



**Building the bridge to  
autonomous vehicles**

## **BARO CAV PLATFORM**

The most advanced framework  
in the market specifically  
designed to develop  
autonomous vehicles  
and robots

**Baro CAV-P** is the most advanced framework in the market specifically designed to develop autonomous vehicles and robots. This platform is a great option to whom develops software for next-generation cars and to be used as the main structure of low-speed autonomous vehicles. A complete chassis, with the ultimate engineering ready to install stand-alone software, includes a new human-machine interface with a joystick connected to an artificial brain for manual driving and a tablet that provides a visual interface integrated with the system.

### Features



Human - Machine Interface



Special Networking



Advanced framework



# GENERAL SPECIFICATIONS

|  |   |
|--|---|
| <b>Processor</b>                           | <ul style="list-style-type: none"><li>◆ LITA AI Computer (NVIDIA Module)</li></ul>  |
| <b>Networking</b>                          | <ul style="list-style-type: none"><li>◆ CAN-FD with encryption 5 mbits and compatible CANBUS with 1 Mbit/s</li><li>◆ BUS Ethernet Gigabit</li></ul>   |
| <b>Perception</b>                          | <ul style="list-style-type: none"><li>◆ 3 Cameras FLIR with SONY senso</li><li>◆ 2 Radar operating at 68-71 gigahertz in front and rear connected by CAN-FD</li><li>◆ Optional LiDAR 16/32 Beams with 360-degree coverage</li><li>◆ GPS Ublox and IMU</li></ul>   |
| <b>HMI<br/>(Human - Machine Interface)</b> | <ul style="list-style-type: none"><li>◆ Joystick connected with CANBUS</li><li>◆ Tablet 12" with graphical software to show how the car is receiving the information</li></ul>  |
| <b>Mechatronic</b>                         | <ul style="list-style-type: none"><li>◆ BARO Drive-by-wire system with CAN-FD interface and steering angle sensor</li><li>◆ Digital Pedals to control the accelerator and brake with CAN-FD Interface and speed sensor</li><li>◆ Lights controller with CAN-FD Interface</li></ul>  |
| <b>Power Supply / Drive Train</b>          | <ul style="list-style-type: none"><li>◆ Motor: Permanent magnet axial flux DC•</li><li>◆ Output rating: 8.6 kW•</li><li>◆ Batteries: Lithium-Ion pack with BMS•</li><li>◆ Transaxle: Oerlikon Graziano - Two step reduction</li></ul>   |
| <b>Mechanical Platform</b>                 | <ul style="list-style-type: none"><li>◆ Steering: Rack and pinion with the electric motor. Drive by wire system•</li><li>◆ Front suspension: Double wishbone suspension, with automotive parts and coil overs•</li><li>◆ Rear suspension: Rear axle mounted with trailing links, Panhard bar and automotive shock absorbers/coil springs•</li><li>◆ Service Brake: Regenerative braking system•</li><li>◆ Parking Brake: Automatic Electro-Magnetic &amp; Brake Drums</li></ul> |

If you have any questions,  
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