

## Corvette C6 LS2 – C6 LS3 – Z06 LS7

### ECU connection



## INTRODUCTION

AIM has developed special applications for many of the most common ECUs: by special applications we mean user-friendly systems which allow to easily connect your ECU to our high tech data loggers: user needs only to install harness between the **logger** and the ECU.

Once connected, the logger displays (and/or records, depending on the logger and on the ECU data stream) values like RPM, engine load, throttle position (TPS), air and water temperatures, battery voltage, speed, gear, lambda value (air/fuel ratio) analog channels...

All AIM loggers include – free of charge – **Race Studio 2** software, a powerful tool to configure the system and analyze recorded data on your PC.

**Warning: once the ECU is connected to the logger, it is necessary to set it in the logger configuration in Race Studio 2 software.**

**Select Manufacturer “GM” and Model “C6\_LS2”.**

**Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.**

## Chapter 1 – Car Models and Communication Setup

GM C6\_LS2 ECU is installed as stock one on the following car models:

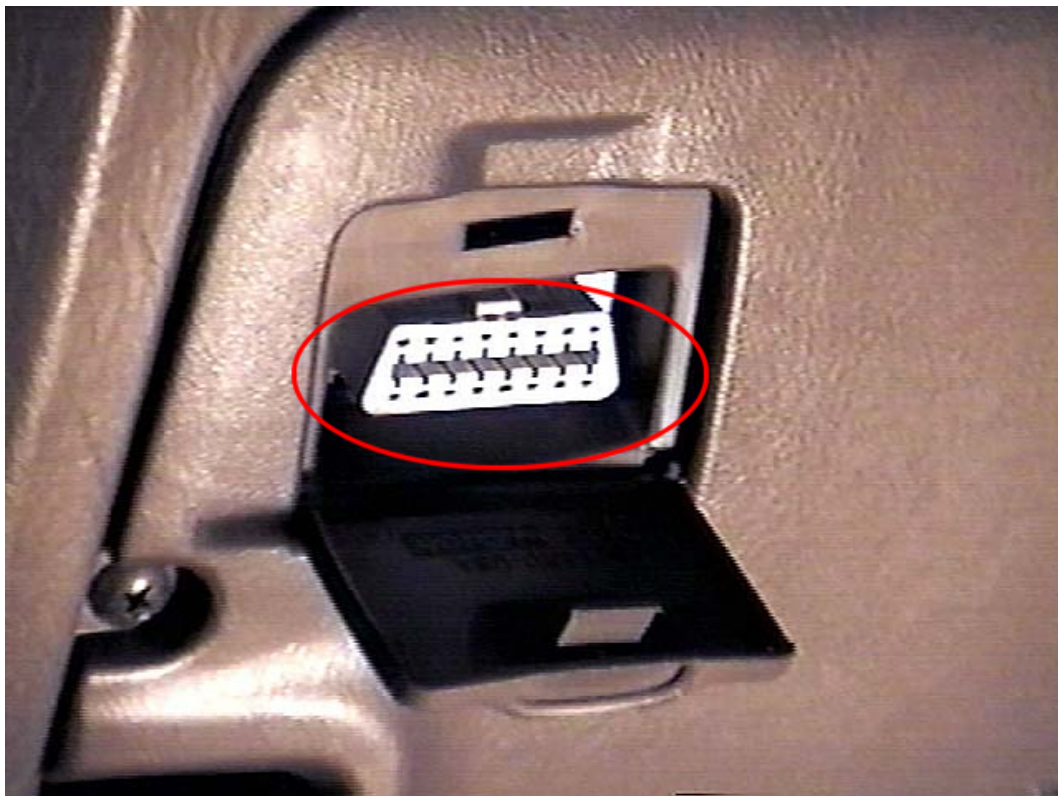
- Corvette C6 LS2
- Corvette C6 LS3
- Corvette Z06 LS7

GM C6\_LS2 ECU is equipped with a CAN communication protocol used to communicate parameters to a data logger. This protocol is also available on the OBD II diagnosis plug placed under the steering column on the left.

## Chapter 2 – Connection to AIM loggers

To connect GM C6\_LS2 ECU to AIM loggers use the “OBDII” Diagnosis connector highlighted here below and:

- connect pin 6 of “OBD II” connector to AIM cable labelled CAN+
- connect pin 14 of “OBD II” connector to AIM cable labelled CAN-



## Chapter 3 – GM C6 LS2 communication protocol

Channels received by AIM loggers connected to GM C6 LS2 ECU are:

<b>ID</b>	<b>CHANNEL NAME</b>	<b>FUNCTION</b>
ECU_1	GMX_RPM	RPM
ECU_2	GMX_SPEED	Speed
ECU_3	GMX_ACC	Accelerometer
ECU_4	GMX_PPS	Pedal position sensor
ECU_5	GMX_TPS	Throttle position sensor
ECU_6	GMX_TENGINE	Engine temperature
ECU_7	GMX_AIR_TEMP	Air Temperature
ECU_8	GMX_FUEL_LEVEL	Fuel Level
ECU_9	GMX_FUEL_USED	Used fuel
ECU_10	GMX_OIL_PRESS	Oil pressure
ECU_11	GMX_WH_SPD_FL	Front Left wheel speed
ECU_12	GMX_WH_SPD_FR	Front Rear wheel speed
ECU_13	GMX_WH_SPD_RL	Rear left wheel speed
ECU_14	GMX_WH_SPD_RR	Rear right wheel speed
ECU_15	GMX_STR_WHEEL_ANG	Steering angle
ECU_16	GMX_YAW_RATE	Yaw rate
ECU_17	GMX_GEAR	Engaged gear
ECU_18	GMX_OIL_TEMP	Engine oil temperature
ECU_19	GMX_TIRE_PR_FL	Tire pressure front left
ECU_20	GMX_TIRE_PR_RL	Tire pressure rear left
ECU_21	GMX_TIRE_PR_FR	Tire pressure front right
ECU_22	GMX_TIRE_PR_RR	Tire pressure rear right