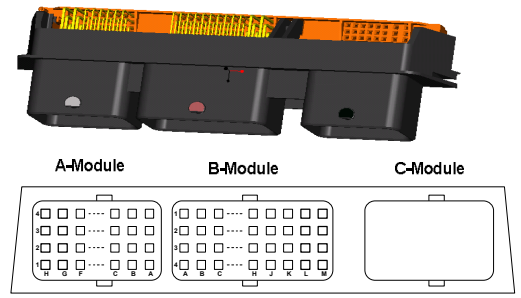


**NOTES**

- Node description  
 1: Battery voltage after main relay supply, V\_EL  
 2: Battery voltage after ignition key supply, V\_IGK  
 3: Direct battery voltage supply, VBD

Pin-header, 80-pin 3module (Connector of CNG interface Box side)  
 > Molex part number: 98228-1011

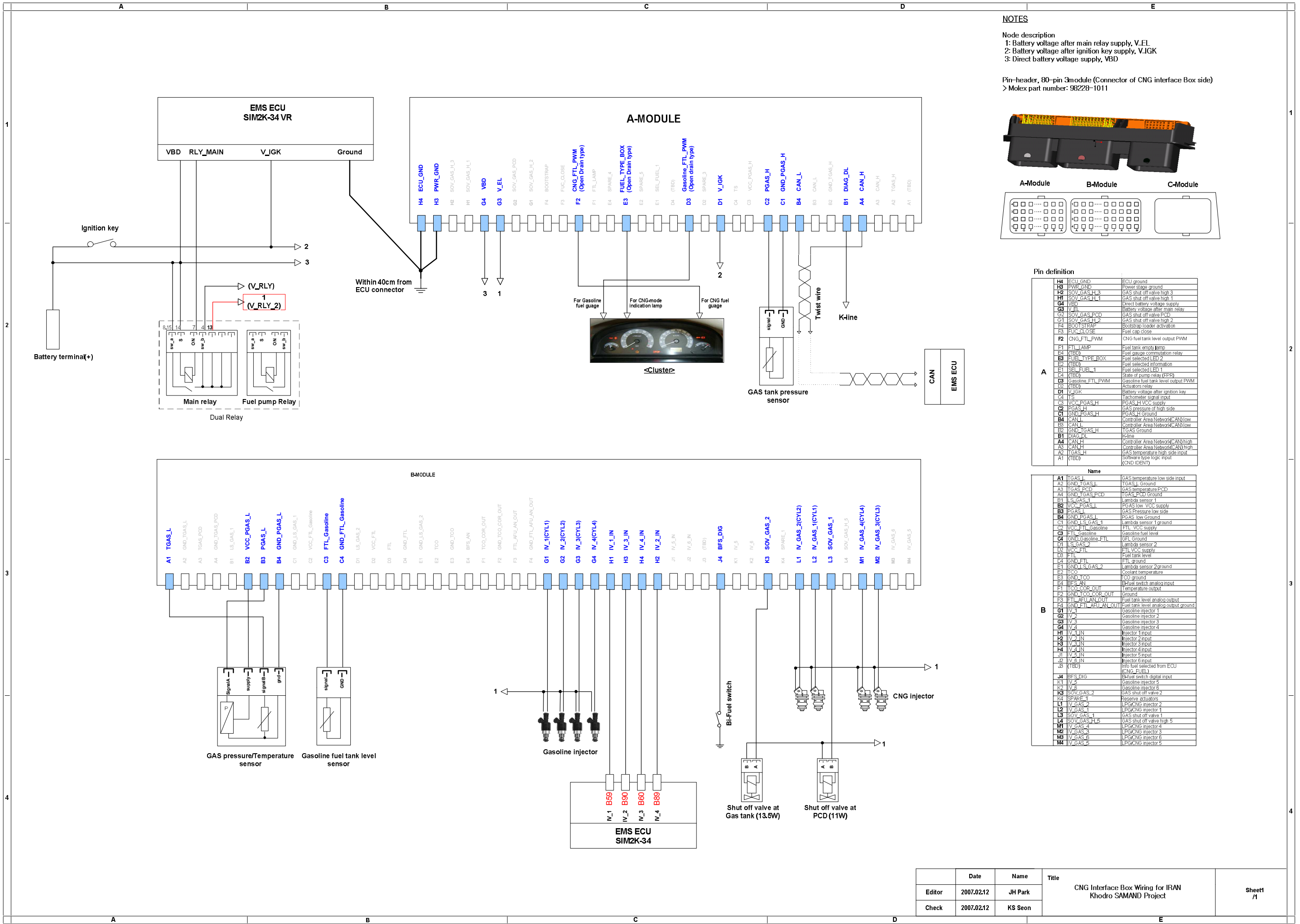


**Pin definition**

H4	ECU_GND	ECU ground
H3	PWR_GND	Power stage ground
H2	SOV_GAS_H,3	GAS shut off valve high 3
H1	SOV_GAS_H,1	GAS shut off valve high 1
G4	VBD	Direct battery voltage supply
G3	V_EL	Battery voltage after main relay
G2	SOV_GAS_PCD	GAS shut off valve PCD
G1	SOV_GAS_H,2	GAS shut off valve high 2
F4	BOOTSTRAP	Bootstrap loader activation
F3	FUC_CLOSE	Fuel tap close
F2	CNG_FTL_PWM	CNG fuel tank level output PWM
F1	FTL_LAMP	Fuel tank empty lamp
E4	SPARE_4	Fuel gauge commutation relay
E3	FUEL_TYPE_BOX (Open Drain type)	Fuel selected LED 2
E2	SPARE_5	Fuel selected information
E1	SEL_FUEL_1	Fuel selected LED 1
D4	(TBD)	State of pump relay (EPF)
D3	Gasoline_FTL_PWM (Open drain type)	Gasoline fuel tank level output PWM
D2	SPARE_3	Actuators relay
D1	V_IGK	Battery voltage after ignition key
C4	TS	Tachometer signal input
C3	VCC_PGAS,H	PGAS_H VCC supply
C2	PGAS_H	PGAS pressure of high side
C1	GND_PGAS,H	PGAS_H Ground
B4	CAN_L	Controller Area Network(CAN)low
B3	CAN_L	Controller Area Network(CAN)low
B2	GND_TGAS,H	TGAS Ground
B1	DIAG_DL	K-line
A4	CAN_H	Controller Area Network(CAN)high
A3	CAN_H	Controller Area Network(CAN)high
A2	TGAS_H	GAS temperature high side input
A1	(TBD)	Software type logic input (CND IDENT)

**Name**

A1	TGAS_L	GAS temperature low side input
A2	GND_TGAS,L	TGAS_L Ground
A3	TGAS_PCD	GAS temperature PCD
A4	GND_TGAS_PCD	TGAS_PCD Ground
B1	LS_GAS_1	Lambda sensor 1
B2	VCC_PGAS,L	PGAS low VCC supply
B3	PGAS_L	PGAS Pressure low side
B4	GND_PGAS,L	PGAS low Ground
C1	GND_LS_GAS_1	Lambda sensor 1 ground
C2	VCC_FTL_Gasoline	FTL VCC supply
C3	FTL_Gasoline	Gasoline fuel level
C4	GND_Gasoline_FTL	GFL Ground
D1	LS_GAS_2	Lambda sensor 2
D2	VCC_FTL	FTL VCC supply
D3	FTL	Fuel tank level
D4	GND_FTL	FTL ground
E1	GND_LS_GAS_2	Lambda sensor 2 ground
E2	TCO	Coolant temperature
E3	GND_TCO	TCO ground
E4	BFS_AN	B-Fuel switch analog input
F1	TCO_COOR_OUT	Temperature output
F2	GND_TCO_COOR_OUT	Ground
F3	FTL_AFU_OUT	Fuel tank level analog output
F4	GND_FTL_AFU_OUT	Fuel tank level analog output ground
G1	IV_1	Gasoline injector 1
G2	IV_2	Gasoline injector 2
G3	IV_3	Gasoline injector 3
G4	IV_4	Gasoline injector 4
H1	IV_1_IN	Injector 1 input
H2	IV_2_IN	Injector 2 input
H3	IV_3_IN	Injector 3 input
H4	IV_4_IN	Injector 4 input
J1	IV_5_IN	Injector 5 input
J2	IV_6_IN	Injector 6 input
J3	(TBD)	Info fuel selected from ECU (CNG_FUEL)
J4	BFS_DIG	B-Fuel switch digital input
K1	IV_5	Gasoline injector 5
K2	IV_6	Gasoline injector 6
K3	SOV_GAS_2	GAS shut off valve 2
K4	SPARE_1	Reserve actuators
L1	IV_GAS_2	LPG/NG injector 2
L2	IV_GAS_1	LPG/NG injector 1
L3	SOV_GAS_1	GAS shut off valve 1
L4	SOV_GAS_H,5	GAS shut off valve high 5
M1	IV_GAS_4	LPG/NG injector 4
M2	IV_GAS_3	LPG/NG injector 3
M3	IV_GAS_5	LPG/NG injector 5
M4	IV_GAS_6	LPG/NG injector 6



	Date	Name	Title	CNG Interface Box Wiring for IRAN Khodro SAMAND Project	Sheet /1
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