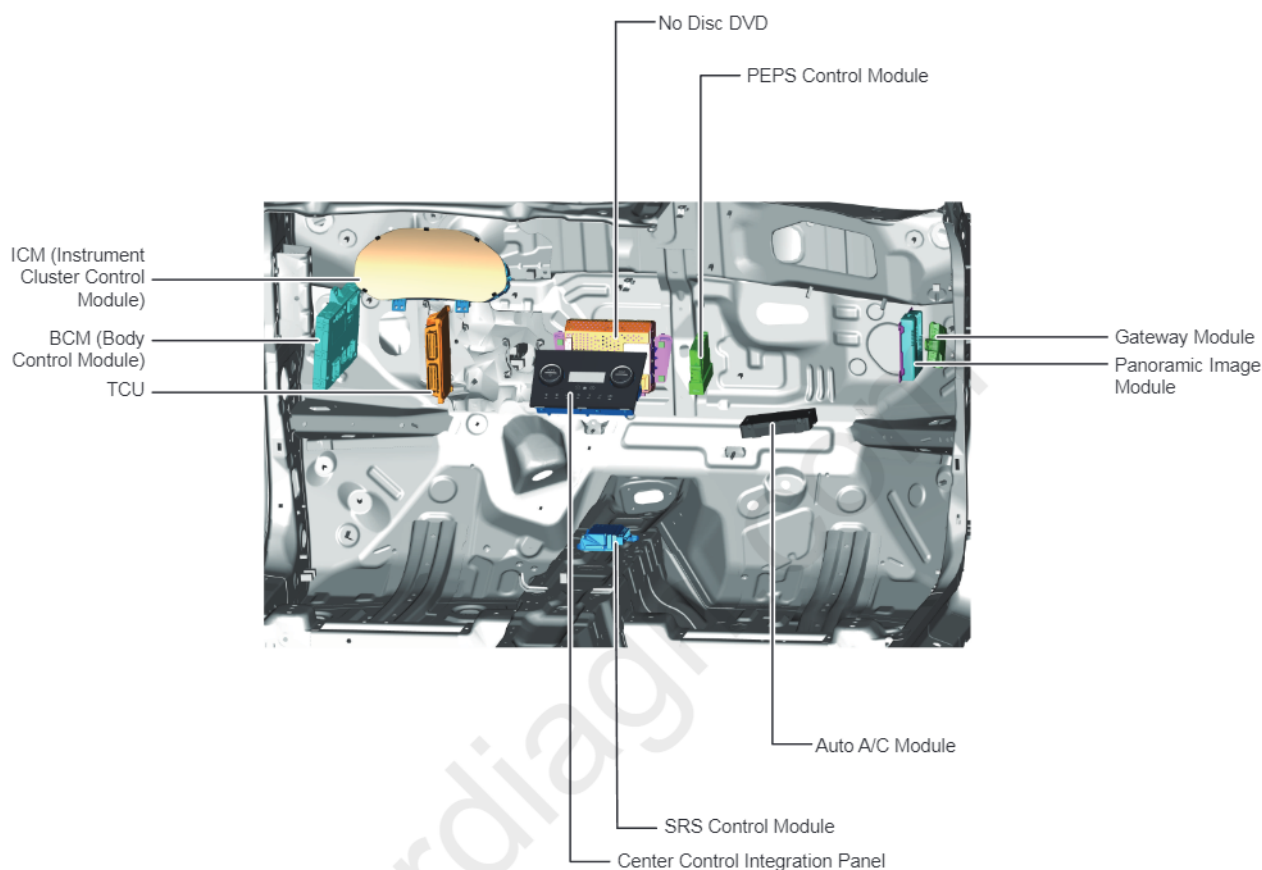


LOCATION AND TERMINAL DEFINITION OF CONTROL MODULES

This section introduces the location and terminal definition information of vehicle control modules. The whole vehicle includes the following modules:

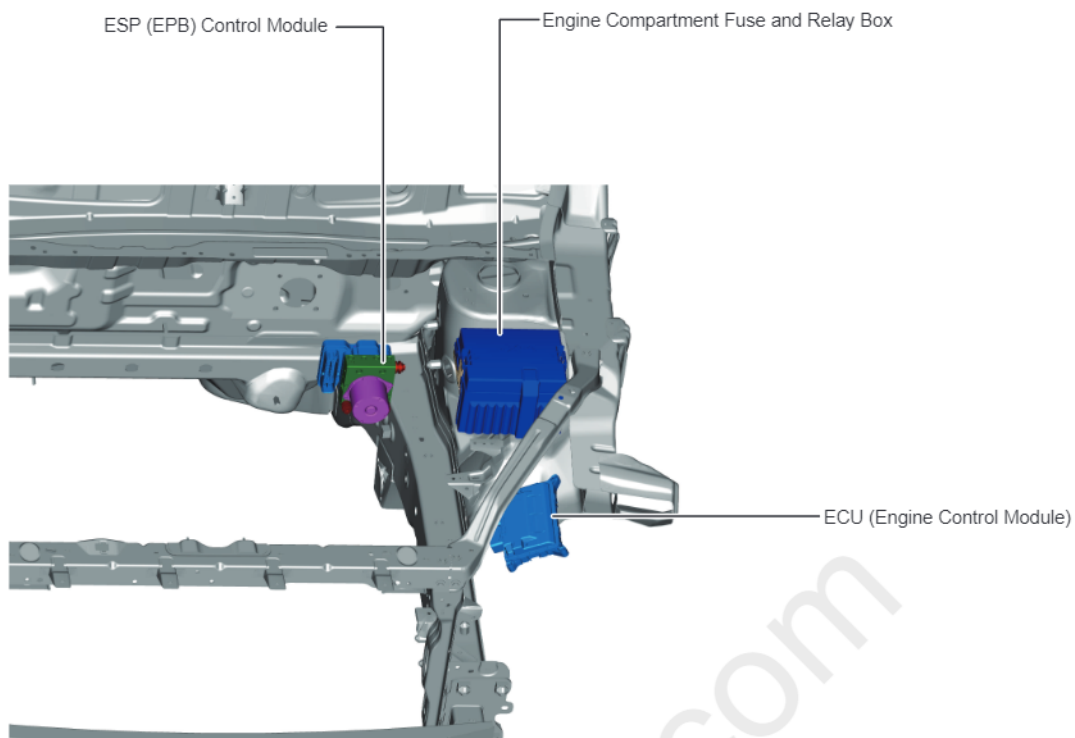


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EWD028001

Terminal Definition

Module Name	See Page
ICM (Instrument Cluster Control Module)	07-9
BCM (Body Control Module)	07-10
DVD Module Terminal Definition	07-13
Reversing Radar Module Terminal Definition	07-14
Airbag Module Terminal Definition	07-15
PEPS Control Module Terminal Definition	07-16
PEPS Terminal Definition	07-16
Gateway Module Terminal Definition	07-17
Auto A/C Module	07-17

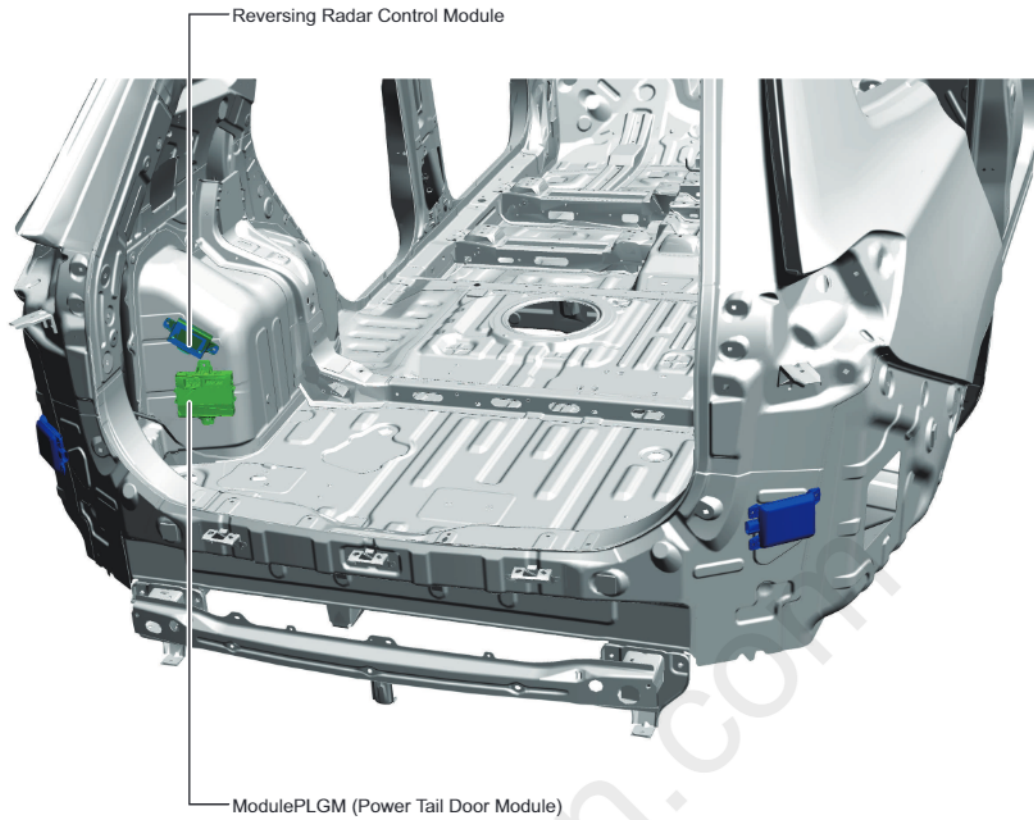


EWD029001

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Terminal Definition

Module Name	See Page
ECM (Engine Control Module) (For E4T15B Model)	07-4
ESP (EPB) Module	07-6
TCU Module	07-7



EWD030001

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Terminal Definition

Module Name	See Page
Reversing Radar Control Module	07-14

ECM (Engine Control Module) Terminal Definition (For 2.0T+CVT25 Model)**ECM (B) Terminal Definition**

Terminal No.	Description	Terminal No.	Description
1	CAN Bus 1 High	33	-
2	Downstream Oxygen Sensor	34	-
3	-	35	Ignition Switch
4	-	36	5V Power Supply of Electronic Accelerator Pedal Sensor 2
5	Main Relay	37	5V Power Supply of Electronic Accelerator Pedal Sensor 1
6	-	38	-
7	Electronic Accelerator Pedal Sensor 1 Ground	39	-
8	-	40	-
9	Spiral Cable	41	Fuel Pump Relay
10	-	42	A/C Compressor Relay
11	Downstream Oxygen Sensor	43	Downstream Oxygen Sensor Ground
12	Brake Vacuum Sensor	44	-
13	-	45	Electronic Accelerator Pedal Sensor 1
14	Downstream Oxygen Sensor Ground	46	Boost Pressure Sensor
15	UBR Noncontinuous Power Supply	47	Analog Ground
16	UBR Noncontinuous Power Supply	48	Downstream Oxygen Sensor Heater
17	CAN Bus 1 Low	49	-
18	-	50	-
19	5 V Power Supply 1	51	-
20	UBD Continuous Power Supply	52	-
21	Downstream Oxygen Sensor	53	-
22	-	54	Electronic Vacuum Pump
23	Brake Switch	55	-
24	A/C Compressor Medium-Pressure Switch	56	-
25	Brake Light Switch	57	-
26	-	58	-
27	-	59	Electronic Accelerator Pedal Sensor 2 Ground
28	Downstream Oxygen Sensor	60	-
29	-	61	-
30	Electronic Accelerator Pedal Sensor 2	62	Boost Temperature Sensor

Terminal No.	Description	Terminal No.	Description
31	Waste Gate Valve Actuator +	63	ECU Ground 2
32	Waste Gate Valve Actuator -	64	ECU Ground 1

ECM (A) Terminal Definition

Terminal No.	Description	Terminal No.	Description
65	-	89	Knock Sensor B
66	-	90	Knock Sensor A
67	Injector 2	91	Intake Pressure Sensor
68	Injector 1	92	-
69	Variable Camshaft Exhaust Timing Valve	93	Camshaft sensor 1 signal
70	ERCV	94	Canister solenoid valve
71	Variable Camshaft Intake Timing Valve	95	Camshaft sensor Ground
72	Injector 3	96	Engine Speed Sensor Input
73	Ignition Coil 2	97	-
74	Cylinder 4 Injector	98	Camshaft sensor power supply
75	PWM	99	Throttle actuator +
76	Downstream Oxygen Sensor Heater	100	Throttle actuator -
77	Throttle Position Sensor 1	101	Engine Coolant Sensor
78	Throttle Position Sensor 2	102	Intake Temperature Sensor
79	SENSOR OUT	103	-
80	-	104	-
81	Ignition Coil 1	105	Camshaft sensor 2 signal
82	Ignition Coil 3	106	-
83	Ignition Coil 4	107	Throttle 5 V Power Supply
84	Engine speed sensor	108	5 V Power Supply
85	Intake Pressure Sensor	109	Intake Manifold 5 V Power Supply
86	Throttle Ground	110	-
87	-	111	ECU Ground 3
88	-	112	ECU Ground 4

ESP (EPB) Module Terminal Definition

Terminal No.	Description	Terminal No.	Description
1	Motor Power Supply End (Positive)	24	Wheel Speed Sensor Power Supply End (Front Left)
2	Right Motor Positive	25	CCAN2-L
3	Right Motor Negative	26	Wheel Speed Sensor Signal End (Front Right)
4	-	27	-
5	CPCAN-H	28	-
6	-	29	-
7	Wheel Speed Sensor Signal End (Front Left)	30	Valve Relay Power Supply End
8	AUTO HOLD Switch Indicator	31	EPB Switch
9	-	32	EPB Switch
10	HDC Switch Indicator	33	-
11	CCAN2-H	34	-
12	Left Caliper Motor Ground	35	-
13	Left Caliper Motor Power Supply	36	Ignition Coil
14	Motor Grounding End	37	Wheel Speed Sensor Signal End (Right)
15	EPB Switch	38	Brake Light Switch
16	EPB Switch	39	Wheel Speed Sensor Power Supply End (Left)
17	HDC Function Switch	40	-
18	EPB Switch Indicator	41	AUTO HOLD Switch
19	PCAN-L	42	-
20	-	43	ESP OFF
21	Wheel Speed Sensor Power Supply End (Front Right)	44	-
22	Wheel Speed Sensor Power Supply End (Right)	45	-
23	Wheel Speed Sensor Signal End (Left)	46	ECU Ground

TCU Module Terminal Definition

Terminal No.	Description	Terminal No.	Description
1	Hydraulic Torque Converter/Clutch Control Valve Low Side Control	29	Main Oil Pressure/P Position Lock Control Valve Low Side Control
2	Input Pulley Shaft Pressure Control Valve Low Side Control	30	Output Pulley Shaft Pressure Control Valve Low Side Control
3	Clutch Control Valve High Side Control	31	P Position Lock Control Valve High Side Control
4	Hydraulic Torque Converter Control Valve High Side Control	32	Main Oil Pressure Control Valve High Side Control
5	-	33	-
6	Output Pulley Shaft Pressure Control Valve High Side Control	34	Input Pulley Shaft Pressure Control Valve High Side Control
7	-	35	-
8	CAN2 L	36	CAN2 H
9	Turbo/Output Pulley Shaft Speed Sensor Ground	37	Input/Output Pulley Shaft Oil Pressure Sensor Ground
10	Input Pulley Shaft Speed Sensor Signal	38	Turbine Speed Sensor Signal
11	Input Pulley Shaft Speed Sensor Ground	39	Output Pulley Shaft Speed Sensor Signal
12	Transmission Fluid Temperature Sensor Ground	40	-
13	Transmission Fluid Temperature Sensor Signal	41	Gear Position Monitor Signal
14	Input Pulley Shaft Oil Pressure Sensor Signal	42	-
15	Output Pulley Shaft Oil Pressure Sensor Signal	43	-
16	Brake Switch	44	Brake Switch
17	P Position	45	-
18	R Position	46	Downshift
19	N Position	47	Upshift
20	D Position	48	-
21	Input Pulley Shaft Speed Sensor Power Supply	49	DS Position (Low Speed Level)
22	Turbo/Output Pulley Shaft Speed Sensor Power Supply	50	-
23	Manual Mode	51	KL30
24	-	52	KL30
25	-	53	KL30
26	Output Pulley Shaft Oil Pressure Sensor Power Supply	54	Input Pulley Shaft Oil Pressure Sensor Power Supply
27	Power Supply Ground 1	55	Power Supply Ground 2

07 - LOCATION AND TERMINAL DEFINITION OF CONTROL MODULES

Terminal No.	Description	Terminal No.	Description
28	KL15	56	Power Supply Ground 3

ICM (Instrument Cluster Control Module) Terminal Definition

Terminal No.	Description	Terminal No.	Description
1	ESP Switch Input	17	-
2	-	18	-
3	Power Supply Ground	19	Driver Seat Belt Signal Input
4	ECO/SPT Switch Input	20	-
5	Fuel Level Sensor Ground	21	Fuel Signal Input
6	-	22	Fuel Level Auxiliary Signal Input
7	-	23	-
8	-	24	-
9	Low Oil Pressure Signal Input	25	-
10	-	26	Brake Fluid Level Signal Input
11	KL30	27	-
12	Backlight Input	28	-
13	KL15	29	BCAN1-L
14	-	30	BCAN1-H
15	-	31	Steering Wheel Key Input (Mode/ Set)
16	Battery Charging/Discharging Signal	32	-

BCM (Body Control Module) Terminal Definition**BCM (A) Terminal Definition**

Terminal No.	Description	Terminal No.	Description
1-01	Heated Windshield	1-27	Dome Light Output
1-02	FL_DR_IND	1-28	Third Row Dome Light Output
1-03	-	1-29	Rear Defroster Output
1-04	Heated Windshield	1-30	High Speed Wiper Output
1-05	-	1-31	Heated Steering Wheel OUT
1-06	-	1-32	Light Sensor Input
1-07	-	1-33	Front Right Window Regulator Switch
1-08	-	1-34	Front Left Window Regulator Switch
1-09	-	1-35	-
1-10	Rear Left Door Open Signal	1-36	Passenger Side Window Regulator Disable Switch
1-11	-	1-37	Front Right Door Open Signal
1-12	Rear Right Door Open Signal	1-38	-
1-13	Front Left Door Lock State Signal	1-39	Brake Switch Input
1-14	Left Rear View Mirror Shadow Light Output	1-40	Passenger Side Window Regulator Disable Switch Operation Indicator
1-15	FR_DR_IND	1-41	-
1-16	LIN Signal (Shift Module)	1-42	Low Speed Wiper Output
1-17	-	1-43	Low Beam Light Output
1-18	High Beam Light Output	1-44	Horn Output
1-19	Rear Right Window Regulator Switch	1-45	Analog Ground
1-20	Passenger Side Front Right Window Regulator Switch	1-46	Turn Signal Light Switch
1-21	Passenger Side Rear Left Window Regulator Switch	1-47	Rear Left Window Regulator Switch
1-22	Passenger Side Rear Right Window Regulator Switch	1-48	Back Door Open Signal
1-23	Front Left Door Open Signal	1-49	Central Lock Switch Input
1-24	Front Wiper Stop Position Signal	1-50	Central Unlock Switch Input
1-25	-	1-51	-
1-26	Rear Wiper Stop Position Signal	1-52	Engine Hood Contact Switch

BCM (B) Terminal Definition

Terminal No.	Description	Terminal No.	Description
2-01	Heated Steering Wheel indicator	2-13	-
2-02	High Speed CAN Signal Low Side	2-14	Hazard Light Operation Indicator
2-03	-	2-15	High Speed CAN Signal High Side
2-04	-	2-16	-
2-05	ACC Signal Input	2-17	IGN Signal Input
2-06	-	2-18	-
2-07	Rear Fog Input	2-19	Rear Washer Input
2-08	Front Wiper Input	2-20	Front Washer Input
2-09	Rear Defroster Input	2-21	Rear Wiper Input
2-10	Rear View Mirror Fold Input	2-22	Front Wiper Input
2-11	Hazard Light Input	2-23	Light Input
2-12	High Beam - Flash Input	2-24	Wiper Sensitivity Switch

BCM (C) Terminal Definition

Terminal No.	Description	Terminal No.	Description
3-01	Power Supply 3	3-08	Rear Left Window UP Output
3-02	Power Supply 6	3-09	Rear Left Window DOWN Output
3-03	Ground 1	3-10	Power Supply 1
3-04	Ground 2	3-11	Front Right Window UP Output
3-05	Rear Right Window DOWN Output	3-12	Front Right Window DOWN Output
3-06	Rear Right Window UP Output	3-13	Front Left Window UP Output
3-07	Power Supply 2	3-14	Front Left Window DOWN Output

BCM (D) Terminal Definition

Terminal No.	Description	Terminal No.	Description
4-01	-	4-07	-
4-02	Central Unlock Output	4-08	-
4-03	Central Lock Output	4-09	Power Supply 5
4-04	Back Door Unlock Output	4-10	Rear Wiper Output
4-05	Front Washer Output	4-11	-
4-06	-	4-12	Rear Washer Output

BCM (E) Terminal Definition

Terminal No.	Description	Terminal No.	Description
5-01	-	5-11	High Mounted Stop Light Output
5-02	Outside Rear View Mirror Unfold Output	5-12	-
5-03	Outside Rear View Mirror Fold Output	5-13	Heated spray nozzle OUT
5-04	Left Turn Signal Light Output	5-14	Left Daytime Light Output
5-05	Right Turn Signal Light Output	5-15	Right Daytime Light Output
5-06	Anti-theft Horn Output	5-16	Battery Saving Output
5-07	Back-up Light Output	5-17	Rear Fog Light Output
5-08	Left and Right Brake Light Output	5-18	-
5-09	Front Position Light + Backlight + License Plate Light	5-19	-
5-10	Rear Position Light + License Plate Light	5-20	Power Supply 4

DVD Module Terminal Definition**A Terminal Definition**

Terminal No.	Description	Terminal No.	Description
A1	Rear Right +	A5	Rear Right -
A2	Front Right +	A6	Front Right -
A3	Front Left +	A7	Front Left -
A4	Rear Left +	A8	Rear Left -

B Terminal Definition

Terminal No.	Description	Terminal No.	Description
B9	Steering Wheel Key Signal 1	B13	Trigger Power Supply Signal
B10	Steering Wheel Key Ground	B14	-
B11	Steering Wheel Key Signal 2	B15	Operation / Memory Power Supply
B12	Power Supply Ground	B16	Backlight

C Terminal Definition

Terminal No.	Description	Terminal No.	Description
C1	ICAN-H	C7	ICAN-L
C2	Start Signal	C8	Power Switch (Including Reset)
C3	MIC Signal	C9	MIC+ Signal
C4	Control Panel Signal	C10	Control Panel Signal Ground
C5	Camera Power Supply Ground	C11	Camera Power Supply
C6	Camera Video -	C12	Camera Video +

D Terminal Definition

Terminal No.	Description	Terminal No.	Description
D1	-	D7	-
D2	-	D8	-
D3	-	D9	-
D4	-	D10	-
D5	-	D11	-
D6	Encoder A	D12	Encoder A

Reversing Radar Module Terminal Definition

Terminal No.	Description	Terminal No.	Description
1	-	13	-
2	-	14	-
3	Ignition Power Supply	15	Rear Right Probe
4	Rear Right Center Probe	16	Ground
5	BCAN-H	17	Front Left Probe
6	BCAN-L	18	Front Left Center Probe
7	Rear Left Probe	19	Front Right Center Probe
8	Rear Left Center Probe	20	Front Right Probe
9	-	21	-
10	-	22	PAS Switch
11	Probe Power Supply	23	LED
12	Probe Ground	24	-

Airbag Module Terminal Definition

Terminal No.	Description	Terminal No.	Description
1	Curtain Shield Airbag Assembly LH +	26	-
2	Curtain Shield Airbag Assembly LH -	27	-
3	Curtain Shield Airbag Assembly RH -	28	-
4	Curtain Shield Airbag Assembly RH +	29	-
5	KL15	30	Passenger Seat Belt Buckle Switch
6	Ground	31	-
7	-	32	-
8	-	33	PCAN1-L
9	-	34	PCAN1-H
10	Driver Airbag Assembly +	35	-
11	Driver Airbag Assembly -	36	-
12	Acceleration Sensor LH +	37	Acceleration Sensor LH -
13	Front Passenger Airbag Assembly +	38	-
14	Front Passenger Airbag Assembly -	39	-
15	-	40	Passenger Detection
16	Front Seat Side Airbag Assembly LH -	41	-
17	Front Seat Side Airbag Assembly LH +	42	-
18	Front Seat Side Airbag Assembly RH +	43	-
19	Front Seat Side Airbag Assembly RH -	44	-
20	Acceleration Sensor RH +	45	Acceleration Sensor RH -
21	-	46	-
22	Driver Side Pretensioner Seat Belt +	47	-
23	Driver Side Pretensioner Seat Belt -	48	-
24	Passenger Side Pretensioner Seat Belt -	49	Rear Pretensioner Seat Belt LH -
25	Passenger Side Pretensioner Seat Belt +	50	Rear Pretensioner Seat Belt LH +

PEPS Control Module Terminal Definition**PEPS Terminal Definition**

Terminal No.	Description	Terminal No.	Description
1	-	21	-
2	-	22	Clutch Switch Signal
3	B-CAN H	23	Start Switch Indication
4	B-CAN L	24	Start Switch Indication
5	Start Relay Detection	25	Start Switch Illustration
6	Back Door Opener Switch	26	Brake Signal
7	Start Switch 2	27	-
8	Start Switch 1	28	Analog Ground
9	-	29	-
10	RL PEPS Antenna Positive Terminal	30	RL PEPS Antenna Negative Terminal
11	Immobilizer Coil DCT Negative Terminal	31	Immobilizer Coil DCT Positive Terminal
12	RR PEPS Antenna Positive Terminal	32	RR PEPS Antenna Negative Terminal
13	Front Low Frequency Positive Terminal	33	Front Low Frequency Negative Terminal
14	Low Frequency Antenna 4 Positive Terminal	34	Low Frequency Antenna 4 Negative Terminal
15	FR Door Handle Sensor Positive Terminal	35	FR Door Handle Sensor Negative Terminal
16	FL Door Handle Sensor Positive Terminal	36	FL Door Handle Sensor Negative Terminal
17	IGN1 Power Supply	37	Ground
18	IGN1 Relay	38	Start Relay
19	-	39	Start Relay (High)
20	Ignition Signal	40	ACC Relay

Gateway Module Terminal Definition

Terminal No.	Description	Terminal No.	Description
1	BD CAN-H	11	BD CAN-L
2	PWT CAN-L	12	PWT CAN-L
3	-	13	CHS CAN-L
4	-	14	-
5	IFT CAN-L	15	IFT CAN-L
6	DIAG CAN-L	16	DIAG CAN-L
7	-	17	-
8	-	18	KL-15
9	-	19	LK-30
10	-	20	GND

Auto A/C Module

Terminal No.	Description	Terminal No.	Description
1	MODE-P3	21	Ground
2	MODE-P2	22	Sensor -
3	MODE-P1	23	-
4	MIX-P4	24	+5V
5	MIX-P3	25	Solar Sensors
6	MIX-P2	26	-
7	MIX-P1	27	-
8	Blower Relay Control Signal	28	Sensor +
9	-	29	Sensor +
10	CAN-H	30	-
11	CAN-L	31	-
12	KL15	32	Feedback Signal
13	MODE-CP4	33	Speed Control Of Blower
14	MODE-CP3	34	-
15	MODE-CP2	35	Solar Sensors
16	MODE-CP1	36	-
17	REC-P4	37	KL30
18	REC-P3	38	-
19	REC-P2	39	-
20	REC-P1	40	MODE-P4

Center Control Integration Panel

Terminal No.	Description	Terminal No.	Description
1	Speed Control Of Blower	17	Post Defrost Request
2	CAN-L	18	Solar Sensors
3	CAN-H	19	Solar Sensors
4	Backlight Input	20	-
5	KL30	21	Defrosting Output
6	Ground	22	MODE-P3
7	MODE-P4	23	MIX-P4
8	MIX-P3	24	MIX-P2
9	MIX-P1	25	REC-P1
10	REC-P2	26	REC-P3
11	REC-P4	27	MODE-P1
12	MODE-P2	28	Outdoor Temperature Sensor +
13	-	29	Evaporator Temperature Sensor -
14	-	30	Evaporator Temperature Sensor +
15	-	31	KL15
16	Blower Relay Control Signal	32	Solar Sensors

Panoramic Image System Module Terminal Definition

07

Terminal No.	Description	Terminal No.	Description
1	Video Output Signal Ground	21	Video Output Signal
2	Rear Camera Video Signal	22	Rear Camera Video Ground
3	Rear Camera Power Supply	23	Rear Camera Power Supply Ground
4	Front Camera Video Signal	24	Front Camera Video Ground
5	Front Camera Power Supply	25	Front Camera Power Supply Ground
6	Right Camera Video Signal	26	Right Camera Video Ground
7	Right Camera Power Supply	27	Right Camera Power Supply Ground
8	Left Camera Video Signal	28	Left Camera Video Ground
9	Left Camera Power Supply	29	Left Camera Power Supply Ground
10	-	30	-
11	-	31	-
12	-	32	-
13	-	33	-
14	-	34	-
15	CAN1-L	35	CAN1-H
16	-	36	-
17	-	37	-
18	-	38	-

Terminal No.	Description	Terminal No.	Description
19	IGN (For Logical Judgment)	39	Switch / Point-touch Type/ Low Efficiency
20	AVM Power Supply	40	Ground

PLGM (Power Tail Door Module)**PLGM (A) Terminal Definition**

Terminal No.	Description	Terminal No.	Description
1-01	PLG Power1	1-08	-
1-02	Releasw Motor	1-09	PLG Signal Power
1-03	-	1-10	-
1-04	Motor1 +	1-11	Motor1 -
1-05	Closure Motor +	1-12	Closure Motor-
1-06	-	1-13	-
1-07	GND	1-14	-

PLGM (B) Terminal Definition

Terminal No.	Description	Terminal No.	Description
2-01	-	2-17	LIN
2-02	Handle switch	2-18	-
2-03	Inner switch	2-19	-
2-04	Driver switch	2-20	-
2-05	INNER & Global indicator	2-21	-
2-06	-	2-22	-
2-07	FULL switch	2-23	DETECT KEY
2-08	-	2-24	-
2-09	PCM SW	2-25	Hall b out
2-10	Half latch switch	2-26	Hall a out
2-11	-	2-27	Hall Vcc
2-12	PinchStrip sensor LH	2-28	Hall GND
2-13	PinchStrip sensor RH	2-29	-
2-14	PinchStrip sensor GND	2-30	-
2-15	-	2-31	-
2-16	BD CAN high	2-32	BD CAN LOW

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