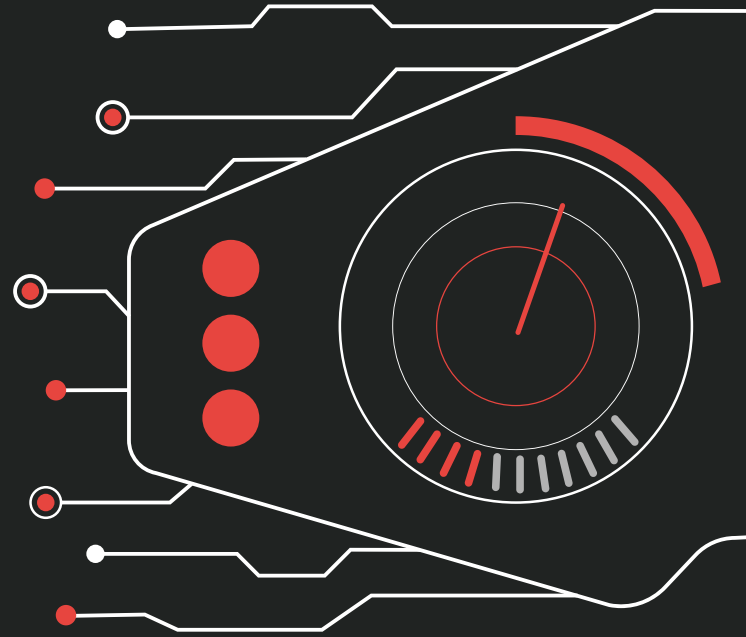


HMI BOX

Product outlook

HMI BOX is a dedicated piece of hardware that RE:Lab conceived for OEMs and Suppliers of different domains (Automotive, Agricultural Machinery, Household Appliances) who need to rapidly prototype and develop working user interfaces, i.e. functionally integrated into the product.

Multiple displays can be handled, as well as data circulating on CAN and other onboard networks. HMI BOX can host software for controlling and visualizing user interfaces for highly complex content (e.g. Infotainment system).



Data sheet

Power management features

- Automotive: 6 - 35V;
- Low Power Mode Support;
- Key Enable Support;
- Peripheral Power Enable/Disable.

Main Peripherals

- 2 x CAN (high speed);
- Different configuration are available:
 - 2xCAN managed by i.Mx6 SOM;
 - 1xCAN managed by i.Mx6 SOM, 1xCAN managed by K20
- 1 x CAN (low speed) - optional;
- Ethernet;
- USB;
- USB-OTG;
- USB-HOST;
- I2C;
- 3 x UART;
- GPIO;
- 4 x Input(3.3V / 5V / 12V) managed by K20 / i.Mx6 SOM
- 3 x Output (3.3V) managed by K20 / i.Mx6 SOM (2A);
- 4 x ANALOG INPUT.

Connectivity

- WI-FI (on i.Mx6 SOM);
- Bluetooth 4.0 / BLE (on i.Mx6 SOM);
- GPRS 3G / LTE (optional - on Mini PCI connector).

HMI – peripherals

- 2 x LVDS;
- FPD-Link III serializer can be enabled on LVDS1 channel;
- 1 x HDMI.

Details description/Use case

HMI Box can be integrated on fixed mock-ups and marching prototypes to support iterative design and test cycles. It has been adopted as prototyping platform of choice in different applications including cars, trucks, agriculture tractors, construction machines and industrial machines.

It was developed building on years of field testing with OEMs and Tier-1s.

RE:Lab is an Italian SME with 15 years of experience in Human Machine Interface and agriculture technologies. With its 90 strong team of highly skilled employees, RE:Lab has developed an ISOBUS stacks now integrated by many OEMs worldwide. It has created highly appreciated advanced HMI for on-vehicle terminals prioritising usability. RE:Lab developed IoT applications for the agricultural, making possible to remotely control tractor's functions.