

Pin no.	Type	Color	M3 Function	TECm Logic or Volts
1	O	BRN/GRN	Fuel Pump Relay	On=0.0V, Off=B+
2	O	WHT/YEL	Idle Speed 3 wire	100Hz, 0-B+V, Lower PW = Idle Down
3	O	BRN/GRN	Injector Cyl. 5	Peak-Hold Inj Out 1
4	O	BRN/VIO	Injector Cyl. 6	Peak-Hold Inj Out 3
5	O	BRN/BLU	Injector Cyl. 4	Peak-Hold Inj Out 5
6	G	BRN	Ground	Ground
7	O	GRN/BLU	Camshaft Solinoid	Off@Idle, MAF&RPM On
8	O	GRY	Check Engine Lamp	On=0.0V, Off=B+
9	O			GPO1 Output
10	I			GPI1 Analog Voltage Input
11	I	WHT/GRY/YEL	TPS to Transmission Box	Analog 00#
12				Not Connected
13	I	YEL	HEGO Signal +	Input 0.0 - 1.0V
14	G	BLK	MAF sensor -	Ground
15	G	BLK	Ground Ignition coils	Ground
16	I	YEL	Crank Sensor +	60-2 Crank Signal Mag PU
17	I	YEL	Cam Sensor + Hall	0.0V-5.0V Hall, 50%DF
18				Not Connected
19				Not Connected
20				Not Connected
21				Not Connected
22				Not Connected
23	O	BLK/BLU	Ign Coil 4	Coil E
24	O	BLK/VIO	Ign Coil 6	Coil F
25	O	BLK/GRN	Ign Coil 5	Coil A
26		RED	Battery +12	Not Connected
27	O	BRN	PCM Relay control	Output to PCM Relay
28	G	BRN/ORG	Ground	Ground
29	O	WHT/GRN	Idle Speed 3 wire	Invert of pin 2
30				Not Connected
31	O	BRN/YEL	Injector 3	Peak-Hold Inj Out 2
32	O	BRN/RED	Injector 2	Peak-Hold Inj Out 4
33	O	BRN/WHT	Injector 1	Peak-Hold Inj Out 6
34	G	BRN	Ground	Ground
35				Not Connected
36	O	BRN	Evap Emms	7.6Hz above 1000RPM, On at idle, off to high RPM
37				Not Connected
38	O	BRN/GRN	O2 Relay Cntl	Off when 0RPM, On with engine running
39	G			Ground
40	G	BLK	HEGO signal -	Ground
41	I	GRY/YEL	MAF Signal	Analog Voltage In (or MAP)
42	I	BLK/WHT	Vehicle Speed	7200 pulse/mile, 0-12V Sq wave
43	G	BLK	Crank Sensor -	Ground
44	G	BRN	Sensor Ground	Ground
45	G	Shield	Ignition Coil Shield	Ground

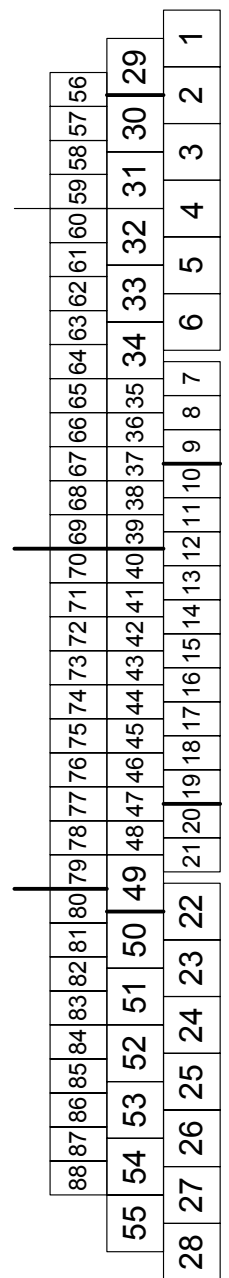
Pin no.	Type	Color	M3 Function	TECm Logic or Volts
46	O	WHT/BLK	Fuel Consumption	Same as Inj Out 1, 0-12V PW
47	O	BLK	Crank RPM TD	Tach, 0-12V Square Wave
48	O	BLK/BLU	Compressor Control	Output 0V when AC On
49				Not Connected
50	O	BLK/WHT	Ign Coil 1	Coil C
51	O	BLK/RED	Ign Coil 2	Coil D
52	O	BLK/YEL	Ign Coil 3	Coil B
53				Not Connected
54	I	RED/WHT	Battery +12V	From ECM relay +12V
55	G	BRN	Ground	Ground
56	I	GRN	Run	12V in Run
57	I	BRN/GRY	Ignition Timing to Trans	GPI2 Analog Voltage Input
58				Not Connected
59	O	RED/YEL	+5V Ref	5V ref
60		GRN/BLU	Program Volts (Pin 18 ALDL)	Not Connected
61				Not Connected
62				Not Connected
63				Not Connected
64	I	VIO/GRY	AC Switch	High=AC on, Low= AC off
65	I	BLK/GRY	AC Press Switch	High=AC Pres OK, Low=AC Pres too high
66	I	GRN	Driveaway	PM7 #
67				Not Connected
68				Not Connected
69	I	BLK	Cyl 4-6 Knock	Knock burst
70	I	BLK	Cyl 1-3 Knock	Knock burst
71	G	BRN/ORG	Knock Grounds	Ground
72				Not Connected
73	I	BRN/BLK	TPS Sensor	TPS Voltage
74				Not Connected
75				Not Connected*
76	I			GPI2 Analog Input
77	I	GRY	MAT sensor	MAT Voltage
78	I	BRN/RED	CLT sensor	CLT Voltage
79				Not Connected
80				Not Connected*
81	I	BRN/BLK	in MT RED/WHT	Park/Neutral, pullup to 5V
82				Not Connected
83				Not Connected
84	G			Ground
85	IO			CAN H
86	IO			CAN L
87		WHT/YEL	R (pin 15 ALDL)	Not Connected*
88		WHT/VIO	T (pin 20 ALDL)	Not Connected*

Notes:
= Not Implemented in Software
* = Possible hardware use

Fastons Located on PC Board:
J1 = TXD to DB9 pin 2
J2 = RXD to DB9 pin 3
J3 = GND to DB9 pin 5
(to PC Computer serial RS232)

TDC set to #15 tooth

Ignition Firing Order
1,5,3,6,2,4
F,A,B,C,D,E



Wire Side of Connector

Electromotive Inc.	
9131 Centreville Rd. Manassas, VA 20110	Phone: 703 331 0100 www.emi.cc Fax: 703 331 0161
Description: TECm Pin out OBD1 M3 Reference: 1995 BMW 325iS	
B	Part Name: 070-
Sheet:	Date: 25 Feb 10
Drawn by: W. Lukaczyk	Drawing Name: