ECU Features Comparison Chart

	Mercury3	Orion2	Venus3	
Hardware Inputs				
Map Sensor	1	1	1	
TPS Sensor	1	1	1	
Built In Altitude/Map Sensor (Optional)		1	1	
External Altitude Sensor	1			
Water Temp Sensor 2K NTC	1	1	1	Note 1
Air Temp Sensor 10K NTC	1	1	1	Note 1
Lambda	1	1	1	
Tuning Pot	1	1	1	Note 2
Fuel Pressure Sensor	1			
Dual Map Switch		1	1	Note 2
Battery Volts	1	1	1	
Crank Angle	1	1	1	
Cam/Home	1	1	1	
VVTI Cam 1	1			Note 3
VVTI Cam 2	1			Note 3
Firmware BootLoader	1	1	1	
Hardware Outputs				
Injector Drivers Negative Out	8	4	6	
Internal Coil Drivers Negative Out		6		Note 4
External Coil Triggers Positive Out	8	4		
RPM Output	1	1	1	
Electronic Relay Output	1			
Relay Output	1	1	1	
GP Outputs	10	10	5	Note 5
Features				
Graph Tuning	1	1	1	
Matrix Tuning	1	1	1	
Idle Control	1	1	1	Note 6
Dual Maps	1	1	1	
Micro Fuelling or Fazed Injector	1	1	1	Note 7
Full Sequential Injector Control	1	1	1	Note 7
Injector Trimming	8	4	4	Note 7
Fuel Pressure Control	1			
V-Tech Cam Control	1	1	1	
VVTI Cam Control	1	1	1	

Launch Control	1	1	1	
Launch Delay	1	1	1	
RapidFire	1	1	1	
Anti-Lag control	1	1	1	
Flat-Shift control	1	1	1	
Boost control	X	X	X	
Throttle x Wire Control Firmware	1	1		Note 8
Cam NOS PWM Open loop Firmware			1	Note 8
Signal Converter Firmware			1	Note 8
RPM Calibration	1	1	1	
Power Management	1	1	1	
Epoxy filed	1			
Can be Epoxy filed		1	1	

Notes Some of These features requires different classes in activation.

Note 1 – Has removable pull-up jumpers for tap-in feature.

Note 2 – These inputs share pins with HV Coil 5 & 6 Which also share with 2 GP outputs.

Note 3 – These inputs do not have jumpers for hall sensor pull-ups. They will require externa

Note 4 – There are 2 drivers that are shared by inputs of Note 2.

Note 5 – The number of GP drivers depends on available drivers that is not used.

Note 6 – For Stepper motors an external Stepper Idle Control Unit is required.

Note 7 – Four cylinder engines only.

Note 8 – This is standalone firmware and not included with the ecu firmware.

X - Capable - Firmware not yet developed or freely available in your country.

TCU Features Comparison Chart

	Mercury3	Orion2	Notes
Hardware			
TPS Sensor	1	1	
RPM Sensor	1	1	
Speed Sensor	1	1	
Oil Temp Sensor	1	1	
Low Range Sensor	1	1	
Shifter Selection Switch	1	1	
Tuning Maps Selection Switch	1	1	
Tiptronic Up Switch	1	1	
Tiptronic Down Switch	1	1	
GP Outputs	2	2	Note 1

Solenoid Drivers Negative Out	8	6(10)	Note 2
Solenoid Drivers Positive Out	8	4	
Speedo Output	1	1	
Electronic Relay Output	1		
Relay Output	1	1	
Battery Volts	1	1	
Features			
Tiptronic Function	1	1	
4 Tuning Maps	1	1	
Individual Gear Shift Profiles	1	1	
Duty Cycle Control	1	1	
Speedo Calibration	1	1	
Lockup Control	1	1	
Lockup Selectable / Gear	1	1	
Transfer Box Ratio Adjustments	1	1	
Retard Request	1	1	Note 1
Number of Gears Capable	10	10	
Power Management	1	1	
Epoxy filed	1		
Can be Epoxy filed		1	

Notes Some of These features requires different classes in activation.

Note 1 - Depends on features selected

Note 2 - These drivers are shared outputs

al resistors.