CARBERRY

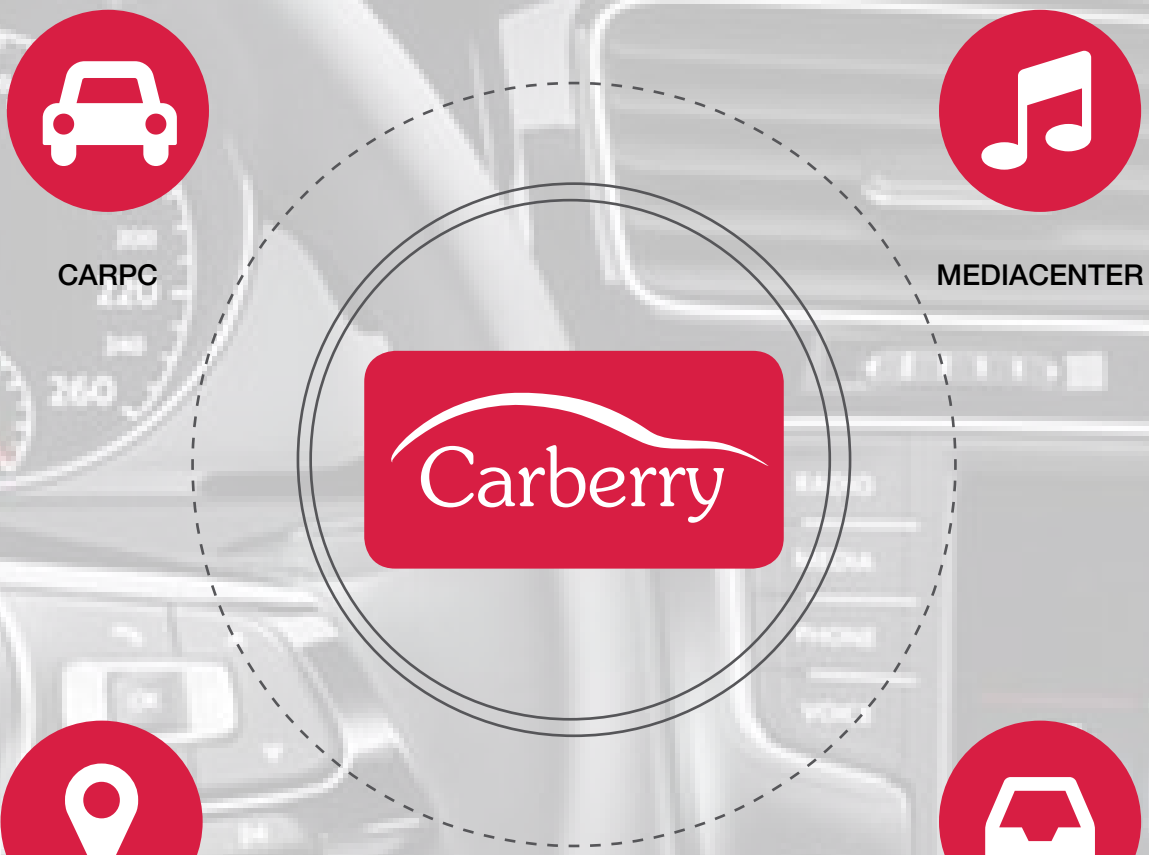
THE UNIQUE RASPBERRY PI SHIELD THAT INCLUDES: CANBUS, GMLAN, +12V POWER SUPPLIER, IR LED INPUT AND MUCH MUCH MORE...

PASER

http://**www.carberry.it**

Carberry uses are not just those examples, real limit is just your imagination...

EXAMPLE OF PROJECTS



AND MANY MORE...

www.carberry.it

CARBERRY

Carberry aims to be a shield for Raspberry Pi micro-computers. Carberry represents the link between car electronics and Raspberry Pi, which allows the development of end-user applications, such as media centers, vehicle diagnostics, data logging, fleet management, tracking, blackboxes, burglar alarms, carputing, internet, and much more.

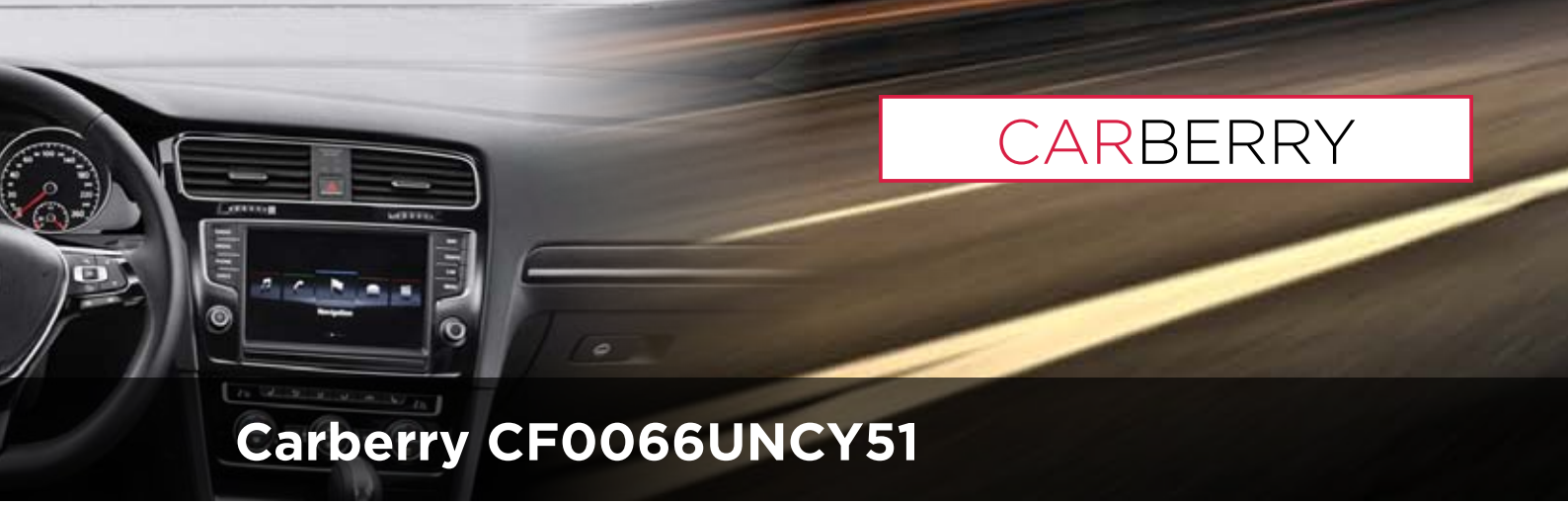
HOW IT WORKS

Carberry is connected to Raspberry Pi via the expansion port P1, by this connection Carberry is able to supply Rasberry Pi. The communication between Raspberry Pi operating system of and Carberry takes place via the serial port.

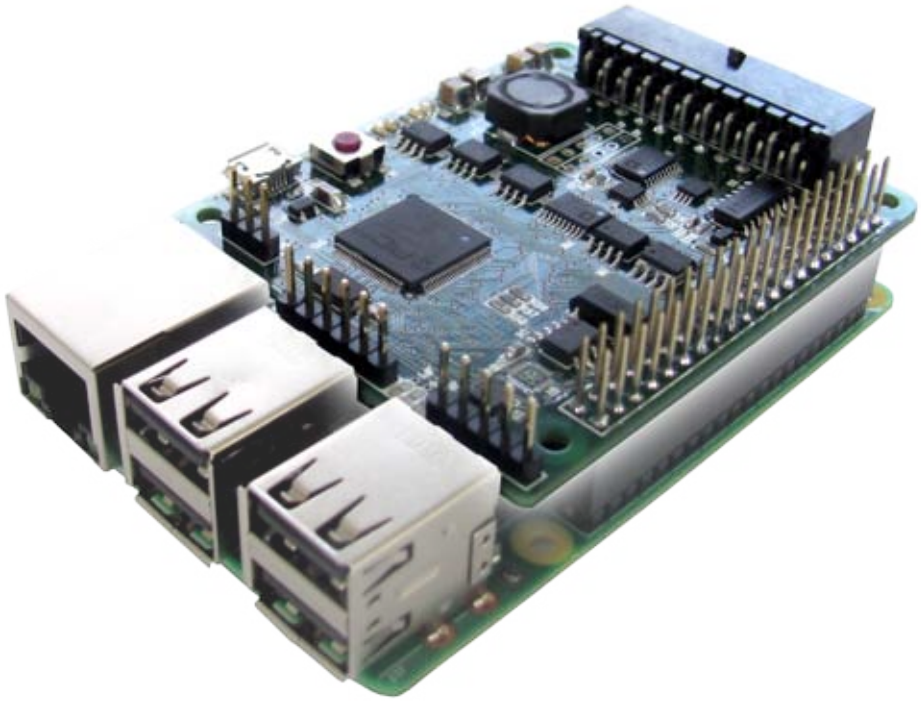
By default it is provided a daemon that allows communication via a TCP/IP socket that responds on port 7070, you can anyway develop your own custom daemon to communicate with Carberry directly on the serial port.

Having a dedicated approach to the cars, Carberry manages Raspberry Pi supply, via a power remote control (whether it is analog on dedicated wire, on the CANBUS or line GMLAN). By acting on the power remote control Carberry will feed the Rasberry Pi or if necessary will launch the shutdown of the operating system.

Click here to see the youtube video:
https://youtu.be/t7Pzsulh9jo



Carberry CF0066UNCY51



compatible with Raspberry B+/ Pi 2/ Pi 3 Version

Carberry, shield for Raspberry Pi microcomputer, provided with adapter compatible with Raspberry B+ / Pi 2 / Pi 3, universal harness not included

(Carberry package, by default, doesn't include any cable and neither Raspberry Pi module.)


CARBERRY
AROUND VIEW
MONITOR
BACK
Carberry
NOW COMPATIBLE
WITH RASPBERRY PI3

Projects: give power to ideas!

CarPC

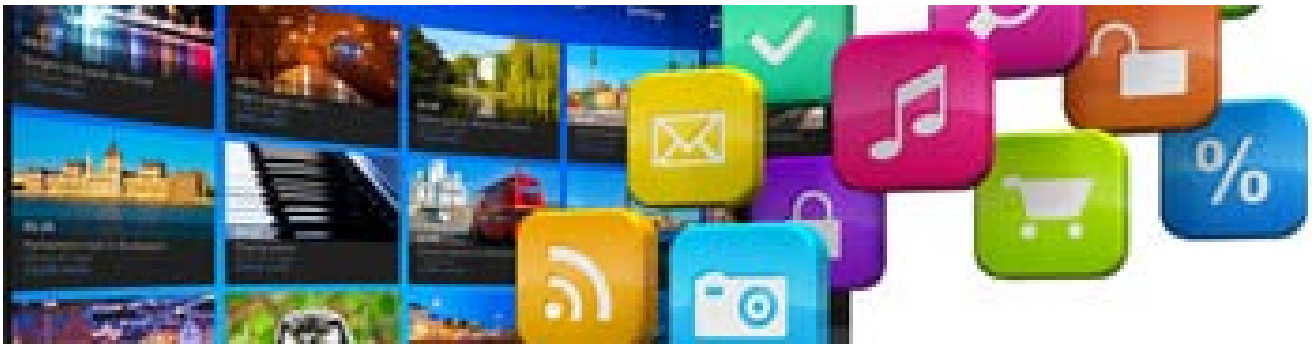
CarPC based on Raspberry are now reality

Carberry integration allows you to add steering wheel commands functionality and also other information like: Positive Ignition, Lights, Speedpulse... information.

Hardware necessary:

- Carberry
- Raspberry Pi
- DAB/FM receiver
- DAB/FM antenna
- 7inch Touchscreen Display
- 4x50W Amplifier
- GPS antenna

Projects: give power to ideas!

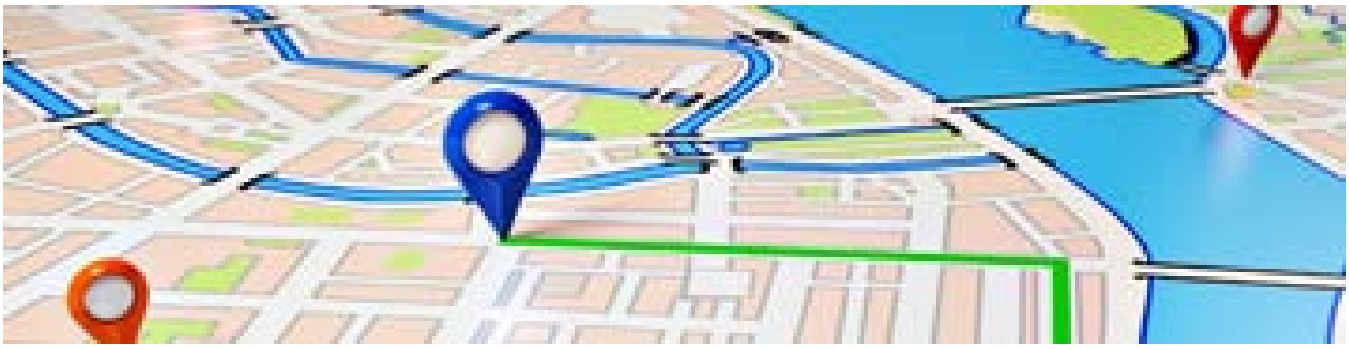


Mediacenter (Kodi)

Raspberry + Carberry could be a valid mediacenter alternative for your car entertainment.
Please check our project: Car Multimedia Center Carberry+Kodi

Hardware necessary:

- Carberry
- Raspberry Pi
- DAB/FM receiver
- DAB/FM antenna
- DVB-T receiver
- DVB-T antenna



GPS Monitoring System

Connecting Carberry to car OBD port and using a GPS antenna connected to Raspberry Pi is possible to create a vehicle tracking system. Speed, Fuel Level, Engine Load, etc... could be read from OBD port and saved insiede carberry memory, combined with GPS position. Adding a 3G modem is possible to create a live tracking system.

Hardware necessary:

- Carberry
- Raspberry Pi
- GPS antenna
- 3G modem

Projects: give power to ideas!

Blackbox

Carberry has onboard an accelerometer + magnetometer sensor that allows you to record G axis movement related to car speed, in this way is possible to create a blackbox to track car behavior during a crash.

Hardware necessary:

- Carberry
- Raspberry Pi
- GPS antenna
- 3G modem

Car Diagnostic

Connecting Carberry to car OBD port you can get real time data (speed, RPM, fuel level, turbo pressure...) and diagnostic errors. This allows to create a car diagnostic computer or a live data info panel like in our project.
Please check our project: Carberry Info Panel

Hardware necessary:

- Carberry
- Raspberry Pi

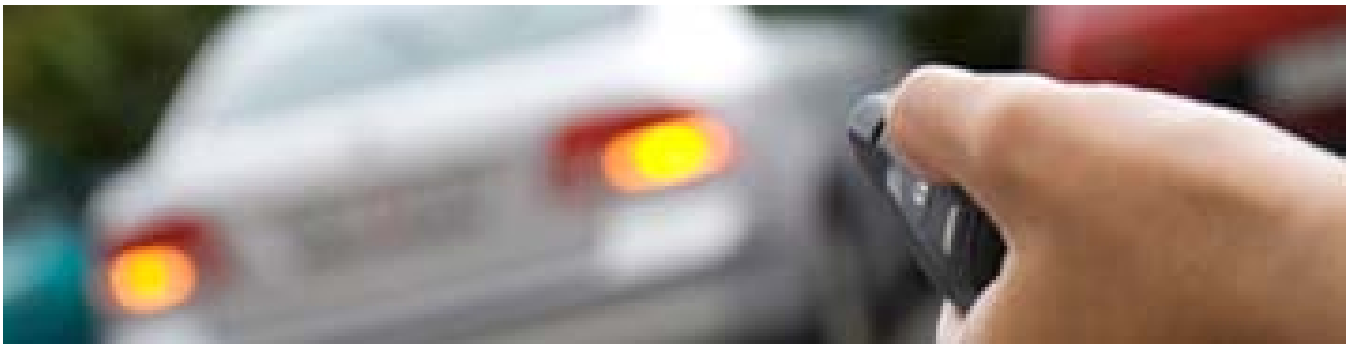
Projects: give power to ideas!

Video in motion

Carberry has 2 Canbus and 2 GMLAN lines: you can use one as input and one as output filtering or altering which information you want from the input to ouput.
Using this technique you could alter speedpulse information in order to unlock video in motion on original infotainment systems while driving.

Hardware necessary:

- Carberry
- Raspberry Pi

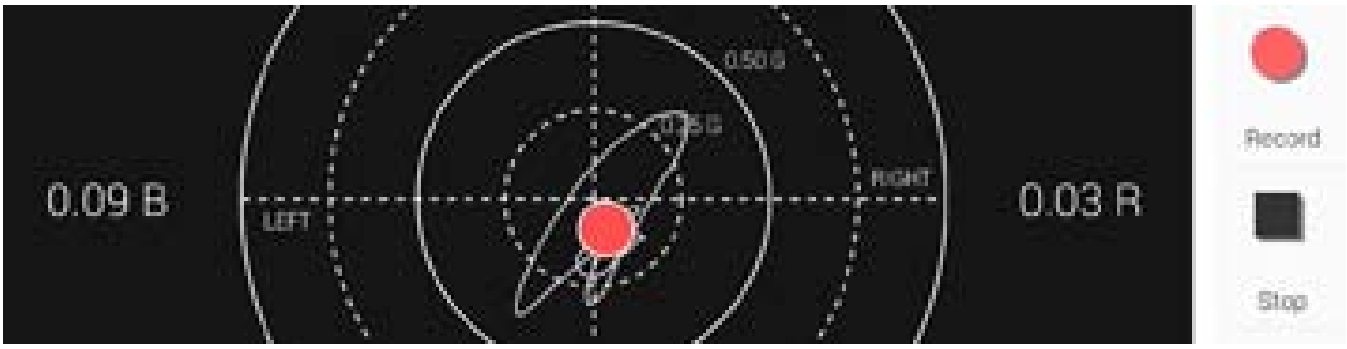


Alarm System

Using Carberry onboard accelerometer + magnetometer sensors is possible to recognizes car movement when is closed, comining these information with GPS position is possible make a full car alarm system.

Hardware necessary:

- Carberry
- Raspberry Pi
- GPS antenna
- 3G modem



G Meter

Carberry accelerometer could be used to create a powerful G Meter and Raspberry pi could draw a the graphic to any kind of display.

Hardware necessary:

- Carberry
- Raspberry Pi

Tyre Pressure Monitoring

In different cars is available speed info of each wheel, calculating different rotating speed is possible to understand if a one tyre is deflated than others and generate an alert for the driver.
A similar product, created with dedicated hardware, was already developed by Paser.
Please check product page: SAFETY KIT SKT170

Hardware necessary:

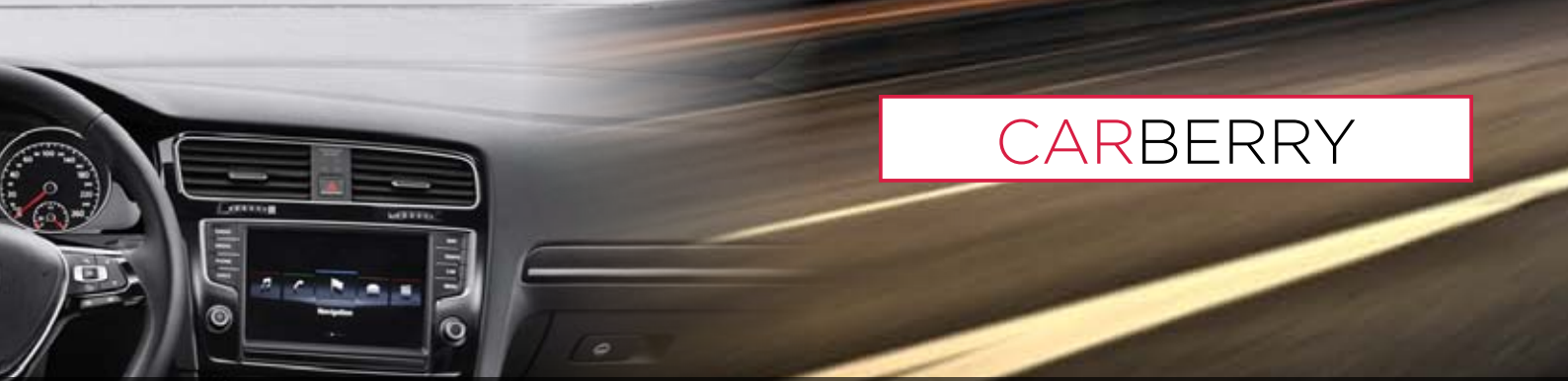
- Carberry
- Raspberry Pi
- 4x50W Amplifier
- 1x Speaker

Car compatibility

NEW CARBERRY CARS COMPATIBILITY

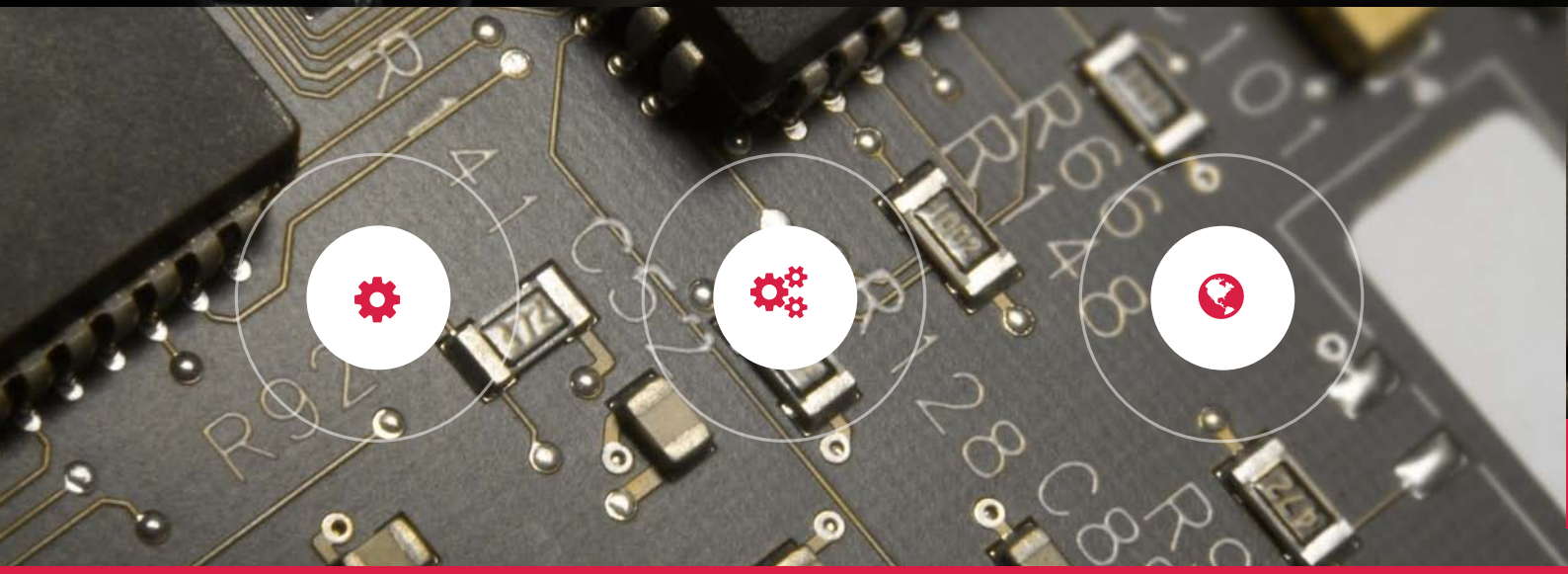
Now Carberry extends your cars compatibility. Updating Carberry to the latest firmware you can add more cars protocol. Visit the download section under the voice “Carberry Update” to see the changelog of firmware version.
Actually Carberry is compatible with the main car brands like Audi, BMW, Fiat, Ford, Honda, Hyundai, Jeep, Kia, Mercedes, Mini, Volkswagen and many more.
The full list of compatible cars is available on the carberry main page under the voice “Car Compatibility”.

AND MANY **MORE**!



CARBERRY

Technical specifications

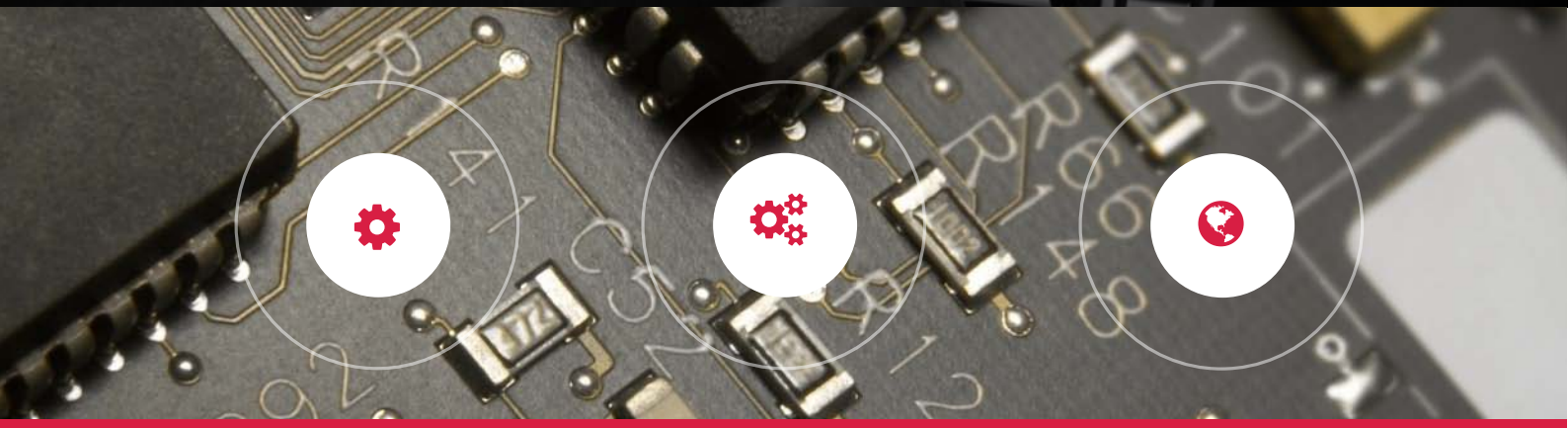


Board Specification

CPU	32 bit RISC Microcontroller
Supply	12V Car supply Consumption 150mA / less than 3ma in standby
BUSes	2xCAN BUS 2x GMLAN 2x LADDER
GPIO	2xGPI 2xGPO 1xGPIO CMOS 1xIGNITION IN 1xIGNITION OUT
User Interface	1xReset button 1xBicolor status led 2xGeneral Purpose LED
UART	One TTL 5V RX/TX UART USB device (Virtual COM Port)
Storage	EEPROM SRAM
Sensors	Accelerometer Magnetometer RTCC
Multimedia	40KHz Infrared emitter 40KHz Infrared receiver MFI Apple Chip Support
Dimensions	Raspberry Pi shaped

CARBERRY

Technical specifications



Hardware specifications

- Same size printed circuit board as of Raspberry Pi, with proper shaping.
- Connection to Raspberry via the P1 26 pin GPIO header located on the board.
- 22 pin Microfit connector for vehicle connection.
- Power supply +12 V and GND from the vehicle.
- Power supply 5V 1A for Rasperry Pi generated onboard by Carberry.
- Control of the Raspberry Pi power supply by mosfet, for the management of low consumption.
- Logic shutdown signal to Raspberry Pi to perform a controlled shutdown.
- Low power consumption compatible according to automotive standards (< 3mA).
- Communication to the Raspberry Pi via UART (Pin 15/16 of P1 header).
- +12V Ignition signal input.
- +12V Ignition signal output with a 2.5A power mosfet.
- 2 CAN Bus lines for series or parallel connection at vehicle buses
- 2 GMLAN lines for series or parallel connection at vehicle buses.
- 2 channels for resistive steering wheel controls, with single key bypass capability.
- 1 general purpose UART 5V/3V3
- 2 general purpose 100mA open collector outputs.
- 2 general purpose inputs (to ground or 5V tolerant).
- 2 general purpose user-programmable LEDs.
- Microchip PIC32MX microcontroller.
- Button and two-color LED for can bus profiles learning and reset functions.
- PWM signal to Raspberry Pi for LIRC management.
- Infrared remote control emulation for media centers via steering wheel controls.
- Infrared sensor for 38KHz IR remote controls.
- Infrared LED for IR codes emission.
- Ready to Apple MFI program to develop applications under Linux (coprocessor not provided).
- RTCC to handle date and time with car battery backup.
- Raspberry Pi wakeup by RTCC at programmed date/time.
- External EEPROM with a unique identifier to be used for any licenses related to the card.
- Accelerometer + magnetometer, for anti-theft features, positioning, blackboxes.
- Raspberry Pi wakeup by accelerometer and magnetometer events.
- Microusb device connector for a stand-alone operation of the shield or future functionality.

Software specifications

- Interfacing to the Raspberry Pi via ASCII strings (like modem AT commands).
- Firmware upgradable via Raspberry Pi.
- CAN bus self-recognition of the car profile.
- GMLAN self-recognition of the car profile.
- Manual selection of CAN bus profile.
- CAN bus Service Manager.
- Notification services (lights, handbrake, odometer, etc) to the Raspberry Pi.
- Management of CAN bus steering wheel controls.
- Notification of CAN bus steering wheel controls to the Raspberry Pi.
- Selective interception of the CAN bus steering wheel controls.
- Notification of fuel gauge and engine diagnostics (where available).
- Self-learning of resistive steering wheel controls.
- Selective interception of resistive steering wheel controls.
- Exposure to Raspberry Pi of the Apple MFI Coprocessor to subscribe to the MFI program to play Apple devices connected to the Raspberry Pi USB.
- Exposure to Raspberry Pi of a RTCC to manage time and date.
- Saving data to retain into EEPROM.
- Exposure to Raspberry Pi of an accelerometer and magnetometer.
- Exposure to Raspberry Pi of a unique code register.

Accessories

Box - Compatible with Raspberry B+ / Pi 2

Product Code:
KITSCT066GPCY11

Carberry+Raspberry Pi Metal Box (L9.2, W6.3, H3.9).
Compatible with Raspberry B+ / Pi 2

Box - Not compatible with Raspberry Pi 2

Product Code:
KITSCT066UNCY11

Carberry+Raspberry Pi Metal Box.
Not compatible with Raspberry Pi 2

Box - Compatible with Raspberry Pi 2 / Pi 3

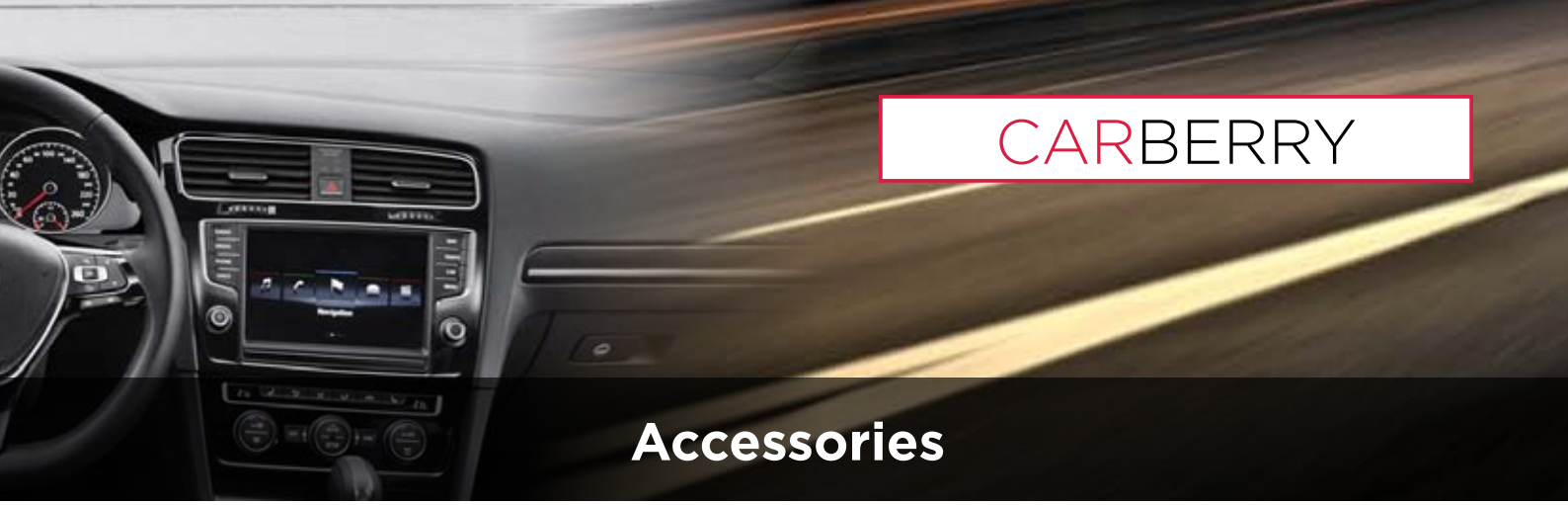
Product Code:
MP0SCT066UNCY31

Carberry+Raspberry Pi Metal Box (L9.2, W6.3, H3.9).
Compatible with Raspberry Pi 2/3

Tap Connectors Kit

Product Code:
KIT066RUCO/4R2B

Tap Connectors Kit.
2x for wires with internal section **from 1.0mm to 2.5mm**
4x for wires with internal section **from 0.2mm to 1.0mm**



Accessories

CarBian OS SD

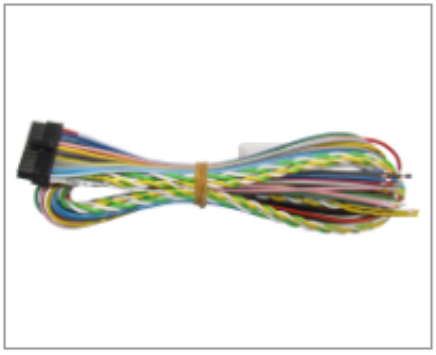
Product Code:
KIT066SD8G/CY

Pre-programmed SD Card with CarBian OS. Size: 8GB
Speed: 30MB/s Class 10

OBD2 Extender

Product Code:
CBL066OBUN11

OBD2 Extender.
Length: 50cm



Carberry Free Wires Harness

Product Code:
CBL066UNCY11

UNIVERSAL free wired harness.
Compatible with Carberry.

Carberry Infrared Adapter

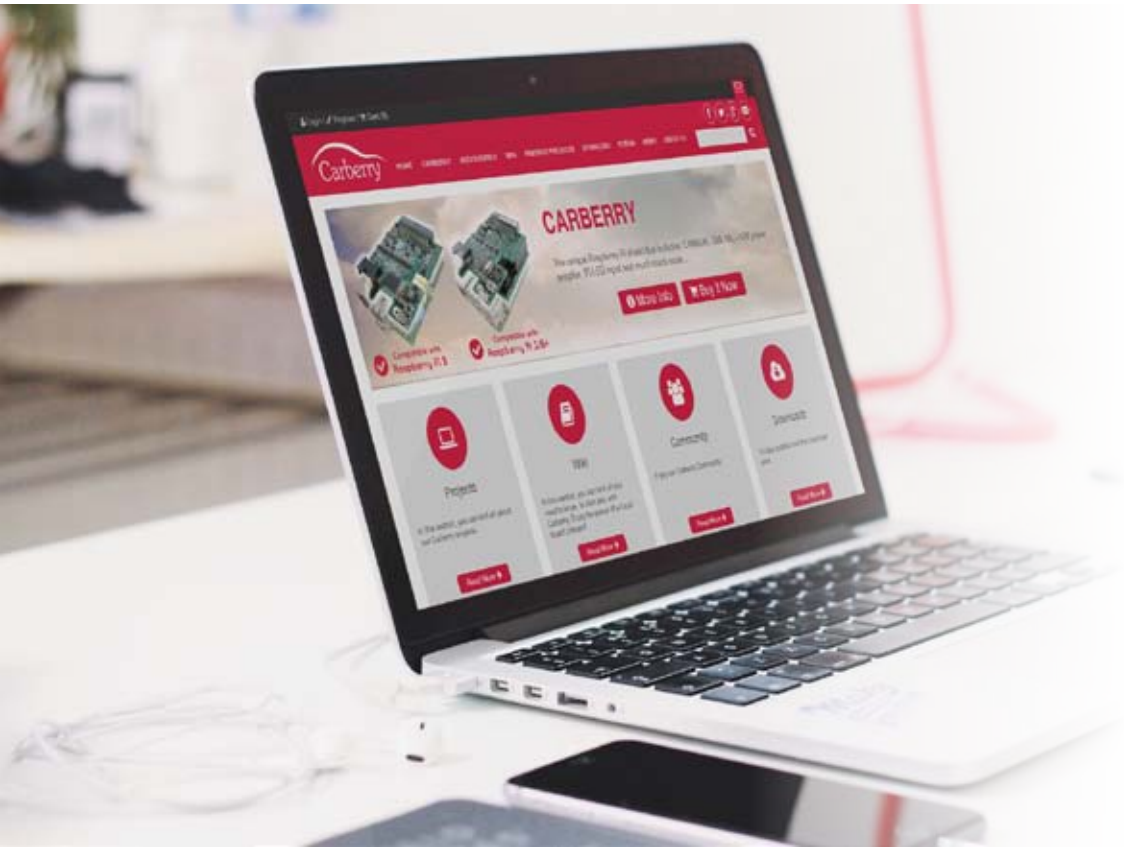
Product Code:
CBL066UNCY21

Carberry Infrared Adapter.

CARBERRY

Paser products

The Paser culture is characterized by a strong focus on innovation and flexibility, with a particular and constant focus on the Customer.
All Paser products are universal and compatible with each type of vehicle.
All entire Paser production cycle is developed in Italy.
All Paser products are known for ease of use, excellent quality and exquisite design.
Paser is certified UNI EN ISO 9001: 2008, ensuring total quality in all business processes, from design, to production, to after-sales services such as highly **qualified technical assistance**!



Paser products

Study

Specific solutions studying, versatile and multifunctional for the protection and security of your Vehicle

Design

Realization of devices with cutting-edge design and suitable for all types of automotive configuration

Installation

Easy installation, ensuring system efficiency, ease of use and total safety for the end user

Develop

Nearly all connections are Plug&Play, simple and intuitive, in order to reduce costs and installation times

CARBERRY

Paser products

Paser boasts an experience of over 20 years in the electronics applied to the most different sectors.

Paser Alarms integrate the functionality and the most common features of the alarms in the world for civil vehicles and homes, with the specificities of each time needed in varied contexts.

The **Paser Alarms** constitute a whole of integration between the various security contexts, protection and tracking systems and thus allow to the end user to install and use an **advanced technology system** that covers in their entirety the requirements for the protection of the vehicle, but offering a use and operation **easiness for everyone**!

Paser products

The Paser Electronic devices are designed, made and produced by the company PASER Ltd., for over 20 years a leader in the electronic industry!

PASER also offers the service of study and realization of Electronic devices for all uses and applications!

Design

Comfort

Easy to use

CARBERRY

Contacts

Paser is always at your disposal!

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PASER