

Engine Control

R8 ECU

Connector pin assignment and functions.

Main Connector

Pin	Description	Comments
1 ..	Ignition 1	See notes
2 ..	Ignition 2	
3 ..	Ignition 3	
4 ..	Injector 1	See notes
5 ..	Injector 2	
6 ..	Injector 3	
7 ..	Injector 4	
8 ..	Fuel Pump	8 amps max.
9 ..	Lambda Heater	8 amps max.
10 ..	Valve 1	Boost Control
11 ..	Valve 2	Water Injection
12 ..	Throttle Position	0-5 volts
13 ..	Airbox Pressure	0-5 volts
14 ..	Pan Vac	
15 ..	Fuel Pressure	0-5 volts
16 ..	Oil Pressure	0-5 volts
17 ..	MSD POINTS	12 volt rising edge
18 ..	Injector 5	See notes
19 ..	Injector 6	
20 ..	Injector 7	
21 ..	Injector 8	
22 ..	Shift Output 1	
23 ..	Shift Output 2	
24 ..	Shift Output 3	
25 ..	Shift Output 4	
26 ..	ECU 12v	
27 ..	Lambda 1	0-5 volts
28 ..	CAN High	
29 ..	CAN Low	
30 ..	Converter 1	
31 ..	Converter 2	
32 ..	Lambda 2	0-5 volts
33 ..	Nitrous Pressure 1	
34 ..	Nitrous Pressure 2	
35 ..	Shock Control 1	
36 ..	BT Antenna	
37 ..	Ignition 4	See notes
38 ..	Ignition 5	
39 ..	Ignition 6	
40 ..	Ignition 7	
41 ..	Ignition 8	
42 ..	Nitrous Purge 1	
43 ..	Nitrous Purge 2	
44 ..	Fuel Temperature	CDI Temp
45 ..	Air Temperature	NTC Input
46 ..	Water Temperature	NTC Input
47 ..	Oil Temperature	NTC Input
48 ..	Crank Pickup	
49 ..	Sync Pickup	
50 ..	Tach Out	was frontwheel
51 ..	Rearwheel	
52 ..	Mixture Switch	Use EFI Part No. 62-605
53 ..	Shock Control 2	
54 ..	NOS 1	
55 ..	NOS 2	
56 ..	NOS 3	
57 ..	NOS 4	
58 ..	Auto Purge	
59 ..	Cooling Fan	
60 ..	Transbrake	was shift lamp
61 ..	Chute Release	
62 ..	TXD Output	3rd party logger link
63 ..	Switch 1	ECU kill switch
64 ..	Switch 2	Map select switch
65 ..	ACD- Shift and Over-ride	Shift Cut Input
66 ..	Nitrous ARM	Pit Limiter switch
67 ..	Clutch/Transbrake	Beacon
68 ..	NOS 5	
69 ..	NOS 6	
70 ..	VREF	5V @200mA max.
71 ..	VREF	5V @200mA max.
72 ..	GND	
73 ..	GND	
74 ..	GND	
75 ..	GND	
76 ..	GND	
77 ..	PWR GND	Connect to Battery
78 ..	PWR GND	Connect to Battery
79 ..	PWR GND	Connect to Battery

Notes

- Mating connector Part No. is AS 620-35SN
- All Injector drivers are peak and hold outputs with 8 amp maximum driver current.
- All Ignition outputs are 5 volt open collector rising edge trigger.
- All switch inputs are normally high and are active when pulled low.