

VasfEFI ECU - Pinout Reference

Current PCB pinout, exactly matching the present routed board

Rev A / March 2026

This reference follows the current PCB pinout exactly. It does not regroup pins by function. Use this document when building the harness for the current hardware revision.

Connector P1 / 56 pins

Pins 1-28 (right side of symbol)			Pins 29-56 (left side of symbol)		
Pin	Signal	Description	Pin	Signal	Description
1	IG-SW	Ignition switched 12V	29	IG_SW	Ignition switched 12V
2	PGND	Power ground	30	PGND	Power ground
3	PGND	Power ground	31	GND	Ground / sensor reference
4	PGND	Power ground	32	GND	Ground / sensor reference
5	BOOST_OUT	Boost output	33	GND	Ground / sensor reference
6	SPARE	Spare	34	Main_RLY	Active main relay
7	INJ_4_OUT	Injector output 4	35	+5V	Sensor 5V supply (VDDA)
8	INJ_3_OUT	Injector output 3	36	+5V	Sensor 5V supply
9	INJ_2_OUT	Injector output 2	37	+5V	Sensor 5V supply
10	INJ_1_OUT	Injector output 1	38	+5V	Sensor 5V supply
11	FAN_OUT	Fan relay output	39	+5V	Sensor 5V supply
12	IDLE2	Idle output 2	40	TACHO_PIN	Tacho output
13	IDLE1	Idle output 1	41	CMP_12V_pin	Cam 12V input
14	CMP_5V_pin	Cam 5V input	42	FUELPUMP	Fuel pump relay control
15	VR1-	VR negative	43	CRANK_IN	Crank input
16	FUEL_pin	Fuel temp / fuel input	44	CLT_pin	CLT sensor input
17	TPS_pin	TPS input	45	IAT_pin	IAT sensor input
18	O2_pin	Wideband analog input	46	OIL_pin	Oil pressure input
19	VSS_pin	Vehicle speed input	47	GND	Ground / sensor reference
20	CLUTCH_pin	Clutch input	48	GND	Ground / sensor reference
21	KNOCK_PIN	Knock input	49	GND	Ground / sensor reference
22	IGN-4-OUT	Ignition output 4	50	O2_2pin	Post-cat O2 input
23	IGN-2-OUT	Ignition output 2	51	IGN-3-OUT	Ignition output 3
24	STEP_B2	Stepper B2	52	IGN-1-OUT	Ignition output 1
25	STEP_B1	Stepper B1	53	GND	Ground / sensor reference
26	STEP_A1	Stepper A1	54	Ex MAP_pin	External MAP sensor
27	STEP_A2	Stepper A2	55	PGND	Power ground
28	VMOT	DRV8825 motor supply	56	NC	No connect

Legend: GND = general / sensor ground. PGND = power ground. VMOT = DRV8825 motor-supply input for a stepper valve driver; use an external relay if stepper control is required.

Default jumper reminders

Function	Default	Alternative
CAM input	5V jumper position	12V input available on CMP_12V_pin

Tachometer output	5V jumper position	May be changed to 12V if required
CKP input	VR / inductive only	Hall crank not supported