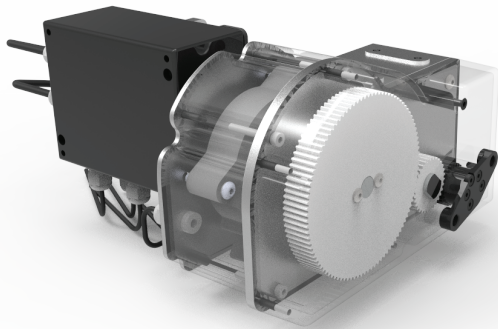


BARO Vehicles pursues and builds new technology for the near future, thinking not only in the mechanic functionality but also in **cybersecurity, latency and redundancy**. Our devices were designed thinking in terms of autonomy, future needs and remote control if needed.

The **BARO CAV Platform** (chassis integrated to technology) is defined as the main structure and basic case of use to assemble autonomous vehicles. In terms of costs, it is the most cost-effective platform in the market to automatise a vehicle.

Lastly, we enjoy developing and providing each component of our products for those who go one step further and develop their customised projects.

DRIVE BY WIRE FOR DRIVELESS CARS



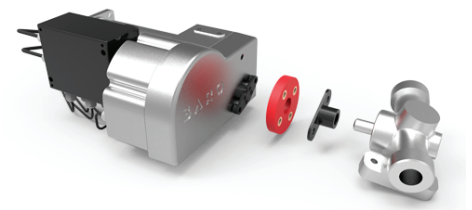
The **BARO Drive by Wire** system provides an ARM Cortex M4F processor running at 120 MHz that offers a powerful speed to process all the commands received from the main computer to move the steering wheel.

The system consists of 2 encoders working together to obtain the **maximum accuracy** of the wheel position.

The **software** is compatible with Arduino (with an IDE modified for this specific processor), besides that you are able to modify the steering system parameters or rebuild the software completely.

The **technology** used was considering the cybersecurity in the CANBUS backbone, offering encryption in the data transfer without compromising system speed.

Lastly, the motor driver controller is powered by the VNH5019A-E driver offering a system to **prevent over-voltage** effectively.



DRIVE BY WIRE SYSTEM

- Designed to programme using a USB Connection
- The system knows the wheel position with high accuracy and in real-time
- Redundancy for the communication with 2 encrypted lines CAN-FD
- USB Port to programme or debug-Arduino Compatible
- Fully Programmable

MECHATRONIC

- Starting torque: 695 lb.in (8 kg.m)
- Speed: 100 rpm
- Current: 6.65 Amps
- IP Motor: IP44
- Steering box ratios allowed: Up to 4 turns (lock to lock)

DIMENSIONS

