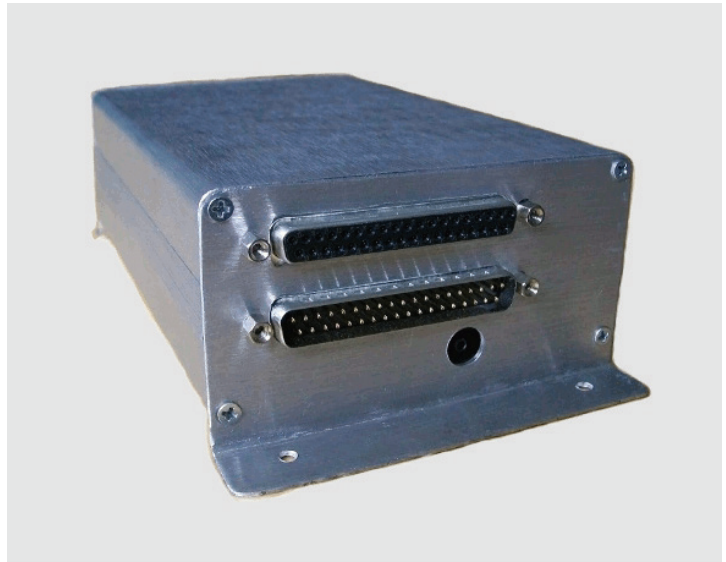


AiM Infotech

Megasquirt MS3 ECU

Release 1.02

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ECU



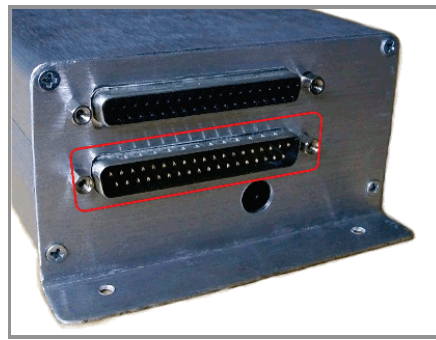
This tutorial explains how to connect Megasquirt MS3 ECU with AiM devices.

# 1

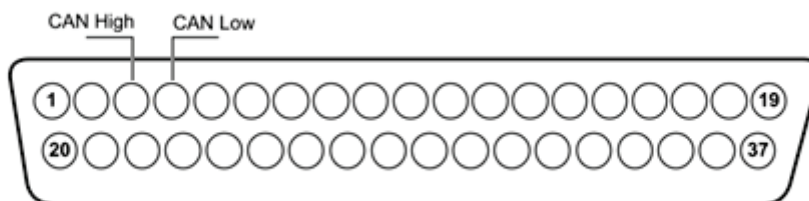
## Wiring connection

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Megasquirt MS3 ECU features a bus communication protocol based on CAN on the 37 pins front male connector shown here below.



Here below is connector pinout and connection table.



ECU 37 pins connector	Pin function	AiM cable label
3	CAN High	CAN+
4	CAN Low	CAN-

## 2

# AiM device configuration

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

- ECU Manufacturer "Megasquirt"
- ECU Model "MS3\_CAN\_BUS"

## 3

# Available channels

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Channels received by AiM loggers connected to "Megasquirt" "MS3\_CAN\_BUS" protocol ECU are:

<b>ID</b>	<b>CHANNEL NAME</b>	<b>FUNCTION</b>
ECU_1	MS3_RPM	RPM
ECU_2	MS3_SPEED1	Speed1
ECU_3	MS3_SPEED2	Speed2
ECU_4	MS3_TPS	Throttle Position sensor
ECU_5	MS3_BATT	V Battery
ECU_6	MS3_MAP	Manifold Air pressure
ECU_7	MS3_BARO	Barometric pressure
ECU_8	MS3_ADVANCE	Spark advance
ECU_9	MS3_KNOCK	Knock sensor
ECU_10	MS3_LAMBDA1	Lambda sensor 1
ECU_11	MS3_LAMBDA2	Lambda sensor 2
ECU_12	MS3_EGO_CORR_1	Exhaust gas oxygen correction 1
ECU_13	MS3_EGO_CORR_2	Exhaust gas oxygen correction 2
ECU_14	MS3_AIR_CORR	Air correction
ECU_15	MS3_WARM_ENR	Warm up enrichment
ECU_16	MS3_GAMMA_ENR	Gamma enrichment



ECU_17	MS3_TPSFUELCUT	Throttle Position Sensor fuel cut
ECU_18	MS3_BARO_CORR	Barometric pressure correction
ECU_19	MS3_FUEL_LOAD1	Fuel Load 1
ECU_20	MS3_FUEL_LOAD2	Fuel Load 2
ECU_21	MS3_FUEL_CORR	Fuel correction
ECU_22	MS3_EGO_V1	Exhaust gas oxygen voltage 1
ECU_23	MS3_EGO_V2	Exhaust gas oxygen voltage 2
ECU_24	MS3_IGN_LOAD1	Ignition load 1
ECU_25	MS3_IGN_LOAD2	Ignition load 2
ECU_26	MS3_ACC_ENRICH	Acceleration enrichment
ECU_27	MS3_VE_CURR1	Current VE value in use 1
ECU_28	MS3_VE_CURR2	Current VE value in use 2
ECU_29	MS3_IAC_STEP	Intake air temperature correction step
ECU_30	MS3_COLD_ADV	Cold advance
ECU_31	MS3_MAT	Manifold air temperature
ECU_32	MS3_ECT	Engine cooling temperature
ECU_33	MS3_ENGINE	Engine status
ECU_34	MS3_KNOCK_RET	Knock retard
ECU_36	MS3_DWELL	Coil dwell time
ECU_37	MS3_EGT_6	Exhaust gas temperature 6
ECU_38	MS3_EGT_7	Exhaust gas temperature 7
ECU_39	MS3_VBO2_EN1	VBO2 Enable 1
ECU_40	MS3_VBO2_EN2	VBO2 Enable 2
ECU_41	MS3_IDLE_PWM	Power width modulation
ECU_42	MS3_PW1	Power width 1
ECU_43	MS3_PW2	Power width 2
ECU_44	MS3_ADC6	Analog to digital counter 6
ECU_45	MS3_ADC7	Analog to digital counter 7
ECU_46	MS3_BOOST_DUTY	Boost duty cycle
ECU_47	MS3_SYNCR	Lost sync reason
ECU_48	MS3_STATUS1	ECU Status1
ECU_49	MS3_STATUS2	ECU Status2