2 Rotor — Orion2 ECU Layout

Wire Colors			Sim leds	Pr3	Priority2	Priority1	Pin Name			Pin Name	Priority1	Priority2	Pr3	Sim leds	Wire Colors		
E24 CR-Only	**E22** CR+TDC						**P1 - 12 Way Input**								**E24** CR+TDC	**E24** CR-Only	
Green	Green						Water Temp	7	1	Air Temp					Yellow	Yellow	
Red	Red						Lambda	8	2	TPS					Blue	Blue	
Red	Red						.+5 Volt Out	9	3	MAP					Blue	Blue	
Red	Red						.+12 Volt Ign	10	4	GND					Black	Black	
N/C	Yellow						TDC Sensor	11	5	TDC Power					Blue	N/C	
Blue	Green						Crank Sensor	12	6	Crank Power					Red	Red	
							Internal			3Bar Alt Sensor	Altitude Sensor	Map Sensor					
E33 Adv	**E32** Std	**E31** No Rel					**P2 - 10 Way Output**								**E31** No Rel	**E32** Std	**E33** Adv
Black/Red	Black/Red	Black/Red	N5		Inj Drv P1	Basic Coil L1 Drv	Coil Negative 1	6	1	Coil Negative 2	Basic Coil T1 Drv	Inj Drv S1		N6	Black/Purple	N/C	Black/Purple
Black/Brown	N/C	Black/Brown	N7		Inj Drv P2	Basic Coil L2 Drv	Coil Negative 3	7	2	Coil Negative 4	Basic Coil T2 Drv	Inj Drv S2		N8	Black/Orange	N/C	Black/Orange
Black/Yellow	Black/Yellow	Black/Yellow	N2	GP4		Inj Drv S1	Negative 2	8	3	Negative 1	Inj Drv P1		GP3	N1	Black/White	Black/White	Black/White
Green	Green	Green	RPM			RPM Out	Negative 4	9	4	Negative 3	Relay Out			Relay	Blue/Black	Blue	Blue
Blue/White	Blue/White	Blue/White	N4	GP2	Idle Valve	Inj Drv S2	Negative 6	10	5	Negative 5	Inj Drv P2	Dual Idle	GP1	N3	Blue/Orange	Blue/Orange	Blue/Orange
		E36					**P3 - 8 Way Output**								**E36**		
		Red/White	P1	GP5	Idle Vlave	Smart Coil L1 Drv	Positive 1	5	1	Positive 2	Smart Coil T1 Drv	Dual Idle	GP6	P2	Red/Yellow		
		Red/Orange	P3	GP7		Smart Coil L2 Drv	Positive 3	6	2	Positive 4	Smart Coil T2 Drv		GP8	P4	Red/Green		
		Red					.+12 Volt In	7	3	.+12 Volt In					Red		
		White	GP1	GP9		Anti-Lag	Coil Negative 5	8	4	Coil Negative 6			GP10	GP2	Blue		
							P4 - 4 Way Serial										
							SDA	3	1	SCL							
							.+5 Volt Out	4	2	GND							
P05-P3	**USB**						**6 Way USB**								**USB**	**P05-P3**	
Green	N/C						Tuning Pot	4	1	Dual Map Sw					N/C	Yellow	
Yellow	Yellow						Receive	5	2	Transmit					Green	Green	
Red	Red						.+5 Volt Out	6	3	GND					Blue	Blue	

Note!! Coil and Injector numbers used here are firing phases from the ECU. It is not the firing order on your engine.
Refer to the drawings for Phase to firing order comparison.

Negative 1 to 6 = Negative drivers 41 Volt 19 Amp Drivers
Positive 1 to 4 = Positive Drivers 12 Volt 6 Amp current limit drivers
Coil Negative 1 to 6 = Negative Coil Drivers for Basic Coils 500 Volt 18 Amp Drivers
Tuning Pot and Coil Driver 6 share the same Micro Connection. Selection with Jumper J6 on board
Dual Map Switch and Coil Negative 5 share the same Micro Connection. Selection with Jumper J6 on board
An optional 3 Bar map sensor can be soldered onto board. It can be used as Altitude or MAP sensor. For an internal MAP sensor you need to make a hole in the lid for the pipe to come through.
Basic Coil = Coil without driver - 0.5 to 0.9 Ohm Primary winding - Charges with earth signal and discharges with open signal
Smart Coil = Coil with Built in driver - Charges with positive signal and discharges with earth signal which is provided by the driver and a pull down resistor
If you use the 3 Bar onboard sensor for MAP then you must use a 2.5 Bar external sensor for Altitude.