



Bench Harness Wiring Pinouts

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Caution

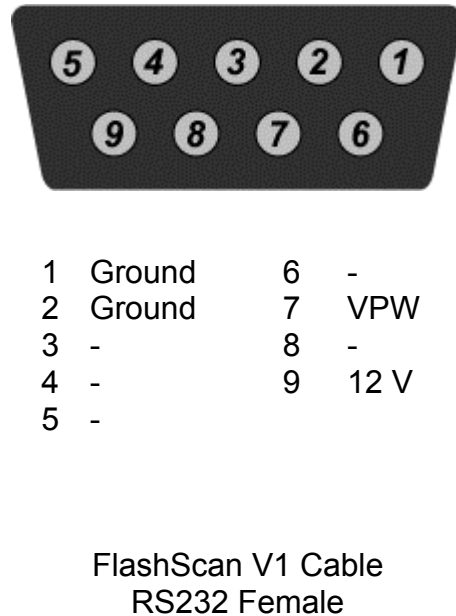
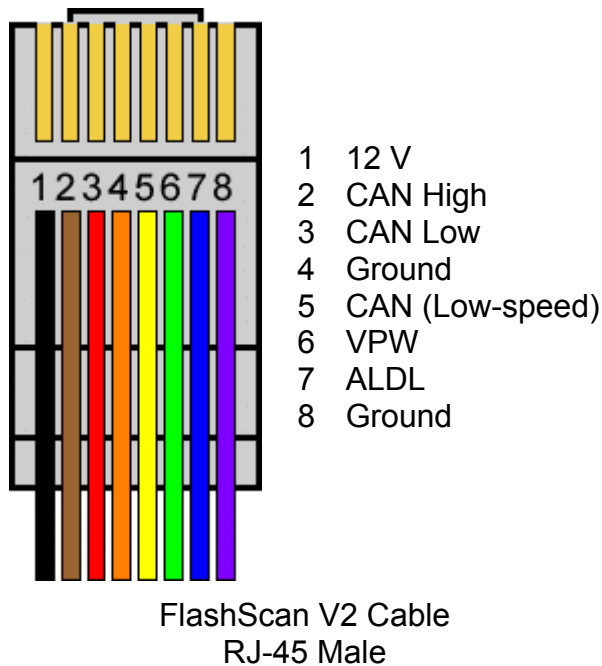
The information provided in this document is intended as a guide only. EFILive does not and cannot warrant that the information is correct. Please refer to manufacturer-specific vehicle schematics if you intend to build your own bench harness.

Extreme care must be taken when connecting any FlashScan device to a controller that is not fitted to a vehicle via factory connections and pin-outs.

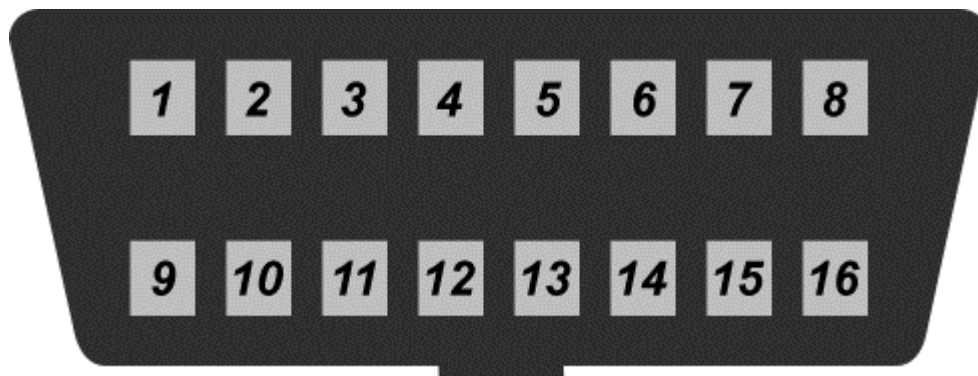
Incorrectly connecting any voltage or ground pin will almost certainly damage the FlashScan V2 unit and the controller.

SUCH DAMAGE IS NOT COVERED BY EFILIVE'S WARRANTY.

EFILive FlashScan Connector Pin Assignments



Vehicle OBDII Connector Pin Assignments



Vehicle OBDII Socket
SAE J1962 Female

1	GM CAN (Low-speed, Single-wire)	9	GM ALDL (OBD-I 8192bps)
2	SAE J1850-VPW Positive	10	SAE J1850-VPW Negative
3	Discretionary *	11	Discretionary *
4	Chassis Ground	12	Discretionary *
5	Signal Ground	13	Discretionary *
6	ISO 15765-4 CAN High	14	ISO 15765-4 CAN Low
7	ISO 9141-2 & ISO 14230-4 K-Line	15	ISO 9141-2 & ISO 14230-4 L-Line
8	Discretionary *	16	Unswitched Battery Power

* Pin assignments have been left to the discretion of the manufacturer.

1997/1998 LS1 Style Controller



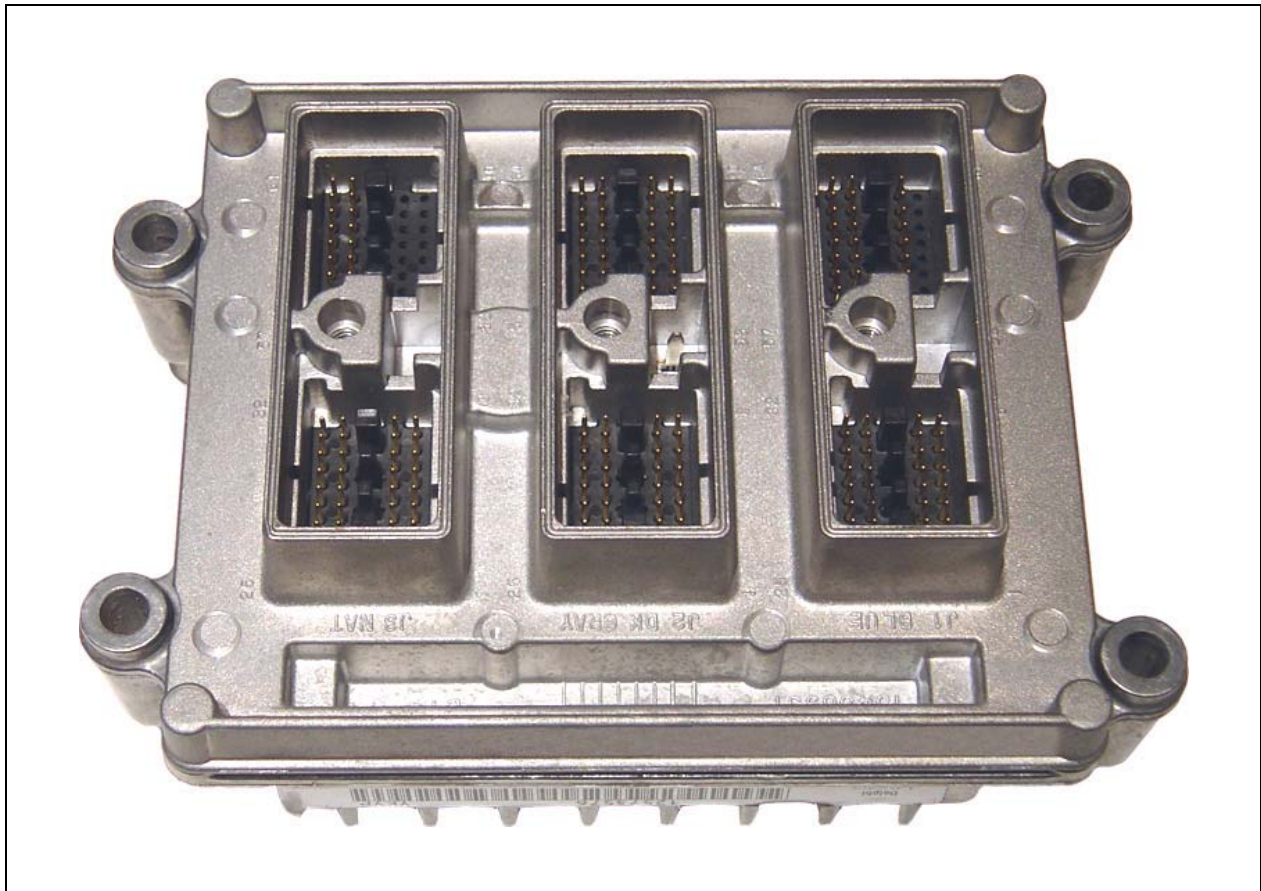
Controller	IGN SW	OBDII	V1	V2	Description
Blue 21		4 and 5	1 and 2	4 and 8	Ground
Blue 20		16	9	1	12V Unswitched
Blue 61		16	9	1	12V Unswitched
Blue 19	•				12V Switched
Blue 58		2	7	6	VPW Serial Data

1999-Current LS1, LB7, Early V6 and 4 Cylinder Style Controllers



Controller	IGN SW	OBDII	V1	V2	Description
Blue 60		4 and 5	1 and 2	4 and 8	Ground
Blue 20		16	9	1	12V Unswitched
Blue 19	•				12V Switched
Blue 58		2	7	6	VPW Serial Data

P10 In-line 6 Cylinder Controllers



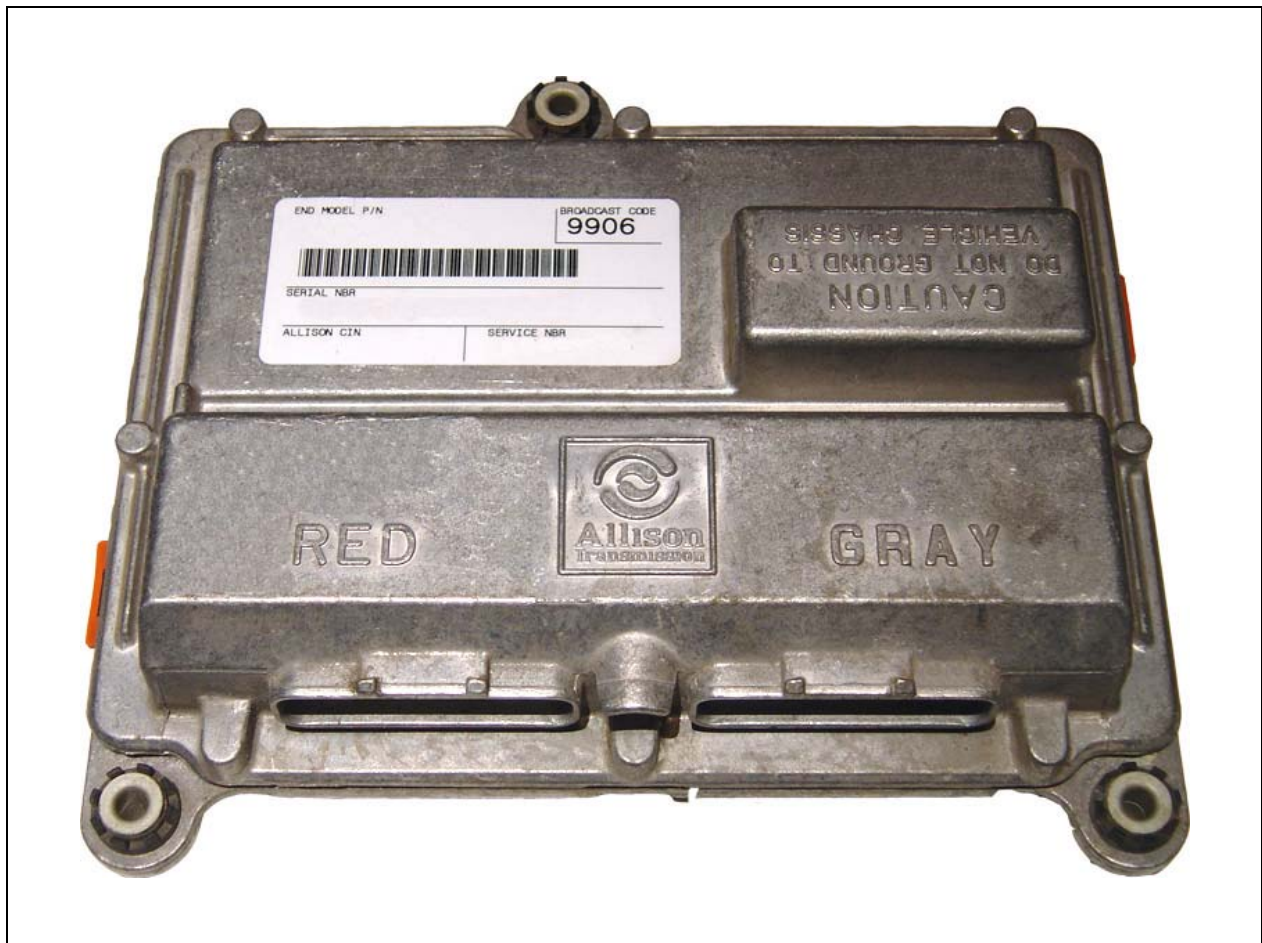
Controller	IGN SW	OBDII	V1	V2	Description
Blue 8		4 and 5	1 and 2	4 and 8	Ground
White 16		4 and 5	1 and 2	4 and 8	Ground
Blue 20		16	9	1	12V Unswitched
Blue 19	•				12V Switched
Blue 21	•				12V Switched
White 17	•				12V Switched
Blue 58		2	7	6	VPW Serial Data

1998+ Vortec Black Controllers



Controller	IGN SW	OBDII	V1	V2	Description
White 18		4 and 5	1 and 2	4 and 8	Ground
White 21		16	9	1	12V Unswitched
Black 13	•				12V Switched
Black 18	•				12V Switched
Black 11		2	7	6	VPW Serial Data

Allison 5 speed Transmission Controllers



Controller	IGN SW	OBDII	V1	V2	Description
Gray 1		4 and 5	1 and 2	4 and 8	Ground
Gray 3		16	9	1	12V Unswitched
Gray 4	•				12V Switched
Gray 30		2	7	6	VPW Serial Data

E40 (Gen-IV V8) and LLY Diesel Controllers

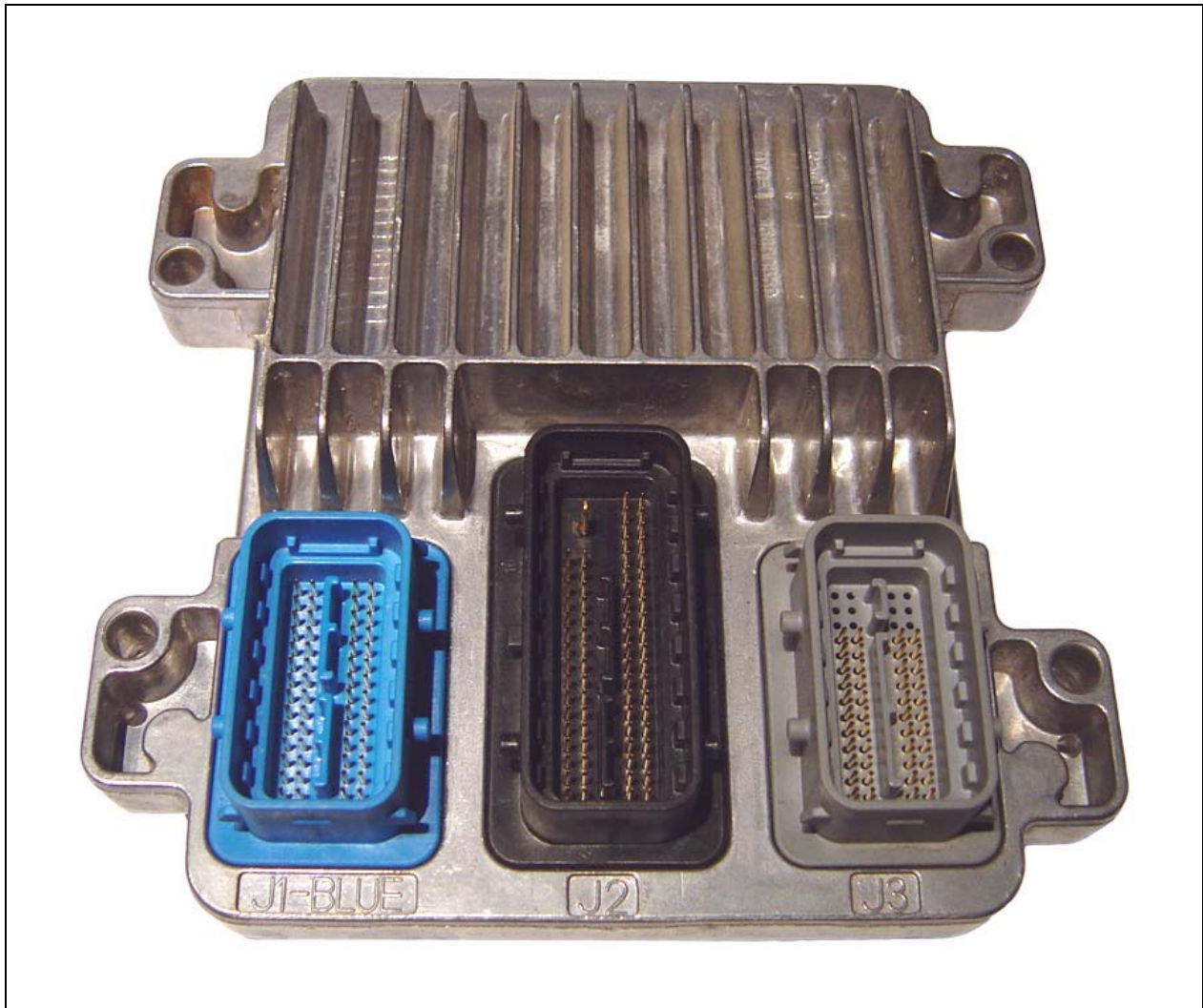


Controller	IGN SW	OBDII	V1	V2	Description
Blue 7		4 and 5	1 and 2	4 and 8	Ground
Blue 20		16	9	1	12V Unswitched
Blue 18	•				12V Switched
Blue 19	•				12V Switched
Blue 1		6	Not Supported	2	CAN +
Blue 2		14		3	CAN -
Blue 15		2	7	6	VPW Serial Data

LLY (VPW Serial Data) is supported by FlashScan V1 and FlashScan V2.

E40 (CAN+/CAN-) is only supported by FlashScan V2.

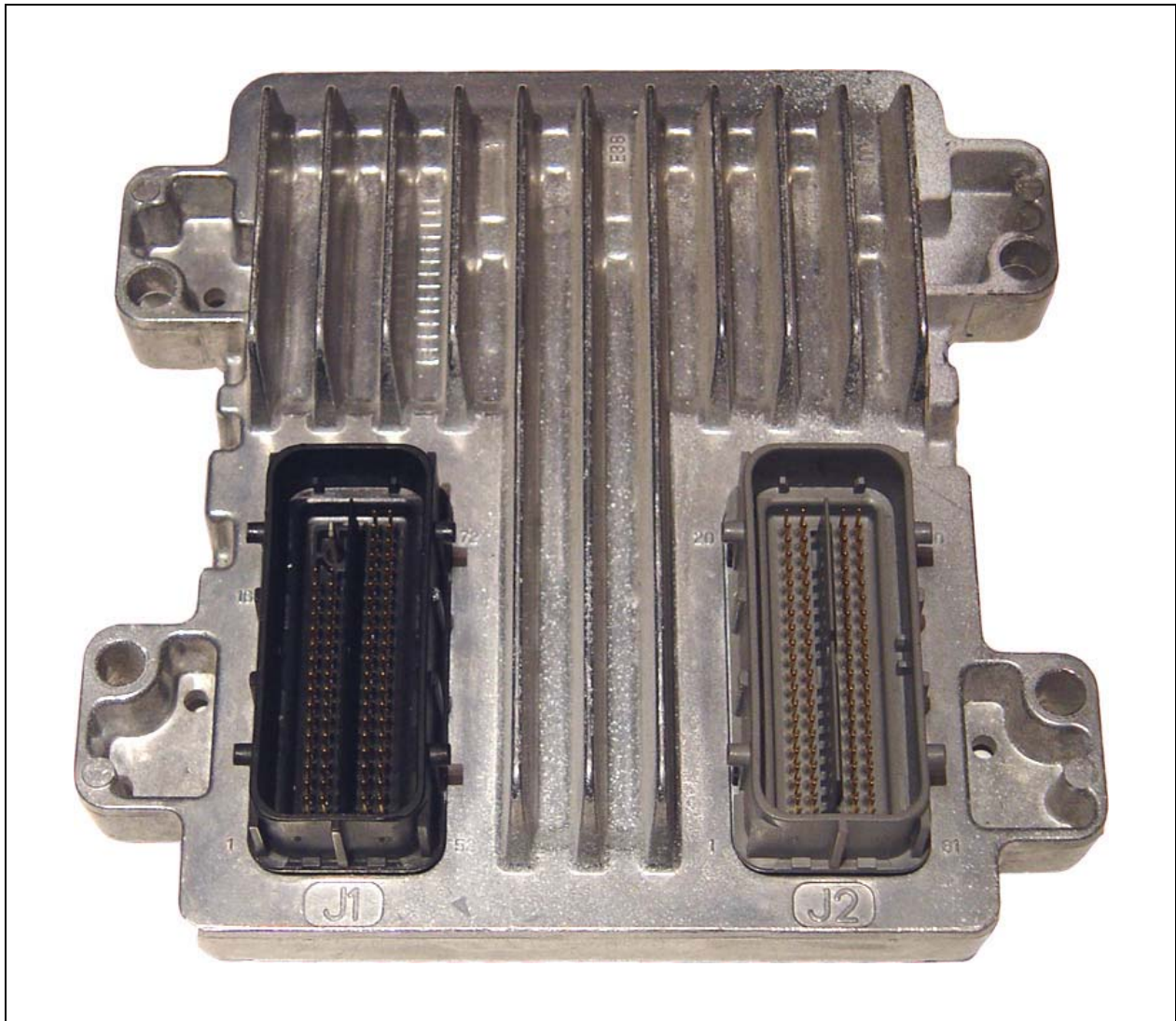
P12 Atlas Engine (In-line 4&5 Cylinder) Controllers



Controller	IGN SW	OBDII	V1	V2	Description
Blue 7		4 and 5	1 and 2	4 and 8	Ground
Blue 20		16	9	1	12V Unswitched
Blue 18	•				12V Switched
Blue 19	•				12V Switched
Blue 1		6	Not Supported	2	CAN +
Blue 2		14		3	CAN -
Blue 15		2	7	6	VPW Serial Data

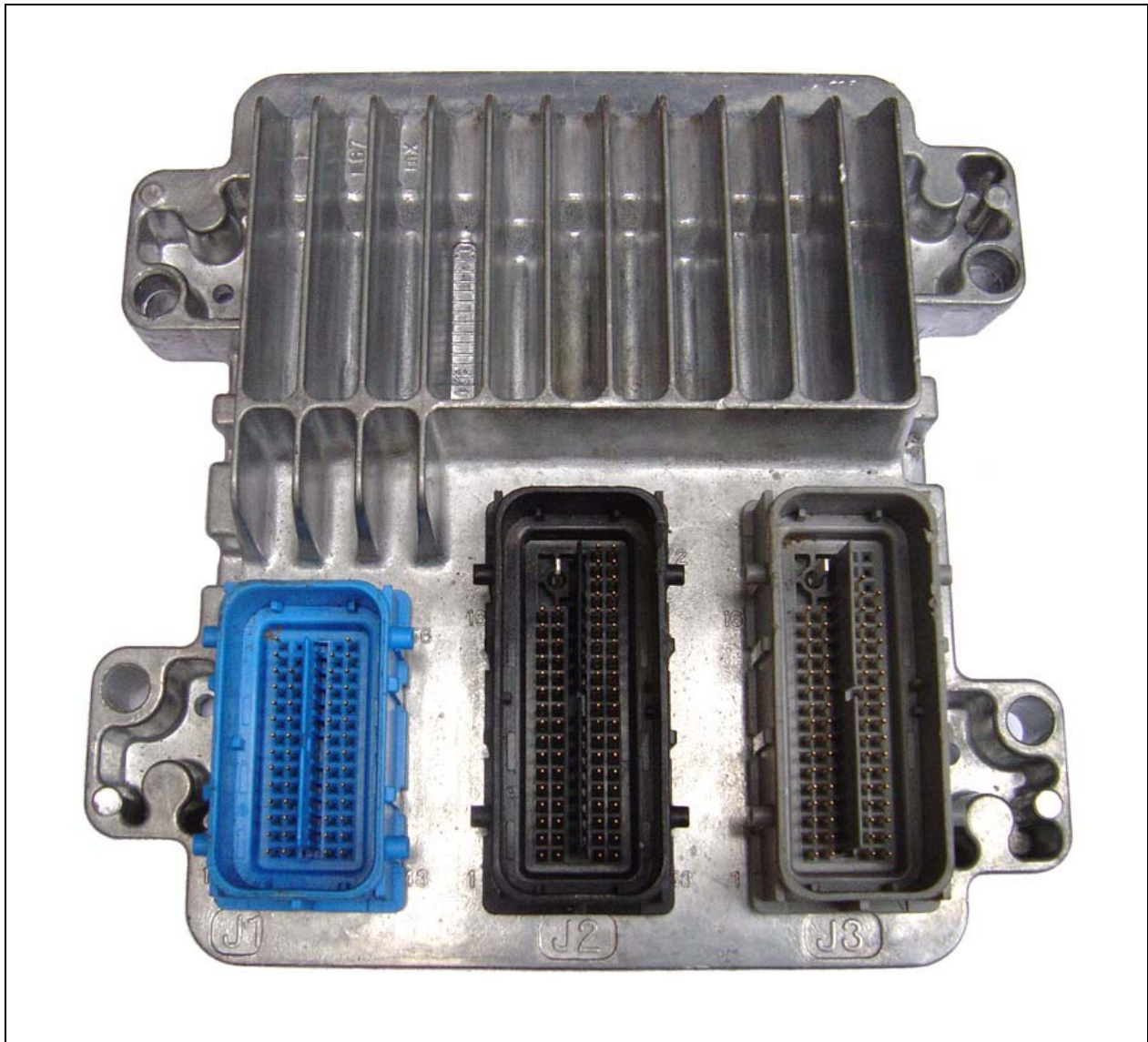
Note: The pin out configuration for this PCM is the same as the E40 / LLY.

E38 Controllers



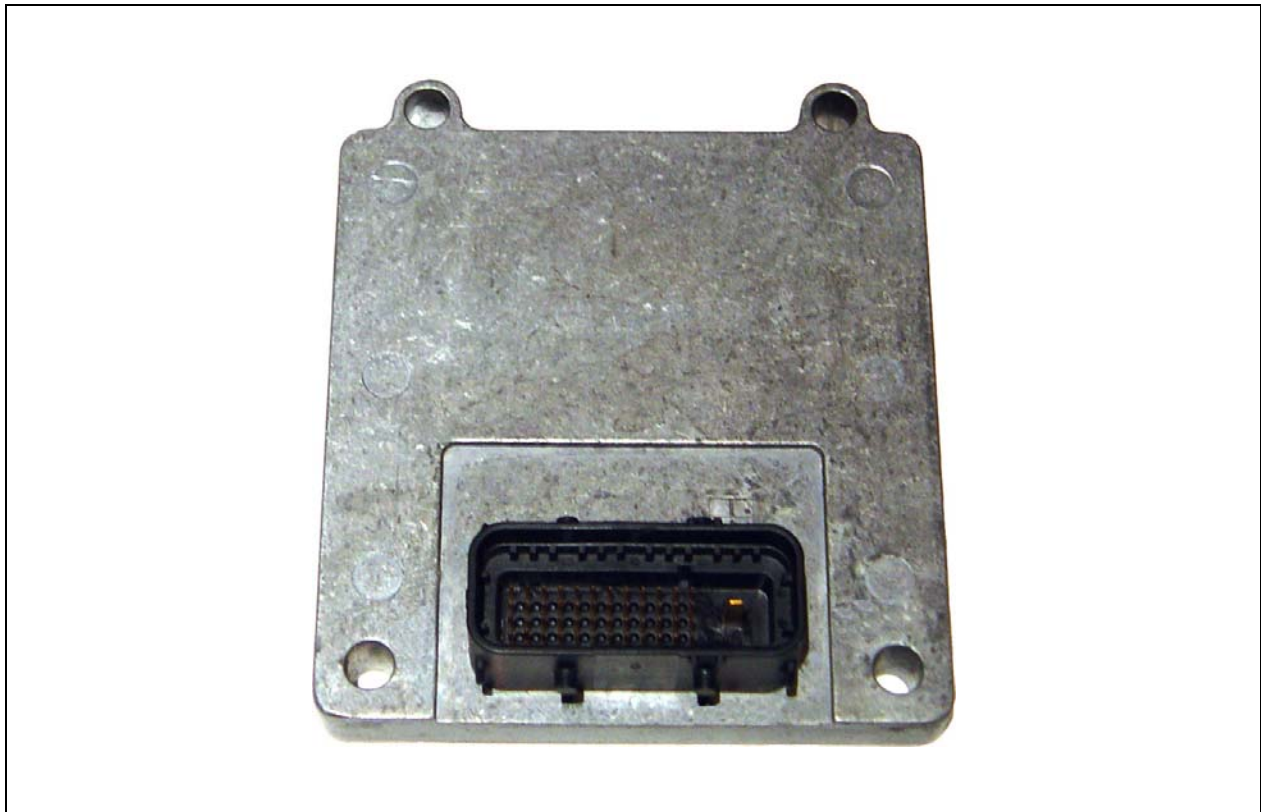
Controller	IGN SW	OBDII	V1	V2	Description
Black 13		4 and 5	Not Supported	4 and 8	Ground
Black 20		16		1	12V Unswitched
Black 19	•				12V Switched
Black 47	•				12V Switched
Black 28		6		2	CAN +
Black 27		14		3	CAN -

E67 Controllers



Controller	IGN SW	OBDII	V1	V2	Description
Black 23		4 and 5	Not Supported	4 and 8	Ground
Blue 20		16		1	12V Unswitched
Black 13	•				12V Switched
Blue 18	•				12V Switched
Blue 19	•				12V Switched
Gray 53		6		2	CAN +
Gray 33		14		3	CAN -

T42 Transmission Controllers



Controller	IGN SW	OBDII	V1	V2	Description	
49		4 and 5	Not Supported	4 and 8	Ground	
32		16		1	12V Unswitched	
11	•					12V Switched
31	•					12V Switched
38		6			2	CAN +
37		14			3	CAN -

Requires ECM to be connected to the CAN bus for correct CAN termination.

LBZ/LMM Controllers



Controller	IGN SW	OBDII	V1	V2	Description
Small 2		4 and 5	Not Supported	4 and 8	Ground
Large 77		16		1	12V Unswitched
Small 1	•				12V Switched
Small 21	•				12V Switched
Small 56	•				12V Switched
Large 76	•				12V Switched
Small 57		6		2	CAN +
Small 44		14		3	CAN -

Allison 6 speed Transmission Controllers



Controller	IGN SW	OBDII	V1	V2	Description
9		4 and 5	Not Supported	4 and 8	Ground
10		16		1	12V Unswitched
63	•				12V Switched
6		6		2	CAN +
27		14		3	CAN -

Requires ECM to be connected to the CAN bus for correct CAN termination.