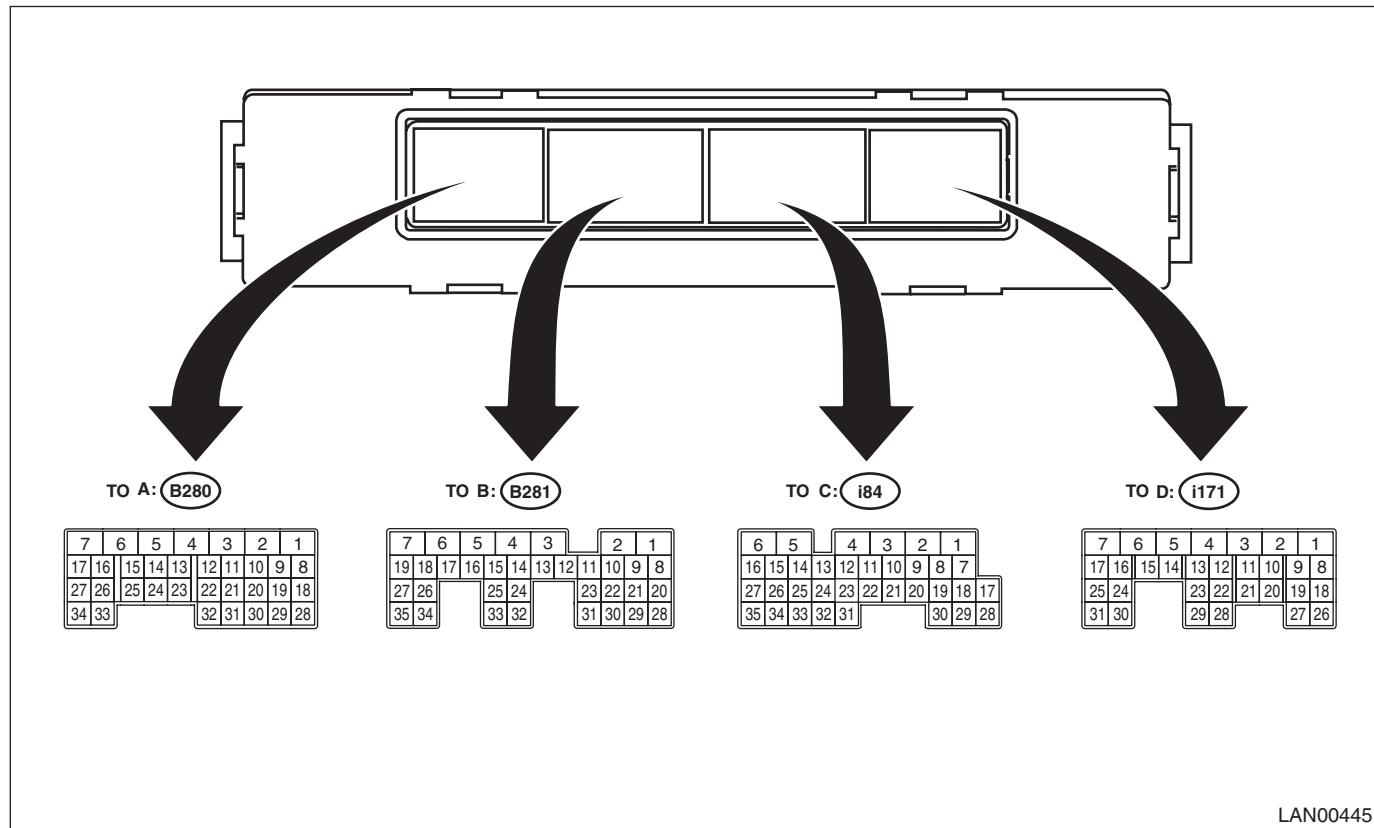


Control Module I/O Signal

BODY CONTROL SYSTEM (DIAGNOSTICS)

5. Control Module I/O Signal

A: ELECTRICAL SPECIFICATION



Description	Terminal No.	Signal (V or Ω)	Note
		Ignition switch ON (engine OFF)	
Ignition power supply (rear wiper)	A5 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 10 — 13 V	Ignition switch OFF \rightarrow ON
Battery power supply (shift lock/key lock)	B6 \leftrightarrow Chassis ground	10 — 13 V	Always
Battery power supply (door lock)	D1 \leftrightarrow Chassis ground	10 — 13 V	Always
Battery power supply (control)	C6 \leftrightarrow Chassis ground	10 — 13 V	Always
Ground	A1 \leftrightarrow Chassis ground	Less than 1.5 V	Always
	C1 \leftrightarrow Chassis ground		
Battery power supply (back-up)	B7 \leftrightarrow Chassis ground	10 — 13 V	Always
Ignition power supply	B3 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 10 — 13 V	Ignition switch OFF \rightarrow ON
ACC power supply	A32 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 10 — 13 V	Ignition switch OFF \rightarrow Accessory ON
Key-in switch	A4 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 10 — 13 V	Key inserted (models without keyless access)
ACC input	A4 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 10 — 13 V	ACC ON (model with keyless access)
P range SW	B18 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	P range to other than P range
Stop light SW	A10 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 8 V	Stop light switch OFF \rightarrow ON
Door SW (driver's)	C14 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Front right door closed \rightarrow open
Door SW (passenger's)	C13 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Front left door closed \rightarrow open

Control Module I/O Signal

BODY CONTROL SYSTEM (DIAGNOSTICS)

Description	Terminal No.	Signal (V or Ω)	Note
		Ignition switch ON (engine OFF)	
Door SW (rear right)	C25 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Rear right door closed \rightarrow open
Door SW (rear left)	C24 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Rear left door closed \rightarrow open
Rear gate SW/trunk SW	C33 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Rear gate/trunk closed \rightarrow open
Opener SW (trunk/rear gate)	C10 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Rear gate/trunk opener switch ON
Manual switch (LOCK)	C9 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Door lock switch ON
Manual switch (UNLOCK)	C20 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Door unlock switch ON
Lighting AUTO	B16 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Switch at AUTO position
Lighting II	A34 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Switch at II position
	B34 \leftrightarrow Chassis ground		
Lighting I	B17 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Switch at I position
Dimmer passing	B25 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Switch at passing position
Dimmer Hi beam	B15 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Switch at Hi beam position
Front fog light SW	B26 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Front fog light switch ON
Illumination sensor power supply	B1 \leftrightarrow A29	Less than 1.5 V \rightarrow 4.5 V or more	Ignition switch OFF \rightarrow ON
Illumination sensor signal	A19	0.2 — 4.5 V	Ignition switch OFF \rightarrow ON
Ground (illumination sensor)	A29 \leftrightarrow Chassis ground	Less than 1.5 V	Always
Rear wiper SW ON	A12 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Switch at ON position
Rear wiper SW INT	A22 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Switch at INT position
Rear washer SW	A30 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Switch at ON position
Illumination SW (Vi1)	D12 \leftrightarrow Chassis ground	Approx. 5 V	While clearance light illuminates
Illumination SW (Vi2)	D22 \leftrightarrow Chassis ground	0.5 — 4.8 V	
Illumination SW (Vi3)	D28 \leftrightarrow Chassis ground	Less than 1.5 V	Always
Bright SW	C21 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	Switch at ON position
Reverse SW (MT)	B12 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 8 V or more	Reverse SW ON
Impact sensor	A11 \leftrightarrow Chassis ground	8 V or more	Apply an impact
Hi-speed CAN communication circuit 1 (Hi)	B20	Serial communication	Except for sleep status*1
Hi-speed CAN communication circuit 1 (Lo)	B28		
Hi-speed CAN communication circuit 2 (Hi)	C27	Serial communication	Except for sleep status*1
Hi-speed CAN communication circuit 2 (Lo)	C35		
Immobilizer antenna (B)	B22	Serial communication	Communication with ignition key in progress
Immobilizer antenna (A)	B10		
Immobilizer antenna amplifier GND	B30 \leftrightarrow Chassis ground	Less than 1.5 V	Always
Immobilizer antenna amplifier power supply	B2 \leftrightarrow B30	4.5 — 5.5 V	Communication with ignition key in progress
Security UART	A21	Serial communication	Always
Front wiper return	A2 \leftrightarrow Chassis ground	8 V	When front wiper is operated
Rear washer switch	A30 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	When rear washer switch is ON
Door UNLOCK (driver's seat) output	D4 \leftrightarrow Chassis ground	Less than 0.5 V \rightarrow 8 V or more	When driver's side door unlock is output

Control Module I/O Signal

BODY CONTROL SYSTEM (DIAGNOSTICS)

Description	Terminal No.	Signal (V or Ω)	Note
		Ignition switch ON (engine OFF)	
Keyless entry communication line	D11	Serial communication	When door lock/unlock is operated with the keyless transmitter, or when TPMS is operated
Rear defogger switch	C18 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 8 V or more	When the rear defogger switch is ON
Parking brake switch	C32 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.5 V	When parking brake is ON
Shift lock solenoid	B5 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 8 V or more	When shift lock is operating (AT models)
Key lock solenoid	B4 \leftrightarrow Chassis ground	Less than 1.5 V \rightarrow 8 V or more	LOCK status is ON (AT models without keyless access)
Rear wiper ON output	A7 \leftrightarrow Chassis ground	Less than 0.5 V \rightarrow 8 V or more	Rear wiper operation in progress
Rear wiper return	A6 \leftrightarrow Chassis ground	Less than 0.5 V \rightarrow 8 V or more	Rear wiper operation in progress
Door LOCK output	D2 \leftrightarrow Chassis ground	Less than 0.5 V \rightarrow 8 V or more	When LOCK signal is output
Door UNLOCK output	D3 \leftrightarrow Chassis ground	Less than 0.5 V \rightarrow 8 V or more	When UNLOCK signal is output
Rear gate/trunk UNLOCK output	D7 \leftrightarrow Chassis ground	Less than 0.5 V \rightarrow 8 V or more	When UNLOCK signal is output
Lighting relay power supply	A3 \leftrightarrow Chassis ground	10 — 13 V	ACC or key-in SW ON
	B19 \leftrightarrow Chassis ground	10 — 13 V	ACC or key-in SW ON
Lighting relay Hi output	A17 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	Dimmer SW at Hi position
Lighting relay Lo output	B35 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	Lighting II SW at ON position
Lighting Lo relay output 2	A27 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	Lighting II SW at ON position
Lighting relay I output	A16 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	Lighting I SW at ON position
Front fog light output	A15 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	Front fog light SW at ON position
DRL cancel output	D10 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	Headlight switch ON or Hi beam ON, passing switch ON
Illumination output	B8	Pulse output	Illumination ON
	C16	Pulse output	Illumination ON
Key ring illumination	A25	Pulse output	Illumination ON
Room light output	C4	Pulse output	Room light ON (doors interlocked)
Map light output	D8	Pulse output	Map light ON (keyless answer-back, etc.)
Luggage/trunk light output	C3	Pulse output	Luggage/trunk at open state
Rear defogger relay output	A26 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	Rear defogger SW ON
Wiper deicer relay output	D9 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	Wiper deicer SW ON
Turn/hazard output	D18 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	When answer-back is output
Security horn output	A24 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	When security is operating
Security light	D26	Pulse control	When security light is illuminating
Answer-back buzzer output	A20 \leftrightarrow Chassis ground	8 V or more \rightarrow less than 1.0 V	When answer-back operates
Immobilizer communication	A31	Serial communication	(Model without keyless access)

*1: For CAN sleep state, hold on for approx. one minute with ignition OFF and the doors, trunk, and rear gate all closed.