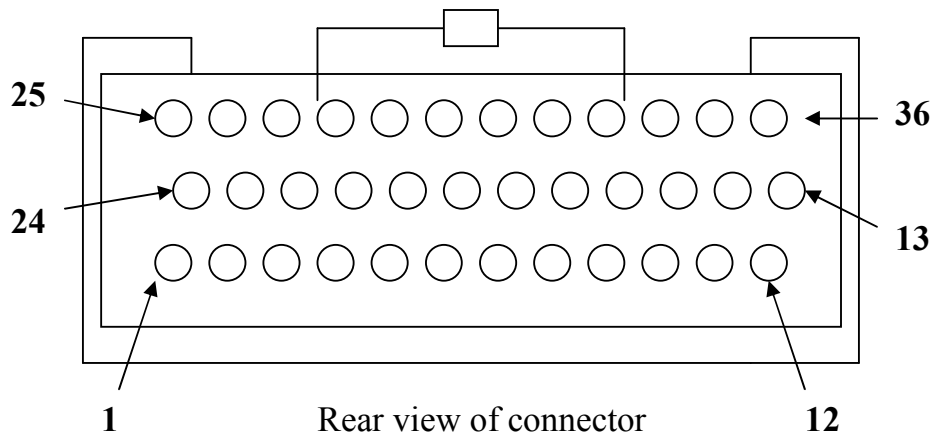


# Elise S2

## 36-way ECU connector



Pin number	Connection	Comments
1	Injector driver 4	Injector 2
2	IACV	Channel 2
3	IACV	Channel 1
4	Main relay control	Relay powers injectors & coils
5	Ignition driver 2	Only used for distributorless ignition. Connect to coil negative terminal
6	Cooling fan relay control	Switched earth
7	AuxIn7	
8	Throttle pot signal input	
9	Throttle pot supply / +5v out	5v output, 100mA max
10	AuxIn10	
11	Ignition sense input	+12v supply via ignition switch
12	Tacho output signal	12v pulsed output
13	Immobilisor input	
14	AuxOut14/AuxIn14	
15	Cam phase or custom input	
16	Air temperature signal input	
17	AuxOut17	Elise S2 = speedo signal
18	Oxygen sensor signal earth	
19	Shift-light driver	Switched earth
20	Fuel pump relay driver	Switched earth
21	AuxOut21	Elise S2 = coolant gauge signal
22	IACV	Channel 3
23	Injector driver 2	Injector 3
24	Injector driver 1	Injector 1
25	Ignition driver 1	Connect to coil negative terminal
26	Injector driver 3	Injector 4
27	IACV	Channel 4
28	+12v Ignition supply	Supply from main relay <b>or</b> common with pin 11
29	ECU earth	Good earth (direct to battery)
30	Sensor earth (common earth)	Common earth for air, coolant & throttle sensors
31	Main trigger signal input	Crank sensor signal
32	Main trigger sensor earth	Earth for main/cam trigger sensor
33	Coolant temp signal input	
34	AuxIn34	0 – 5v input (MAP sensor signal)
35	AuxIn35	0 – 5v input
36	Oxygen sensor heater relay driver	Switched earth

**Note:** The Elise S2 wheel speed sensor is connected to *Aux Port B* (9-way port on back of ECU) pins 1 & 4.

### External map sensor wiring if required

Plug pin no.	Description
1	Map sensor signal
2	Earth
3	+5v supply

## To adapt EU3 twin plug loom to single plug for K6

EU3/S2 ECU				K6 ECU
Pin	Colour	Use	Note	Pin
<b>First row - left/top large pin is pin 1 – clip to top</b>				
1	Black/blue	Lambda heater earth	<b>Big pin</b>	36
2			<b>Big pin</b>	
3	Yellow/blue	Lambda 2	Not used	
4	Blue/purple	Crank sensor	Signal	31
5	Screen/blank	Camshaft sensor shield		30
6	Pink/black-blank		Not used	
7	Pink/black	Sensor earth		30
8	Yellow/purple	Map sensor	+5v supply	9
9				
10				
11				
12				
13	Orange/grey	IACV pin C	<b>C</b> (K6 only)	2
14	Yellow/red	Injector 3		23
<b>Second row – no large pins</b>				
15	Green/yellow	Lambda signal		7
16	Yellow/purple	Cam sensor signal		15
17	Black/grey	Crankshaft sensor shield		30
18	Pink/black-blank	Sensor earth		30
19	Brown/pink	+12v supply		28
20	Green/yellow	Throttle pot	Signal	8
21				
22				
23				
24	Orange/blue	IACV pin D	<b>D</b> (K6 only)	27
25	Yellow/blue	Injector 1		24
26	White/black	Coil 2	Coil for cyl 2&3	5
<b>Third row – two large pins first</b>				
27	Green/blue	Lambda 2 heater earth	<b>Big-pin</b> Not used	
28	Pink/black	Lambda 1 screen earth	<b>Big pin</b>	30
29	Blue/red-Blue/white	Lambda 2	Not used	
30	White/blue-Black/pink	Crank sensor	Signal earth	32
31	Pink/black	Map sensor earth		30
32	Green/red		Not used	
33	Pink/green	Coolant temp sensor		33
34	Pink/black	Throttle pot earth	Join to sensor earth	30
35	White/red		Not used	
36				
37				
38	Black/orange	Carbon canister		
39	Orange/green	IACV pin B	<b>B</b> (K6 only)	3
40	Yellow/brown	Injector 4		26
<b>Fourth row</b>				
41	Green/brown	Lambda signal earth		18
42	Black/grey	Cam sensor	Signal earth	32
43				
44	Yellow/white	Air temp sensor		16
45	Red/green	Map sensor	Signal	34
46	Pink/purple	Throttle pot	+5v supply	9

47				
48				
49				
50	Pink/blue	IACV pin A	A (K6 only)	22
51	Yellow/green	Injector 2		1
52	White/orange	Coil 1	Coil for cyls 1&4	25
<b><u>Small connector- first row top-left, clip to bottom</u></b>				
53	Blue/black	AC clutch		
54	White/pink	Main relay control		4
55	White/black	Tacho	Tacho signal	12
56	Pink/blue-black	AC request/earth		
57	Green/black-blank	AC hot soak pump		
58	White/yellow	OBDII pin 7	Not used	
59	Black	Battery earth		29
<b><u>Second row</u></b>				
60	Blue/yellow-blank	AC fan/condenser		
61	Green—white	Ignition sense		11
62	LG?	OBDII pin 15	Not used	
63				
64	?	Wheel speed sensor i/p		AuxPortB_1
65	Red	OBDII pin 6	Not used	
66	Black	Battery earth		29
<b><u>Third row</u></b>				
67	Blue/grey-blank	Cooling fan relay	Switched earth	6
68	Black/purple	Fuel pump	Relay switched earth	20
69	White/purple-blank	MIL LED	Not used	
70	Black/orange-blank	TRINARY?		
71				
72	Blue/green	Coolant gauge		21
73	Black	Battery earth		29
<b><u>Fourth row</u></b>				
74	Yellow/grey	Speedo output signal		17
75				
76				
77				
78	?	Wheel speed sensor i/p		AuxPortB_4
79	Blue	OBDII pin 14	Not used	
80	Purple-or-red	Fused battery +12v	Not used	

#### Elise S2 stepper motor IACV connections

IACV pin **A** = Pink/Blue wire, to K6 pin 22  
 IACV pin **B** = Orange/Green wire, to K6 pin 3  
 IACV pin **C** = Orange/Grey wire, to K6 pin 2  
 IACV pin **D** = Orange/Blue wire, to K6 pin 27