

## Раздел 11-17

Блок ECU подключен к бортовой электросети тремя пожевыми разъемами. На рисунке они обозначены, как ①, ② и ③. Ниже, в таблицах первая цифра обозначает номер разъема, вторая номер пожевого контакта в этом разъеме.

### Назначение контактов в разъеме ①

Pin No.	Pin Description	Reference Pin	Open-circuit Voltage	Signal-input Effective Voltage
1.01	Не используется			
1.02	ECU питание+ _3	1.05	Battery Voltage	
1.03	ECU питание + _4	1.05	Battery Voltage	
1.04	Positive Power Supply Output 1 (High End Drive)	1.05	Battery Voltage-0.26V	
1.05	ECU Power-_3	Body	0V	
1.06	ECU Power-_4	Body	0V	
1.07	Не используется			
1.08	ECU Power + _1	1.05	Battery Voltage	
1.09	ECU Power + _2	1.05	Battery Voltage	
1.10	ECU Power-_1	Body	0V	
1.11	ECU Power-_2	Body	0V	
1.12				
1.13	Fan Relay 2	1.05	Battery Voltage-0.26V	
1.14	Не используется			
	Не используется			
1.21	Не используется			
1.22	Diagnosis Lamp	1.05		
1.23				
1.24	Idling Lift Switch 1, Inner Earth	1.05	0V	
1.25	Idling Lift Switch 1, Signal	1.24	4.9-5.1V	
1.26	Idling Lift Switch 2, Signal	1.05	4.9-5.1V	
1.27				
1.28	Idling Lift Switch 2, Earth	1.05	0V	
1.29	Digital Earth	1.05	0V	
1.30	Inner Earth	1.05	0V	

1.31	Cruise Control Button " Setup/ Acceleration"	1.05	0-0.0102V	High Level: >3.98V Low Level: <1.79V
1.32	Diesel Engine Starting Switch Signal			High Level: >3.75V Low Level: <2.18V
1.33	Diesel Engine Output Signal	1.05		
1.34	CAN_L	1.05/1.35	2~3V	High Level: >900mV Low Level: <500mV
1.35	CAN_H	1.05/1.34	2~3V	High Level: >900mV Low Level: <500mV
1.36				
1.37	Starting Relay High End	1.05	Relay: No Start 3.5 V, Start 24V	
1.38	Cold Start Lamp	1.05	2.91-3.91V	
1.39	Warning Lamp	1.05	2.91-3.91V	
1.40	T15			ECU Activation Voltage: 3.35~24V
1.41	Main Brake Switch	1.05	0V	High Level: >3.75V Low Level: <2.18V
1.42	Air Conditioner Request Switch	1.26	0V	High Level: >3.75V Low Level: <2.18V
1.43	Oil-Water Separation Water Level Sensor	1.05	4.9-5.1V	
1.44	Parking Brake	1.05	4.755-5.25V	
1.45				
1.46	Cruise Control Button "Recover"	1.05	0-0.0102V	High Level: >3.98V Low Level: <1.97V
1.47	Diesel Engine Stop Switch	1.05		
1.48	Low Idle Switch	1.05/1.29	5.53-5.9V	High Level: >3.75V Low Level: <2.18V
1.49	Redundant Brake Switch	1.05	0V	High Level: >3.75V Low Level: <2.18V
1.50	Starting Relay Low End	1.05	Relay: No Start 3.5V, Start 0V	
1.51				
1.52				
1.53				
1.54				
1.55	Air Intake Preheating Relay	1.05	Vbat-0.45V	
1.56	Water-in-oil Warning Lamp	1.05	2.91-3.91V	
1.57				

1.58	Fan Relay 2 Earth			
1.59	Air Intake Preheating Relay Earth	Body	OV	
1.60				
1.61	T50 Starting Switch	1.05/1.59	OV I	Input High Level: >3.61V Input Low Level: <2.33V
1.62	Torque Limiting Signal (Multi-state Switch)	1.65	4.9-5.1V	
1.63				
1.64	Cruise Control Button "Setup/Slowdown"	1.05	0-0.0102V	
1.65	Torque Limiting Inner Earth	Body	OV	
1.66	Clutch Switch Signal	1.05	OV	High Level: >3.75V Low Level:
1.67	Fan Speed Sensor Earth	Body	OV	
1.68	Fan Speed Sensor Power	1.67	4.9-5.1V	
1.69	Fan Speed Sensor Signal	1.67	4.84-5.16V	High Level: >3.69V Low Level:
1.70	Vehicle Speed Sensor Earth	Body	OV	
1.71	Speed Sensor Signal	1.70	4.05-4.34V	
1.72	Diagnostic Request Switch	1.05	0-0.0102V	High Level: >3.69V Low Level:
1.73				
1.74	Cruise Control Button "Switch"	1.05	0-0.0102V	High Level: >3.98V Low Level:
1.75				
1.76	Accelerator Pedal Position Sensor 2 Earth	Body	OV	
1.77	Accelerator Pedal Position Sensor 1 Power	1.78	4.9-5.1V	
1.78	Accelerator Pedal Position Sensor 1 Earth	Body	OV	
1.79	Accelerator Pedal Position Sensor 1 Signal	1.78	OV	Without Press: 0.75V Press to the Floor: 3.84 V
1.80	Accelerator Pedal Position Sensor 2 Signal	1.76	OV	Without Press: 0.375V Press to the Floor: 1.92 V
1.81	Oil Filter Pressure Difference Sensor	1.83	5.75-5.85V	
1.82				
1.83	Oil Filter Pressure Difference Sensor Earth	Body	OV	
1.84	Accelerator Pedal Position Sensor 2 Power	1.83	4.9~5.1V	
1.85	Neutral Gear Switch	1.05/1.29	0~0.0105V	
1.86				

1.87				
1.88				
1.89	K Wire	1.05	Battery Voltage	

## Назначение контактов в разъеме ②

Pin No.	Pin Description	Reference Pin	Open-circuit Voltage	Signal-input Effective Voltage
2.01	Fan Solenoid Valve	1.05	2.91~3.91V	
2.02				
2.03	Power Positive Output 2 (High-end Drive)	1.05	Battery Voltage	
2.04	Fuel Heating Solenoid Valve	1.05	Vbat-0.45V	
2.05	Fuel Heating Solenoid Valve Inner Earth	Body	0V	
2.06	Exhaust Brake Solenoid Valve	1.05	2.91~3.91V	
2.07				
2.08				
2.09	Camshaft Speed Sensor Signal	2.10	231~260mV	
2.10	Camshaft Speed Sensor Earth	1.05	0V	
2.11	Air Conditioner Compressor Relay	1.05	2.91~3.91V	
2.12	Rail Pressure Sensor Earth	1.05	0V	
2.13	Rail Pressure Sensor Power	2.12	4.9~5.1V	
2.14	Rail Pressure Sensor Signal	2.12	4.9~5.1V	
2.15	Coolant Temperature Sensor	2.26	4.9~5.1V	
2.16	Remote Throttle Sensor 1 Power	1.05	4.9~5.1V	
2.17	Remote Throttle Sensor 1 Earth	Body	0V	
2.18	Remote Throttle Sensor 2 Earth	Body	0V	
2.19	Crankshaft Speed Sensor Earth	1.05	0V	
2.20				
2.21	Remote Throttle Sensor 1 Signal	2.17	0V	Without Press: 0.75V Press to the
2.22	Remote Throttle Sensor Signal	2.18	0V	Without Press: 0.375V Press to the Floor: 1.92V
2.23	Crankshaft Speed Sensor Signal	2.19	231~260mV	
2.24	Oil Pressure Sensor Earth	Body	0V	
2.25	Inlet Pressure, Temperature Sensor Earth	Body	0V	
2.26	Coolant Temperature Sensor Earth	Body	0V	
2.27	Oil Pressure Sensor Signal	2.24	5.243~5.406	
2.28	Oil Pressure Sensor Signal	2.24	4.9~5.1V	

2.29	Exhaust Brake Switch	2.17	0V	High-Level: > 3.57 V Low
2.30				
2.31	Remote Throttle Sensor 2 Power	2.17	4.9~5.1V	
2.32	Oil Pressure Sensor Power	2.17	4.9~5.1V	
2.33	Air-Inlet Boost Pressure Sensor Power	2.17	4.9~5.1V	
2.34	Air-Inlet Boost Pressure Sensor Signal	2.25	5.243 ~ 5.406	
2.35	Fuel Temperature Signal	2.26	4.9 ~ 5.1 V	
2.36	Air Inlet Temperature Sensor Signal	2.25	4.9~5.1V	

## Назначение контактов в разъеме ③

Pin No.	Pin Description	Reference Pin	Open-circuit Voltage	Signal-input Effective Voltage
3.01	Fuel Injector 1 Capacitance High End 2 (Cylinder 5 Fuel Injector High End)	1.02		
3.02	Fuel Injector 2 Capacitance High End 2 (Cylinder 6 Fuel Injector High End)			
3.03	Fuel Injector3 Capacitance High End 2 (Cylinder 4 Fuel Injector High			
3.04	Fuel Injector 1 Capacitance High End 1 (Cylinder 1 Fuel Injector High End)			
3.05	Fuel Injector1 Capacitance High End 1 (Cylinder 3 Fuel Injector High			
3.06	Fuel Injector 3 Capacitance High End 1 (Cylinder 2 Fuel Injector High End)			
3.07				
3.08				
3.09	Flow Metering Unit Power(BAT+)	1.05	Vbat-0.26V	
3.10	Flow Metering Unit Power PWM	1.05	2.91~3.91V	
3.11	Fuel Injector 3 Capacitance High End 1 (Cylinder 2 Fuel Injector High End)			
3.12	Fuel Injector 2 Capacitance High End 1 (Cylinder 3 Fuel Injector High End)			
3.13	Fuel Injector 1 Capacitance High End 1 (Cylinder 1 Fuel Injector High			
3.14	Fuel Injector 3 Capacitance High End 2 Cylinder 4 Fuel Injector High			
3.15	Fuel Injector 2 Capacitance High End 2 (Cylinder 6 Fuel Injector High			
3.16	Fuel Injector 1 Capacitance High End 2 (Cylinder 5 Fuel Injector High			