

							Lexus V8 VVTi											
Wire Colors				Software Selectable			Orion2 ECU Layout				Software Selectable				Wire Colors			
			Sim leds	Pr 3	Priority2	Priority1					Priority1	Priority2	Pr 3	Sim leds				
	E24	E22					P1 - 12 Way Input								E22	E24		
	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	E32	E31					P2 - 10 Way Output								E31	E32	E33	
Black/Red	Black/Red	Black/Red	N5			Inj Drv 1	Coil Negative 1	6	1	Coil Negative 2	Inj Drv 2			N6	Black/Purple	N/C	Black/Purple	
Black/Brown	N/C	Black/Brown	N7			Inj Drv 3	Coil Negative 3	7	2	Coil Negative 4	Inj Drv 4			N8	Black/Orange	N/C	Black/Orange	
Black/Yellow	Black/Yellow	Black/Yellow	N2			Cam 1	Negative 2	8	3	Negative 1	Intake Flap			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		GP1	Idle Vlave	Negative 6	10	5	Negative 5	Dual Idle			GP2	N3	Blue/Orange	Blue/Orange	Blue/Orange
		E36					P3 - 8 Way Output								E36			
		Red/White	P1			Smart Coil Drv 1 T	Positive 1	5	1	Positive 2	Smart Coil Drv 2 T			P2	Red/Yellow			
		Red/Orange	P3			Smart Coil Drv 3 T	Positive 3	6	2	Positive 4	Smart Coil Drv 4 T			P4	Red/Green			
		Red					.+12 Volt In	7	3	.+12 Volt In					Red			
		White	GP1		GP3	Anti-Lag	Coil Negative 5	8	4	Coil Negative 6			GP4	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.

Coil Phaze	Fire Order Ex. 1 8 4 3 6 5 7 2
	Wasted Spark
Coil Drv 1	1 - 6
Coil Drv 2	8 - 5
Coil Drv 3	4 - 7
Coil Drv 4	3 - 2

Inject Phaze	Fire Order Ex. 1 8 4 3 6 5 7 2
	Split Seq
Inj Drv 1	1 - 6
Inj Drv 2	8 - 5
Inj Drv 3	4 - 7
Inj Drv 4	3 - 2