

OBR Control Systems - E8PLUS

E8PLUS Connector J1 - 32-way grey

PIN	NAME	TYPE	COMMENTS
A1	EM4	Digital input - Crank sensor HALL	
A2	EM3	Digital input - Cam sensor VR	
A3	EM2	Digital input - Came sensor VR	
A4	EM1	Digital input - Crank sensor VR	
B1	AGND	Analogue Ground	
B2	GND	Digital Ground	
B3	GND	Digital Ground	
B4	GND	Digital Ground	
C1	HE8	Digital Input - SENT/Logic/Hall Effect	Channel #27
C2	LNR6	Analogue Input - Pull Up	Channel #6
C3	INJ8	Digital Output - Injector	
C4	INJ7	Digital Output - Injector	
D1	LNR5	Analogue Input - Pull Up	Channel #5
D2	LNR4	Analogue Input - Pull Up	Channel #4
D3	INJ4	Digital Output - Injector	
D4	INJ3	Digital Output - Injector	
E1	HE4	Digital Input - Logic/Cam/Hall Effect	Channel #23
E2	HE3	Digital Input - Logic/Cam/Hall Effect	Channel #22
E3	INJ6	Digital Output - Injector	
E4	INJ5	Digital Output - Injector	
F1	HE2	Digital Input - Logic/Cam/Hall Effect	Channel #21
F2	HE1	Digital Input - Logic/Cam/Hall Effect	Channel #20
F3	INJ2	Digital Output - Injector	
F4	INJ1	Digital Output - Injector	
G1	IGN8	Digital Output - Ignition	
G2	IGN7	Digital Output - Ignition	
G3	IGN6	Digital Output - Ignition	
G4	IGN5	Digital Output - Ignition	
H1	IGN4	Digital Output - Ignition	
H2	IGN3	Digital Output - Ignition	
H3	IGN2	Digital Output - Ignition	
H4	IGN1	Digital Output - Ignition	

OBR Control Systems - E8PLUS

E8PLUS Connector J2 - 48-way brown

PIN	NAME	TYPE	COMMENTS
A1	OUT1	Digital Output - High Current	Output #1
A2	KNK GND	Knock Ground	
A3	KNK1	Analogue Input - Knock 1	
A4	KNK2	Analogue Input - Knock 2	
B1	OUT2	Digital Output - High Current	Output #2
B2	AGND	Analogue Ground	
B3	TPS2A	Analogue Input - Pull Up	Channel #13
B4	TPS2B	Analogue Input - Pull Down	Channel #14
C1	OUT3	Digital Output - High Current	Output #3
C2	AGND	Analogue Ground	
C3	TPS1A	Analogue Input - Pull Up	Channel #11
C4	TPS1B	Analogue Input - Pull Down	Channel #12
D1	OUT4	Digital Output - High Current	Output #4
D2	AGND	Analogue Ground	
D3	LNR2	Analogue Input - Pull Up	Channel #2
D4	LNR3	Analogue Input - Pull Up	Channel #3
E1	OUT5	Digital Output - High Current	Output #5
E2	LNR1	Analogue Input - Pull Up	Channel #1
E3	TEMP4	Analogue Input - NTC	Channel #18
E4	TEMP5	Analogue Input - NTC	Channel #19
F1	OUT7	Digital Output - High Current	Output #7
F2	TEMP3	Analogue Input - NTC	Channel #17
F3	LL-RCOMP1	UEGO Controller - RC	
F4	LL-VS/IP1	UEGO Controller - Reference	
G1	OUT8	Digital Output - High Current	Output #8
G2	VREF1	5V Analogue Voltage Reference	
G3	LL-VS+1	UEGO Controller - VS	
G4	LL-VS/IP2	UEGO Controller - Reference	
H1	OUT9	Digital Output - High Current	Output #9
H2	VREF2	5V Analogue Voltage Reference	
H3	LL-IP+2	UEGO Controller - IS	
H4	LL-VS+2	UEGO Controller - VS	
J1	OUT11	Digital Output - High Current	Output #11
J2	VREF3	5V Analogue Voltage Reference	
J3	LL-RCOMP2	UEGO Controller - RC	
J4	LL-IP+1	UEGO Controller - IS	
K1	HT-LMB1	Digital Output - Heater	
K2	HT-LMB2	Digital Output - Heater	
K3	CAN3L	CAN Bus 3 Low	Data Export/OBD II
K4	CAN3H	CAN Bus 3 High	Data Export/OBD II
L1	DBW4A	Full Bridge 4A	Output #21
L2	DBW4B	Full Bridge 4B	Output #22S
L3	OUT10	Digital Output - High Current	Output #10
L4	OUT6	Digital Output - High Current	Output #6
M1	DBW1(-)	ETB 1 Driver	Throttle body 1
M2	DBW1(+)	ETB 1 Driver	Throttle body 1
M3	DBW2(-)	ETB 2 Driver	Throttle body 2
M4	DBW2(+)	ETB 2 Driver	

OBR Control Systems - E8PLUS

E8PLUS Connector J3 - 48-way black

PIN	NAME	TYPE	COMMENTS
A1	OUT12	Digital Output - High Current	Output #12
A2	TEMP2	Analogue Input - NTC	Channel #16
A3	LNR7	Analogue Input - Pull Up	Channel #7
A4	PPSB	Analogue Input - Pull Up	Channel #10
B1	OUT16	Digital Output - High Current	Output #16
B2	IGN SW	ECU Ignition Switch	
B3	HE11	Digital Input - Logic/Hall Effect	Channel #30
B4	PPSA	Analogue Input - Pull Down	Channel #9
C1	OUT15	Digital Output - High Current	Output #15
C2	HE12	Digital Input - Logic/Hall Effect	Channel #31
C3	TEMP1	Analogue Input - NTC	Channel #15
C4	HE9	Digital Input - Logic/Hall Effect	Channel #28
D1	OUT14	Digital Output - High Current	Output #14
D2	HE13	Digital Input - Logic/Hall Effect	Channel #32
D3	GND	Digital Ground	
D4	GND	Digital Ground	
E1	MAIN-RL	Digital Output - Main Relay	
E2	OUT20	Digital Output - High Current	Output #20
E3	HE6	Digital Input - SENT/Logic/Hall Effect	Channel #25
E4	LNR8	Analogue Input - Pull Up	Channel #8
F1	OUT19	Digital Output - High Current	Output #19
F2	OUT18	Digital Output - High Current	Output #18
F3	VREF4	5V Analogue Voltage Reference	
F4	VREF5	5V Analogue Voltage Reference	
G1	OUT17	Digital Output - High Current	Output #17
G2	HE7	Digital Input - SENT Input	Channel #26
G3	HE5	Digital Input - SENT Input	Channel #24
G4	HE10	Digital Input - Logic/Hall Effect	Channel #29
H1	GND	Digital Ground	
H2	OUT13	Digital Output - Low Current	Output #13
H3	CAN2L	CAN Bus 2 Low	Data Import / Export
H4	CAN2H	CAN Bus 2 High	Data Import / Export
J1	DBW3A	Full Bridge 3A	DBW3A
J2	DBW3B	Full Bridge 3B	DBW3B
J3	CAN1L	CAN Bus 1 Low	PC Communication
J4	CAN1H	CAN Bus 1 High	PC Communication
K1	CAN4L	CAN Bus 4 Low	CAN4L
K2	CAN4H	CAN Bus 4 High	CAN4H
K3	AGND	Analogue Ground	
K4	AGND	Analogue Ground	
L1	GND-POW	Power Ground	
L2	GND-POW	Power Ground	
L3	GND-POW	Power Ground	
L4	GND-POW	Power Ground	
M1	VBATT-IN	Analogue Input - Battery	
M2	VBATT-IN	Analogue Input - Battery	
M3	VBATT-IN	Analogue Input - Battery	
M4	VBATT-IN	Analogue Input - Battery	