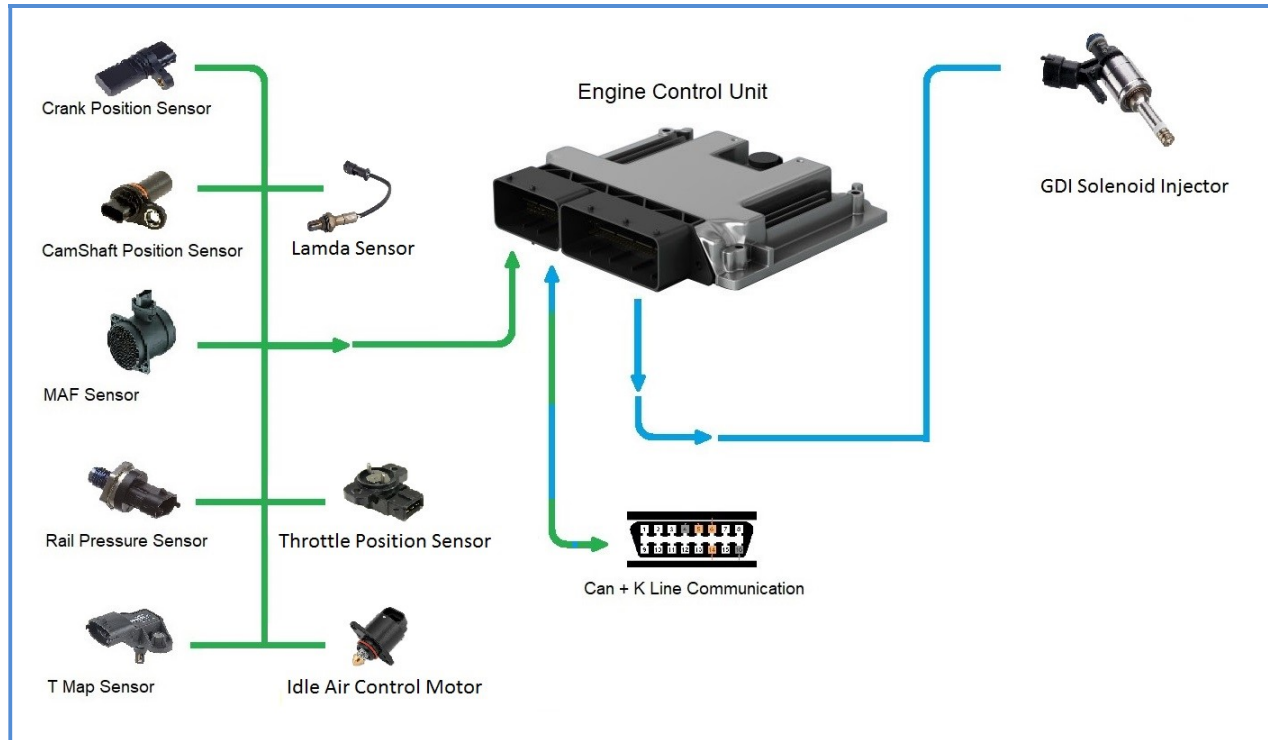




GDI Kit-Open ECU (Product Code: R&DU13)

GDI Open ECU



Components of GDI Open ECU

- Crankshaft position sensor (Measures crankshaft position)
- Camshaft position sensor - (Measures camshaft position)
- MAF Sensor - (Measures mass air flow)
- Rail pressure sensor - (Measures common rail pressure)
- T Map sensor - (Measures manifold temperature and pressure)
- Engine Control Unit - (To Measure sensors and control series of actuators on an internal combustion engine and ensure excellent engine performance)
- Petrol solenoid injector – (For fuel injection)
- Can + K line - (For calibration and Troubleshoot)

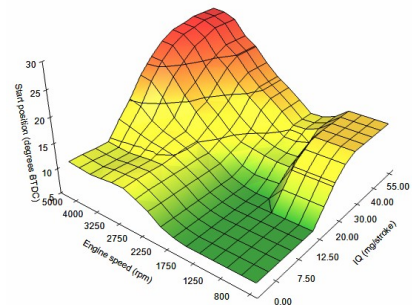




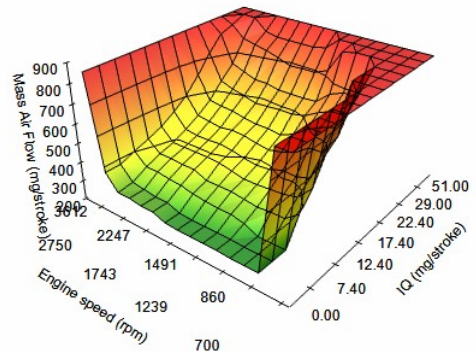
GDI Open ECU Functionality (Tunable Maps)

- Set idle Speed - (The user can set the required idle speed of the engine)
- Closed loop control for idling - (ECU controls the injection until engine idle)
- Start injection angle for homogeneous operation-(The user can set the start of injection angle as desired)
- End injection angle for stratified operation-(The user can set the end of injection angle)
- Start angle for spark ignition-(The user can set the spark timing)
- Injection Duration - (Calculated by the ECU)
- Open loop rail pressure - (This is an special feature in which an user can set the Injection Pressure in terms Bar, variable from 10 to 110 bar)
- Calibration charts are provided for Injection Quantity at various pressure

NGIST RPM	0.00	5.00	7.50	10.00	12.50	15.00	20.00	25.00	30.00	35.00	40.00	45.00	55.00	60.00
5000	13.5°	13.5°	13.5°	13.5°	16.1°	18.2°	21.0°	23.7°	25.8°	27.1°	27.8°	28.1°	28.1°	28.1°
4500	13.1°	13.1°	13.1°	13.1°	15.1°	17.5°	20.5°	23.4°	25.5°	26.8°	27.3°	27.9°	27.9°	27.9°
4000	12.4°	12.4°	12.4°	12.4°	13.8°	15.4°	18.1°	21.0°	23.1°	25.0°	25.9°	27.0°	27.0°	27.0°
3500	11.4°	11.4°	11.4°	11.4°	12.6°	13.7°	15.1°	16.4°	19.3°	21.8°	23.0°	24.1°	24.1°	24.1°
3250	11.0°	11.0°	11.0°	11.0°	11.8°	12.8°	13.3°	15.9°	16.9°	19.0°	21.1°	22.5°	22.5°	22.5°
3000	10.4°	10.4°	10.4°	10.4°	10.9°	11.7°	11.6°	13.8°	15.1°	16.3°	18.6°	19.8°	19.8°	19.8°
2750	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	12.0°	12.7°	14.0°	16.5°	17.6°	17.6°	17.6°
2500	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.5°	11.2°	12.2°	14.7°	15.9°	15.9°	15.9°
2250	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.8°	11.1°	12.5°	14.0°	14.0°	14.0°
2000	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.4°	10.9°	12.0°	12.0°	12.0°
1750	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.1°	10.8°	12.1°	12.1°	12.1°
1500	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.0°	10.1°	11.5°	13.0°	13.0°	13.0°
1250	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°
1000	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°
800	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°	12.0°



NGIST RPM	0.00	3.00	7.40	10.00	12.40	15.00	17.40	20.00	22.40	25.00	29.00	33.00	51.00
3612	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00
3423	365.00	365.00	395.00	420.00	450.00	495.00	550.00	630.00	720.00	795.00	820.00	850.00	850.00
2750	285.00	295.00	335.00	365.00	385.00	420.00	460.00	510.00	585.00	650.00	760.00	850.00	850.00
2499	285.00	285.00	335.00	365.00	385.00	410.00	450.00	500.00	560.00	625.00	745.00	790.00	850.00
2247	275.00	275.00	325.00	360.00	385.00	410.00	440.00	495.00	545.00	600.00	730.00	775.00	850.00
1995	275.00	275.00	320.00	360.00	385.00	415.00	450.00	490.00	525.00	600.00	710.00	775.00	850.00
1743	250.00	250.00	305.00	330.00	380.00	405.00	445.00	470.00	530.00	585.00	685.00	775.00	850.00
1596	245.00	245.00	295.00	330.00	365.00	390.00	430.00	470.00	535.00	585.00	690.00	775.00	850.00
1491	245.00	245.00	290.00	330.00	350.00	380.00	420.00	460.00	535.00	585.00	690.00	790.00	850.00
1386	245.00	245.00	290.00	320.00	350.00	385.00	435.00	490.00	550.00	590.00	720.00	850.00	850.00
1239	245.00	245.00	275.00	310.00	355.00	410.00	460.00	540.00	590.00	650.00	835.00	850.00	850.00
924	240.00	240.00	240.00	315.00	360.00	405.00	510.00	575.00	620.00	680.00	850.00	850.00	850.00
860	240.00	240.00	240.00	315.00	375.00	425.00	515.00	600.00	620.00	680.00	850.00	850.00	850.00
750	240.00	240.00	240.00	370.00	450.00	574.00	622.00	630.00	630.00	650.00	850.00	850.00	850.00
700	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00
0	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00	850.00





GDI Kit-Open ECU (Product Code: R&DU13)

GDI Open ECU	
ECU processor	Infineon
Crankshaft position	Crank trigger wheel
Camshaft position	Cam trigger wheel
Crank position sensor	Variable reluctance sensor
Cam position sensor	Hall effect sensor
T-map	NTC
Mass air flow	Hot wire type
Software	Engine control system
High pump	Bosch CP-1
Fuel Filter	Bosch
Pre-supply Fuel Pump	Bosch
Fuel Rail	Bosch
Connecting pipes	Stainless steel
Injector	Solenoid Injector
Motor	Kirloskar 5HP 3 phase
Open ECU Capabilities	<ul style="list-style-type: none">• Set idle Speed - (The user can set the required idle speed of the engine)• Closed loop control for idling - (ECU controls the injection until engine idle)• Start injection angle for homogeneous operation-(The user can set the start of injection angle as desired)• End injection angle for stratified operation-(The user can set the end of injection angle)• Start angle for spark ignition-(The user can set the spark timing)• Closed loop rail pressure - (Controlled by ECU, variable from 10 to 110 bar)• Calibration charts are provided for Injection Quantity at various pressure