

Engine Control Module X1

Pin	Wire Color	Circuit No.	Function
1	0.35 OG/BK	1786	Park/Neutral Signal
2	0.5 GY/BK	1694	4WD Low Signal (NQG/NP2)
3	0.5 TN/WH	1695	Axle Switch Signal (NQG/NP2)
4-8	—	—	Not Used
9	0.5 L-BU/WH	6311	Brake Switch Signal
10	0.5 PU/WH	1668	HO2S High Signal – Bank 1 Sensor 2
11	0.5 TN/WH	1669	HO2S Low Signal – Bank 1 Sensor 2
12	0.35 OG/BK	380	A/C Refrigerant Pressure Sensor Signal (CJ2/C67)
13	0.35 TN	5514	Low Reference (CJ2/C67)
14-15	—	—	Not Used
16	0.35 PU	1589	Fuel Level Sensor Signal – Primary
17	0.35 D-BU/WH	473	High Speed Cooling Fan Relay Control (-LY6)
18	0.5 D-BU	5985	Accessory Wakeup Serial Data
19	0.5 PK	439	Ignition 1 Voltage
20	0.5 RD/WH	440	Battery Positive Voltage
21-22	—	—	Not Used
23	0.35 PU	1272	Low Reference
24	0.35 D-GN	890	Fuel Tank Pressure Sensor Signal
25-26	—	—	Not Used
27	0.5 TN/BK	2501	High Speed GMLAN Serial Data Bus-
28	0.5 TN/BK	2500	High Speed GMLAN Serial Data Bus+
29	0.35 D-BU	1161	APP Sensor 1 Signal
30	0.35 BN	1271	Low Reference
31	0.35 TN/BK	6049	Low Reference
32	0.35 L-BU	1162	APP Sensor 2 Signal
33	0.35 GY	2709	5-Volt Reference 1
34	0.35 GY/WH	2700	5-Volt Reference (CJ2/C67)
35	—	—	Not Used
36	0.35 TN	1274	5-Volt Reference 1
37	0.5 TN/BK	472	IAT Sensor Signal
38	0.5 TN	2760	Low Reference

39-40	—	—	Not Used
41	0.5 YE	492	MAF Sensor Signal
42-46	—	—	Not Used
47	0.5 PK/BK	1339	Ignition 1 Voltage
48	—	—	Not Used
49	0.5 TN	1671	HO2S Low Signal – Bank 2 Sensor 2
50	0.35 D-GN/WH	465	Fuel Pump Relay Control – Primary (LGM/LY6/LC9)
			Fuel System Control Module Signal (–LGM/LY6/LC9)
51	0.35 TN	1465	Fuel Pump Relay Control – Secondary (LY6)
52	0.5 YE/BK	625	Starter Enable Relay Control
53-55	—	—	Not Used
56	0.35 WH/BK	1164	5-Volt Reference 2
57	0.35 YE/BK	1827	Vehicle Speed Signal
58	0.35 D-GN	335	Low Speed Cooling Fan Relay Control (–LY6)
59	0.35 YE	5991	Powertrain Relay Coil Control
60	—	—	Not Used
61	0.5 WH	1310	EVAP Canister Vent Solenoid Control
62	—	—	Not Used
63	0.35 D-GN/WH	459	A/C Compressor Clutch Relay Control (CJ2/C67)
64	0.5 OG/WH	3223	HO2S Heater Low Control (Bank 2 Sensor 2)
65	0.5 GY/WH	3122	HO2S Heater Low Control – Bank 2 Sensor 1
66-67	—	—	Not Used
68	0.35 BN/WH	419	MIL Control
69	0.5 PU	1670	HO2S High Signal – Bank 2 Sensor 2
70	0.35 L-BU	1937	Secondary Fuel Level Sensor Signal (LY6)
71	0.5 PU/WH	821	VSS High Signal (20/30 Series +NQF/+NQG/+NP2)
	0.35 OG/BK	6399	Replicated TOS Signal (10 Series/20/30 Series –NQF/–NQG/–NP2)
72	0.5 L-GN/BK	822	VSS Low Signal (20/30 Series +NQF/+NQG/+NP2)
73	3.0 BK/WH	451	Ground