AIM Infotech

Fiat 500 Abarth
(from 2008 onward)

Release 1.05
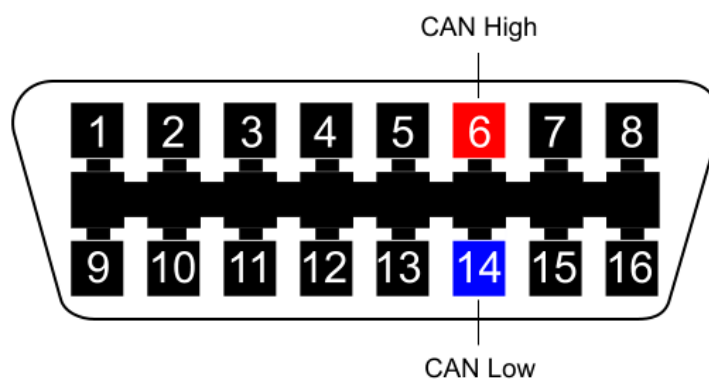
This tutorial explains how to connect Fiat 500 Abarth (from 2008 onward) to AiM devices.

1
CAN communication setup

Fiat 500 Abarth features a bus communication protocol based on CAN on the OBDII plug placed left of the steering column under the dashboard as shown below.

OBDII connector as well as connection table are shown below.

OBDII connector pin	Pin function	AiM cable label
6	CAN High	CAN+
14	CAN Low	CAN-

2
AIM device configuration

Before connecting the ECU to AiM device set this up using AiM Race Studio software. The parameters to select in the device configuration are:

- ECU manufacturer "FIAT_ABARTH"
- ECU Model "CAN STANDARD";

3
Available channels

Channels received by AIM devices connected to "FIAT ABARTH" "CAN STANDARD" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	FA_RPM	RPM
ECU_2	FA_PPS	Pedal position sensor
ECU_3	FA_TPS	Throttle position sensor
ECU_4	FA_BRAKE_SW	Brake switch
ECU_5	FA_BRAKE_PRESS	Brake pressure
ECU_6	FA_VEH_SPEED	Vehicle speed
ECU_7	FA_WH_SPD_RR	Rear right speed wheel
ECU_8	FA_WH_SPD_RL	Rear left wheel speed
ECU_9	FA_WH_SPD_FR	Front right wheel speed
ECU_10	FA_WH_SPD_FL	Front left wheel speed
ECU_11	FA_STEER_ANGLE	Steering angle
ECU_12	FA_STEER_SPEED	Steering wheel speed
ECU_13	FA_ECT	Engine coolant temperature
ECU_14	FA_OILP_SW	Oil pressure switch
ECU_15	FA_CLUTCH_SW	Clutch switch
ECU_16	FA_FUEL_LEV	Fuel level

ECU_17	FA_AMB_TEMP	Ambient air temperature
ECU_18	FA_DRIVE_STY	Drive stability
ECU_20	FA_CURR_FAIL	Current failure
ECU_21	FA_D_SIGNAL	Digital signal
ECU_22	FA_BOOST_PR	Boost pressure
ECU_23	FA_BRK_SW2	Brake switch 2
ECU_24	FA_EPS_FAIL	Electronic powered steering failure

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific and therefore may not be applicable.