enabling communication and networking capabilities between various electronic systems and components within the vehicle. In addition to multiple

CAN, LIN, and Ethernet interfaces high performance CPUs enable low latency gateways making it suitable for connected vehicle platforms.

Cortus ULYSS 4 plays a critical role in creating highly efficient and high-performance systems for ADAS and autonomous vehicles to exploit sensors, processors and control algorithms to enhance vehicle safety, provide real-time assistance and improve the overall driving experience. The fusion of data from cameras, radar, lidar and ultrasonic sensors makes it possible to assess the driving situation and take immediate decisions. This paves the way for autonomous driving applications.

If you have a specific request or question about Cortus automotive MCUs, please do not hesitate to contact us. Cortus would be happy to offer you a fully customized solution.

About Cortus S.A.S.

Cortus is a French fabless semiconductor manufacturing group, headquartered in Mauguio (near Montpellier, France). Cortus provides IC devices from a simple MCU to a high-end SoC based around its broad IP portfolio which includes processor, digital, analog, mixed-signal, RF and security IP; in many areas such as Automotive, IoT/5G NB-IoT, Edge Computing and Industrial. Over 14 billion devices have been manufactured containing Cortus processors and IP and 1.2 billion units shipped per year.

Cortus is a Platinum Founding Member of the RISC-V Foundation and strategic member of RISC-V International.

Press contact:
Cortus S.A.S.
Company Contact: Olivier Demoly
Director of Marketing and Business Development
Tel: +33 4.30.96.70.00   -   Email: olivier.demoly@cortus.com