

USDM Evo 9 pinout according to USDM Evo 9 Factory Service Manual*

* The unused pins were examined as follows with ignition "on" and engine "off"

- 1) The voltage was measured across all unused pins.
- 2) 1.7 V was applied to most of the unused pins to determine which if any were ADC inputs.

plug C-121 = "A" plug on GEMs pinout, pins 1-8, 9-23, 24-35

plug C-119 = "B" plug on GEMs pinout, pins 41-47, 48-59, 60-68

plug C-117 = "C" plug on GEMs pinout, pins 71-77, 78-90, 91-100

C-121

(MU803784)

1	2		3	4		JAE				5	6		7	8
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
24	25		26	27	28	29		30	31	32	33		34	35

C-119

(MU803782)

41	42	43	44						45	46	47
48	49	50	51	52	53	54	55	56	57	58	59
60	61		62	63	64		65	66		67	68

C-117

(MU803783)

71	72		73	74		JAE				75	76	77
78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93		94	95		96	97	98		99	100

C-121

(MU803784)

1	2		3	4		JAE					5	6		7	8
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
24	25		26	27	28	29		30	31	32	33		34	35	

Pin	Color	USDM Description
1		Injector #1
2		Injector #4
3		Front O2 heater control
4		not used, 0 V
5		not used, 0 V, probably a relay (secondary air solenoid control on JDM Evo IXs)
6		EGR solenoid relay ground (control)
7		not used, 0 V
8		Alternator control ground
9		Injector #2
10		not used, 0 V
11		Ignition coil cyl #1, #4
12		Ignition coil cyl #2, #3
13		not used, 0 V
14		Idle air control
15		Idle air control
16		Evaporative purge solenoid relay ground (control)
17		not used, 0 V
18		Cooling fan relay ground (control)
19		MAF signal filter?
20		A/C compressor clutch ground (control)
21		Fuel pump relay ground (control)
22		CEL ground (control)
23		not used, +5 V (load capacity unknown)
24		Injector #3
25		not used, 0 V
26		Rear O2 heater control
27		not used, 0 V
28		Idle air control
29		Idle air control
30		A/C condenser fan control high
31		A/C condenser fan control low
32		MIVEC valve control
33		not used, 0 V
34		Sensor ground
35		Evaporative ventilation solenoid relay ground (control)

C-119

(MU803782)

41	42	43	44						45	46	47
48	49	50	51	52	53	54	55	56	57	58	59
60	61		62	63	64		65	66		67	68

Pin	Color	Description
41		Waste gate solenoid relay ground (control)
42		TPS power (+5 V)
43		Crankshaft position sensor signal
44		Coolant sensor signal
45		RPM
46		Ground to Chassis
47		12 V Power (via MFI relay, likely follows IG1)
48		Fuel pressure solenoid ground (control)
49		Sensor ground
50		Exhaust cam position sensor signal
51		MAF barometric pressure sensor signal
52		Alternator signal?
53		Intake cam position sensor signal
54		Power steering pressure sensor signal
55		Fuel pump relay ground (control)
56		not used, relay (ICS relay ground on JDM Evo IXs)
57		MFI relay ground (control)
58		Ground to chassis
59		12 V Power (via MFI relay, likely follows IG1)
60		Power from battery (always live)
61		MAF sensor signal
62		IAT sensor signal
63		not used, 0 V
64		not used, ADC 0F, 5 V = 255 (read by ECU but unused in code)
65		A/C control
66		not used, active +11.75 V power out (ICS power on JDM Evo IXs)
67		not used, active +11.75 V power out (ICS power on JDM Evo IXs)
68		Starter relay signal

C-117

(MU803783)

71	72		73	74		JAE				75	76	77
78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93		94	95		96	97	98		99	100

Pin	Color	Description
71		Front O2 sensor signal
72		not used, causes ADC 08 to flip from 0 to 1 when 1.7 V applied
73		Rear O2 sensor signal
74		not used, 0 V
75		not used, 0.51 V
76		not used, 0 V
77		not used, 0 V
78		TPS signal
79		ACD
80		Vehicle Speed Sensor signal
81		not used, 0 V
82		not used, 0 V
83		A/C control
84		not used, +4.6 V
85		Data link
86		not used, 0 V
87		not used, 0 V
88		Clutch pedal
89		not used, 0 V
90		not used, relay, (ICS relay ground on JDM Evo IXs)
91		Knock sensor signal
92		MAP sensor signal
93		Fuel tank differential pressure sensor signal
94		not used, 0 V
95		Fuel level sensor signal (main)
96		Fuel temperature sensor signal
97		Fuel level sensor signal (low fuel)
98		Immobilizer
99		Ignition Switch IG1 (power during ignition "ON" and "START")
100		Data link