

**Document title** Abbreviations of signal and circuit designations for wiring diagrams

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OV00.01-P-1001-28DAA	Abbreviations of signal and circuit designations for wiring diagrams	Model 212	
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Model
212

Abbreviation	Designation	Notes
( - ) SH	Ground (rear sensors)	
( - ) SV	Ground (front sensors)	
(+)	Voltage supply	
(+) SH	Rear sensor supply	
(+) SV	Front sensor supply	
(-)	Ground	
12V	12 V power supply	
15R	Switched positive, in ignition position 1, 2 & 3	
15R(1)	Circuit 15R(1)	
30	Battery voltage, positive (continuous positive)	
30g	Switched positive, fused	
30z	Circuit 30, 1st input	
31	Return line to battery negative or ground, direct	
33	Mirror, fold in (+ drive mode)	
33	Mirror, fold in (+ garage position)	
49L	Left turn signal lamp	
49R	Right turn signal lamp	
50	Starter control (direct)	
54	Brake light	
55L	Left front fog lamp	
55R	Right front fog lamp	
56a	High beam	
56a L	Left high beam	
56a R	Right high beam	
56b	Low beam	
56b L	Left low beam	
56b R	Right low beam	
56L	Left standing light / parking light	
56R	Right standing light / parking light	
58	Position, tail, license plate and instrument lamps	
58d	Variable instrument/switch illumination	
58L	Left standing lamp	
58R	Right standing lamp	
5V	5V power supply	
5V KMD	Refrigerant pressure sensor supply	
87	Input (Circuit 87)	
87F	Circuit 87 F (NAT control unit)	
87M	87 Motor electronics	
1. Zyl.	Cylinder 1 glow plug signal	
2. Zyl.	Cylinder 2 glow plug signal	
3. Zyl.	Cylinder 3 glow plug signal	
4. Zyl.	Cylinder 4 glow plug signal	
5. Zyl.	Cylinder 5 glow plug signal	
6. Zyl.	Cylinder 6 glow plug signal	
A KJS	Actuation of oxygen sensor 1 heater	
A-ZME	Actuation of common rail direct injection fuel system high pressure pump	
A-ZME	Actuation of quantity control valve	
AAV	Activated charcoal filter - shutoff valve	
AB1, BF+	Passenger-side airbag 1st stage +	
AB1, BF-	Passenger-side airbag 1st stage -	
AB1, FA+	Driver-side airbag 1st stage +	
AB1, FA-	Driver-side airbag 1st stage -	
AB2, FA+	Driver-side airbag 2nd stage +	
AB2, FA-	Driver-side airbag 2nd stage -	
AHK i.O.	Ball neck locked signal	
AHK n.i.O	Ball neck not locked signal	
AKSE	Automatic child seat recognition, front passenger seat	
Anst.	Actuation signal	
Ant.	Antenna signal	
Ant. Bt	Bluetooth antenna	
Ant. GPS	GPS antenna	
Ant. NOT	Emergency call antenna	

AP ULK+	Recirculated air flap actuator +	
AP ULK-	Recirculated air flap actuator -	
ARS	Actuation of exhaust gas recirculation positioner	
AS	Oxygen sensor heater	
AS SLV	Secondary air pump valve / air injection	
ASS LED	Tow-away protection feedback	
ASS-OFF	"Tow-away protection off" signal	
AT	Outside air temperature sensor	
AT ZUE1	Ignition coil 1	
AT ZUE2	Ignition coil 2	
AT ZUE3	Ignition coil 3	
AT ZUE4	Ignition coil 4	
AUX GND	AUX GND	
AUX li	AUX audio input, left channel	
AUX re	AUX audio input, right channel	
AUX Sh	AUX shield	
A_EKA	Intake port shutoff actuation	
A_KEH	Crankcase ventilation system heater	
A_LDR	Actuation of boost pressure positioner	
A_S_DK	Electric switchover valve tumble flap actuator	
BBV HR	Rear right brake wear sensor signal	
BBV VR	Front right brake wear sensor signal	
BFS	Brake fluid switch	
BLA	Brake light actuation	
BLS_H	Brake light switch, high	
BLS_L	Brake light switch, low	
BLS_M	Brake light switch ground	
BSL-L	Left brake/taillight	
BSL-R	Right brake /taillight	
BSS	Bit synchronous interface (bidirectional)	
BTN	Open/closed signal	
C	Camera 1 GND CV+	
CAK, BF	Passenger-side NECK-PRO head restraint	
CAK, FA	Driver-side NECK-PRO head restraint	
CAN A H	Telematics CAN HIGH	
CAN A L	Telematics CAN low	
CAN B H	Interior CAN HIGH	
CAN B L	Interior CAN LOW	
CAN C H	CAN engine compartment bus, high	
CAN C L	CAN engine compartment low	
CAN D H	Diagnostic CAN High	
CAN D L	Diagnostic CAN Low	
CAN E H	Chassis CAN High	
CAN E L	Chassis CAN Low	
CAN G H	Front end CAN High	
CAN G L	Front end CAN Low	
CAN H H	Vehicle dynamics CAN High	
CAN H L	Vehicle dynamics CAN Low	
CAN I H	Drive train sensor CAN High	
CAN I L	Drive train sensor CAN Low	
CAN K H	Multifunction CAN High	
CAN K L	Multifunction CAN Low	
Clock +	Cycle 1 High	
Clock -	Cycle 1 Low	
Crash	Crash signal	
Crash out, analog	Analog crash output	
Crash out, dig	Crash output, digital (USA)	
CTS In	CTS signal	
CV	Composite camera 1 CV	
D	Function illumination for selector lever position D	
Data	Data	
Data 0+	Data channel 0 +	
Data 0-	Data channel 0 -	
Data 1+	Data channel 1 +	
Data 1-	Data channel 1 -	
Data 2+	Data channel 2 +	
Data 2-	Data channel 2 -	
Data Fond	LIN data, rear (LIN data, rear operation)	
Data MRM	LIN data, steering column module (LIN data, engine compartment)	
DCM	Motor (minus) of throttle valve actuator	
DCP	Motor (plus) of throttle valve actuator 1	
DF HL M	Left rear rpm sensor ground	

DF HL S	Left rear rpm sensor signal	
DF HR M	Right rear rpm sensor ground	
DF HR S	Right rear rpm sensor signal	
DF VL M	Left front rpm sensor ground	
DF VL S	Left front rpm sensor signal	
DF VR M	Right front rpm sensor ground	
DF VR S	Right front rpm sensor, signal	
Diag.	Diagnosis	
DK1	Position sensor, tumble flap for right bank	
DK2	Position sensor, tumble flap for left bank	
DRV	Actuation of pressure regulator valve	
DS	Intake manifold pressure sensor signal	
DS, BF+	Passenger-side pressure sensor +	
DS, BF-	Front passenger pressure sensor -	
DS, FA+	Driver-side pressure sensor +	
DS, FA-	Pressure sensor, driver -	
DS, HL +	Left rear pressure sensor +	
DS, HL -	Left rear pressure sensor -	
DS, HR+	Right rear pressure sensor +	
DS, HR-	Right rear pressure sensor	
DST	Tank pressure sensor signal	
DZ-N2	Engine speed N2	
DZ-N3	Rpm N3	
EA	Oxygen sensor signal	
EA HFM	Hot film mass air flow sensor signal	
EA LDS	Boost pressure sensor signal	
EA TANS	Intake air temperature signal	
EA UDS	Ambient pressure sensor signal	
ECO 12V	ECO valve 12V	
ECO A	ECO valve (-)	
EDW	ATA [EDW] signal	
EF HFM1	Hot film mass air flow sensor signal	
EF REF1	Hot film mass air flow sensor reference signal	
EKP	Actuation of electric fuel pump	
EV 1	Cylinder 1 injection valve	
EV 2	Cylinder 2 injection valve	
EV 3	Cylinder 3 injection valve	
EV 4	Cylinder 4 injection valve	
EV1	Injection valve output stage 1 cyl. 1	
EV2	Injection valve output stage 2 cyl. 4	
EV3	Injection valve output stage 3 cyl. 3 (A_P_EV3)	
EV4	Injection valve output stage 4 cyl. 6 (A_P_EV4)	
EV5	Injection valve output stage 5 cyl. 2 (A_P_EV5)	
EV6	Injection valve output stage 6 cyl. 5 (A_P_EV6)	
ExT1	Exhaust temperature sensor 1 signal upstream of catalytic converter)	
EXT2	Exhaust temperature sensor 2 signal downstream of catalytic converter	
EXTS1	Exhaust temperature signal in left oxidization catalytic converter	
EXTS2	Exhaust temperature signal T3 upstream of supercharger	
E_ATF1	Exhaust gas temperature sensor signal upstream of catalytic converter	
E_A_KS1A	Knock sensor signal A, right bank	
E_A_KS1B	Knock sensor signal B, left bank	
E_A_KS2A	Knock sensor signal A, right bank	
E_A_KS2B	Knock sensor signal B, left bank	
E_DPF	Differential pressure sensor signal	
E_HFM1	HFM sequential multiport fuel injection/ignition system signal, left bank	
E_HFM2	HFM-SFI signal, right bank	
E_P3	Exhaust gas pressure sensor signal	
E_RDS	Fuel pressure sensor signal	
E_T1	Intake air temperature sensor signal	
E_T1_1	Intake air temperature signal (HFM) left bank	
E_T1_2	Intake air temperature signal (HFM) right bank	
FH H	Power window up	
FH T	Power window down	
FL	Rear lights actuation	
FLWTR	Water level switch signal (only in countries with poor-quality fuel)	
FM1/AM	FM1/AM antenna signal	
FM2	FM2 antenna signal	
GND	Ground	
GR	Actuation of blower regulator	
GS, BF+	Emergency tensioning retractor, front passenger +	
GS, BF-	Front passenger emergency tensioning retractor -	
GS, FA+	Driver emergency tensioning retractor +	

GS, FA-	Driver emergency tensioning retractor -	
GS, HL+	Left rear emergency tensioning retractor +	
GS, HL-	Left rear emergency tensioning retractor -	
GS, HR+	Right rear emergency tensioning retractor +	
GS, HR-	Right rear emergency tensioning retractor -	
GSS HL	Seat belt buckle switch, rear left	
GSS HM	Seat belt buckle switch, rear center	
GSS HR	Seat belt buckle switch, rear right	
GSS, BF	Passenger-side seat belt buckle switch	
GSS, FA	Driver-side seat belt buckle switch	
G_WLS	Water level switch ground	
H Side	High Side	
HAV	Heater shutoff valve	
HFE	Trunk lid locking element	
HL +	Left rear door speaker +	
HL-	Left rear door speaker -	
HR	Main relay	
HR+	Right rear door speaker +	
HR-	Right rear door speaker -	
HS 1	Hall sensor 1 signal	
HS 2	Hall sensor 2 signal	
HS(+)	Hall sensor power supply	
HS(-)	Hall sensor ground	
HV_HS(+)	HV Hall sensor supply	
HV_HS(-)	HV Hall sensor ground	
HV_Mot+	HV motor (+on)	
HV_Mot-	HV motor (-on)	
Info	ICall button	
Info LED	ICall LED	
INJ H	Actuation of high side injector	
INJ L	Actuation of low side injector	
IP1S	Throttle valve potentiometer 1 signal	
IP2S	Throttle valve potentiometer 2 signal	
IPM	Throttle valve potentiometer sensor ground	
IRS LED	Interior protection feedback	
IRS-OFF	"Interior protection off" signal	
I_WLS	Water level switch signal	
KB, FA+	Kneebag, driver +	
KB, FA-	Kneebag, driver -	
KHZ	Actuation of coolant thermostat heating element	
KMD	Refrigerant pressure	
KP	Fuel pump actuation	
KS1-Sig.	Knock sensor signal 1	
KS2-Sig.	Knock sensor signal 2	
KTS Sig.	Fuel temperature sensor signal	
KUP1	Clutch switch signal	
KUP2	Interlock switch signal (USA)	
KWDGA	Crankshaft sensor	
KWDGB	Crankshaft sensor (reference)	
KWGA	Crankshaft sensor signal	
L Side	Low side	
LED	LED	
LHP	Power steering pump signal	
LIN	LIN bus	
LIN 1	Instrument panel LIN	
LIN 2	Wiper/Roof LIN	
LIN A1	COU [ZBE] LIN	
LIN B1	Front door LIN	
LIN B2	Rear door LIN	
LIN B3	OBF LIN	
LIN B4	Rear SAM LIN	
LIN B5	Left door LIN	
LIN B6	Right door LIN	
LIN B7	On-board electrical system LIN	
LIN B8	Climate control LIN	
LIN C1	Drive train LIN	
LIN E1	Steering LIN	
LL L	Left reading lamp 12V	
LL R	Right reading lamp 12V	
LLTF Sig.	Boost air temperature sensor signal (I_A_IATS2)	
LS IA	Oxygen sensor signal	
LS IP	Oxygen sensor pump current	

LS UN	Oxygen sensor Nernst voltage	
LS VM	Oxygen sensor ground	
LS2HK	Oxygen sensor signal in catalytic converter, left bank	
LSCA1	Compensating current, oxygen sensor upstream of catalytic converter	
LSCP1	Pump current, oxygen sensor upstream of catalytic converter	
LSH1	Oxygen sensor heater signal upstream of catalytic converter	
LSH1HK	Oxygen sensor heater in catalytic converter, right bank	
LSH2HK	Oxygen sensor heater in catalytic converter, left bank	
LSHK	Oxygen sensor signal in catalytic converter, right bank	
LSHU1	Oxygen sensor heater, universal oxygen sensor control sensor	
LSHVK1	Oxygen sensor heater upstream of catalytic converter, right bank (A_T_LSHKVK1)	
LSHVK2	Oxygen sensor heater upstream of catalytic converter, left bank	
LSIK	Oxygen sensor ground in left catalytic converter and right bank	
LSK	Oxygen sensor upstream of catalytic converter, left bank	
LSU1A	Oxygen sensor upstream of catalytic converter, right bank (trimming resistor)	
LSU1N	Oxygen sensor control sensor, universal oxygen sensor signal	
LSU1P	Oxygen sensor upstream of catalytic converter, right bank (pump current)	
LSU1S	Oxygen sensor pump current	
LSU1UN	Oxygen sensor upstream of catalytic converter, right bank (Nernst voltage)	
LSU1US	Oxygen sensor trimming resistor LSU1	
LSU1VM	Oxygen sensor virtual ground, universal oxygen sensor	
LSU1VM	Oxygen sensor upstream of catalytic converter, right bank (virtual ground)	
LSU2IA	Oxygen sensor upstream of catalytic converter, left bank (trimming resistor)	
LSU2IP	Oxygen sensor upstream of catalytic converter, left bank (pump current)	
LSU2UN	Oxygen sensor upstream of catalytic converter, left bank (Nernst voltage)	
LSU2VM	Oxygen sensor upstream of catalytic converter, left bank (virtual ground)	
LSVG1	Ground (oxygen sensor upstream of catalytic converter)	
LSVN1	Current measurement, oxygen sensor upstream of catalytic converter	
LUES	Engine fan (PWM signal)	
LV_HS(+)	LV Hall sensor supply	
LV_HS(-)	LV Hall sensor ground	
LV_Mot+	LV motor (+ fore)	
LV_Mot-	LV motor (- fore)	
LWR	Headlamp range adjustment	
M (+)	Intake air throttle motor +	
M (-)	Intake air throttle motor -	
Mic. +	Microphone +	
Mic. -	Microphone -	
Mic. 1+	Microphone 1+	
Mic. 2+	Microphone 2+	
MK+	Head restraint motor (+up)	
ML HFM	Line ground, hot film mass air flow sensor	
ML+	Backrest motor (+fore)	
ML/K	Backrest/head restraint motor (fore/up)	
MLS	Steering column in/out motor (+in), up/down (+up)	
MLS, H	Steering column up/down motor (- up)	
MLS, V	Steering column in/out motor (-in)	
MOST	Media Oriented System Transport (MOST)	
MOST in	MOST Receiver IN	
MOST out	MOST Transmitter OUT	
Motor +	Motor (+)	
Motor -	Motor (-)	
MOT_(+)/GND	Engine plus/minus actuation	
MOT_GND/(+)	Engine minus/plus actuation	
MR	Oxygen sensor ground	
MR HFM	Hot film mass air flow sensor signal ground	
MR HFM1	Hot film mass air flow sensor (sensor ground)	
MR UDS	Ambient pressure sensor ground	
MR ULKP	Ground (air recirculation flap potentiometer)	
Mute	Muting	
M_ATF1	Exhaust gas temperature sensor ground upstream of catalytic converter	
M_DPF	Differential pressure sensor ground	
N	Function illumination for selector lever position N	
NC	Not assigned	
NSL	Rear fog lamp	
NSL-L	Left rear fog lamp	
NSL-R	Right rear fog lamp	
NTC	NTC resistor signal	
NV_HS(+)	NV Hall sensor supply	
NV_HS(-)	NV Hall sensor ground	
NV_Mot+	NV motor (+on)	
NV_Mot-	NV motor (-on)	

NWAE2	Exhaust camshaft sensor, left bank	
NWG-Sig.	Camshaft sensor signal	
NWGA1	Exhaust camshaft positioner, right bank	
NWGE1	Inlet camshaft sensor, right bank	
NWGE2	Inlet camshaft sensor, left bank	
NWG_M	Sensor ground 1	
NWG_M2	Sensor ground 2	
NWHGSA	Signal, camshaft signal, exhaust	
NWHGSE	Signal, camshaft signal, intake	
NWSA 1	Exhaust camshaft positioner, right bank	
NWSA 2	Exhaust camshaft positioner, left bank	
NWSE 1	Intake camshaft positioner, right bank	
NWSE 2	Inlet camshaft positioner, left bank	
NWVA2	Exhaust camshaft positioner signal	
NWVE2	Inlet camshaft positioner signal	
Oeltemp	Oil temperature sensor signal	
OSS	Oil level switch signal	
P	Function illumination for selector lever position P	
PML 12V	Speed-sensitive power steering valve 12V	
PML A	Speed-sensitive power steering valve (-)	
Poti (+)	Throttle valve position sensor power supply	
Poti (-)	Intake air throttling ground	
Poti Sig.	Intake air throttling signal	
R/P-S (+)	R/P locking solenoid (Plus)	
R/P-S (-)	R/P locking solenoid (ground pulsed)	
R	Function illumination for selector lever position R	
RDS	Rail pressure sensor signal	
REG	Purge valve	
return_line	Feedback for front passenger seat occupation and belt tension sensor	
RFL	Backup lamp	
RFL-L	Left backup lamp	
RFL-R	Right backup lamp	
RSS AUS	RSS switch off +	
RSS EIN	RSS switch on +	
RTS On	RTS signal	
RV	Control valve	
RX	Telephone RX (output)	
RX In	ETC RX signal (input)	
S 1 V	Front sensor 1	
S 10 H	Rear sensor 10	
S 2 V	Front sensor 2	
S 3 V	Front sensor 3	
S 4 V	Front sensor 4	
S 5 V	Front sensor 5	
S 6 V	Front sensor 6	
S 7 H	Rear sensor 7	
S 8 H	Rear sensor 8	
S 9 H	Rear sensor 9	
SB, BF+	Passenger-side sidebag +	
SB, BF-	Passenger-side sidebag	
SB, FA+	Driver-side sidebag +	
SB, FA-	Driver-side sidebag -	
SB, HL-	Left rear sidebag -	
SB, HR+	Right rear sidebag +	
SB, HR-	Right rear sidebag -	
SB,HL+	Left rear sidebag +	
SBE	Front passenger seat occupied recognition sensor	
SENM1	Tank pressure sensor ground 1	
SH(+)	Mirror heater power supply	
SH(-)	Mirror heater ground	
Shield	Shield	
SH_High	Rear sensors CAN High	
SH_Low	Rear sensors CAN Low	
S_GB	Glass breakage sensors	
Sig.	Signal	
SL-li	Left taillamp	
SL-re	Right taillamp	
SLP	Relay of secondary air injection pump 1	
SLV	Secondary air valve	
SND	LID sensor signal	
SOS	eCall button	
SOS LED	eCall LED	

SP1M	Pedal value sensor 1 sensor ground	
SP1S	Pedal value sensor 1 signal	
SP2M	Pedal value sensor 2 sensor ground	
SP2S	Pedal value sensor 2 signal	
SS_BF+	Front sidebag sensor, front passenger +	
SS_BF-	Front sidebag sensor, front passenger -	
SS_FA+	Front sidebag sensor, driver +	
SS_FA-	Front sidebag sensor, driver -	
STR	Starter relay	
SUV1	Intake manifold switchover valve	
SV	AT shift valve	
SV_High	Front sensors, CAN High	
SV_Low	Front sensors, CAN Low	
SV_M1	Up/down mirror adjustment (+ up)	
SV_M1M2	Mirror adjustment M1/M2	
SV_M2	Left/right mirror adjustment (+ left)	
TG L	Left fuel level sensor	
TG R	Right fuel level sensor	
THS	Coolant thermostat	
Tipp (+)	Touch control up	
Tipp (-)	Touch control down	
Tipp (Masse)	Touch control sensor, ground	
Tipp (Plus)	Touch control sensor plus	
TMOT	Coolant temperature sensor signal	
TV-GND	Ground	
TV-In L	TV audio signal TV, right channel	
TV-In R	TV audio signal TV, left channel	
TV-RX	TV data output	
TV-TX	TV data input	
TX	Telephone TX (input)	
TX On	ETC TX signal (output)	
TX Out	VICS TX signal (output)	
TZS-Mot +	Additional door lock,motor	
UB	Voltage supply	
UFS, BF+	Upfront sensor, front passenger +	
UFS, BF-	Upfront sensor, front passenger -	
UFS, FA+	Upfront sensor, driver +	
UFS, FA-	Upfront sensor, driver -	
ULKP1	Recirculated air flap potentiometer 1 signal	
ULKP2	Recirculated air flap potentiometer 2 signal	
U_DPF	Differential pressure sensor supply	
U_PWG1	Pedal value sensor supply	
Video In	Video signal Y	
Video Sig.	Video signal C	
Video-GND	Video - GND	
VL +	Left front door speaker +	
VL -	Left front door speaker -	
VR+	Right front door speaker +	
VR-	Right front door speaker -	
Wake up	Cut-in signal	
WB, VL+	Left front windowbag +	
WB, VL-	Left front windowbag -	
WB, VR+	Right front windowbag +	
WB, VR-	Right front windowbag -	
WH (+)	Rear warning elements supply	
WH (-)	Rear warning elements ground	
WH (Data)	Rear warning elements signal	
WS	TDCall button	
WS LED	TDCall LED	
WTS Sig.	Water temperature sensor signal	
WV (+)	Front warning elements supply	
WV (-)	Front warning elements ground	
WV (Data)	Front warning elements signal	
ZUE 1	Ignition signal 1 ignition coil cyl. 1	
ZUE 2	Ignition signal 1 ignition coil cyl. 4	
ZUE 3	Ignition signal 3 ignition coil cyl. 3	
ZUE 4	Ignition signal 4, cyl. 6 ignition coil	
ZUE 5	Ignition signal 5, ignition coil cyl. 2	
ZUE 6	Ignition signal 6 ignition coil cyl. 5	
ZV	Central locking	
ZV Ant.	Central locking antenna module signal	
ZV-Mot +	Central locking motor	