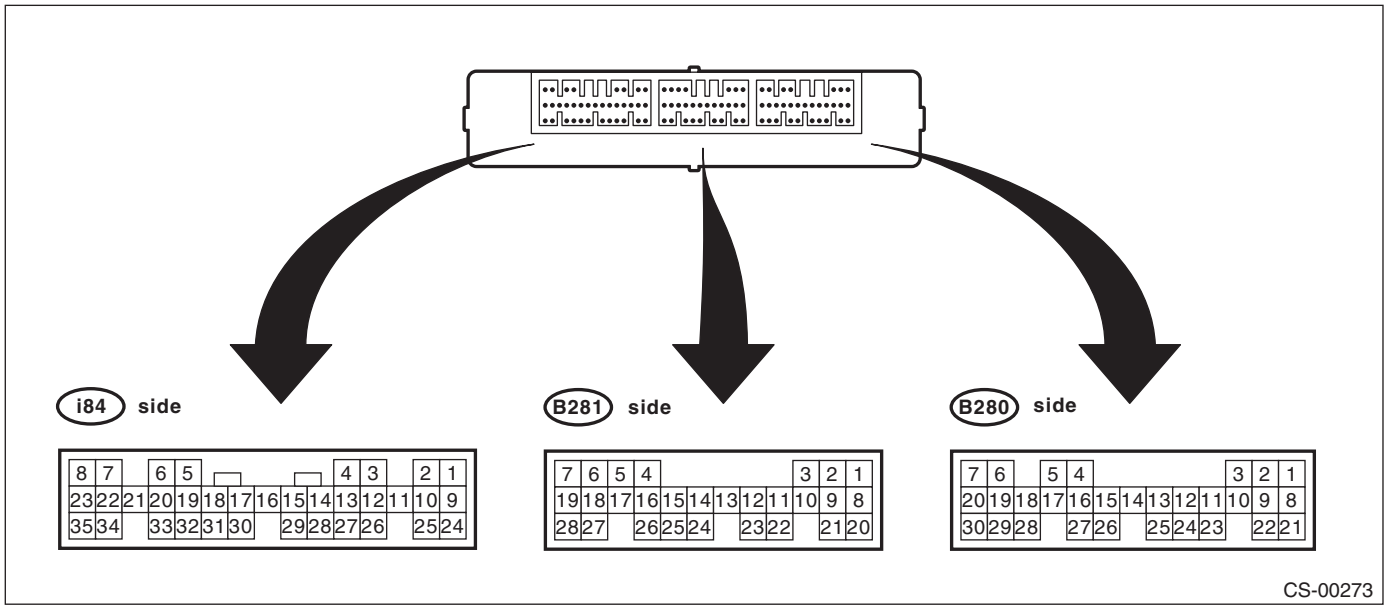
5. Control Module I/O Signal

A: ELECTRICAL SPECIFICATION



Description	Connector No.	Terminal No.	Signal (V)	Note
			Ignition switch ON (engine OFF)	
System control power supply	B281	2	10 — 13 V	Always
Backup power supply	B280	7	10 — 13 V	Always
Ignition power supply	i84	1	10 — 13 V	Ignition ON
ACC power supply	i84	24	10 — 13 V	ACC ON
Ground	i84	21	0 V	Always
	B281	9		
	B281	8		
	B280	22		
Key warning switch	B281	7	10 — 13 V	When ignition key is inserted
Stop light switch	B281	23	10 — 13 V	When brake pedal is depressed
Illumination control switch (Bright switch)	i84	30	10 — 13 V (at dimmer ON)	Cancel the extinction of the clock and audio illumination
Illumination control switch	i84	30	10 — 13 V (at dimmer ON)	Extinct the clock and audio illumination
Illumination volume (Vi1)	i84	10	4.5 — 5.5 V	Small light ON
Illumination volume (Vi2)	i84	2	0.5 — 4.5 V	—
Illumination volume (Vi3)	i84	25	0 V	Ground circuit
Illumination output	i84	5	10 — 13 V	Small light ON
Front fog light input	B281	17	10 — 13 V	Front fog light ON
Door switch input driver's seat	i84	19	Less than 1 V (10 — 13 V at OFF)	Driver's door open (ON)
Door switch input passenger's seat	i84	32	Less than 1 V (10 — 13 V at OFF)	Passenger's door open (ON)
Door switch input rear RH seat	i84	18	Less than 1 V (10 — 13 V at OFF)	Rear RH door open (ON)
Door switch input rear LH seat	i84	31	Less than 1 V (10 — 13 V at OFF)	Rear LH door open (ON)
Door switch trunk/rear gate	i84	17	Less than 1 V (10 — 13 V at OFF)	Trunk/rear gate open (ON)

Description	Connector No.	Terminal No.	Signal (V)	Note
			Ignition switch ON (engine OFF)	
Manual switch (LOCK)	i84	15	Less than 1 Ω	Door lock switch ON
Manual switch (UNLOCK)	i84	29	Less than 1 Ω	Door unlock switch ON
Door lock power supply	i84	34	10 — 13 V	Always
All door lock output	i84	7	10 — 13 V	Manual lock switch, door key switch ON
Driver's door UNLOCK output	i84	23	10 — 13 V	Driver's seat unlock signal ON
All door UNLOCK output	i84	8	10 — 13 V	ALL door unlock signals ON
Rear gate UNLOCK output	i84	22	10 — 13 V	When the rear gate release switch is ON with all seats unlocked
Rear gate release switch	B281	22	0 V	Rear gate release switch ON
Key/shift lock power supply	B281	1	10 — 13 V	Always
Shift lock output	B280	6	10 — 13 V	Key-lock warning SW ON, ignition switch ON, shift position "P" range, foot brake ON (AT Only)
Key locking output	B280	5	10 — 13 V	Other than "P" range, ignition switch ON
Wiper deicer switch	i84	14	0 V	Wiper deicer switch ON
Wiper deicer relay output	B280	14	0 V	Wiper deicer relay ON
Rear defogger switch	i84	28	0 V	Rear defogger switch ON
Rear defogger relay output	B281	16	0 V	Rear defogger relay ON
Shift switch (ON)	B281	26	0 V	At shift lever manual mode
Shift switch (UP)	B281	15	0 V	At shift lever manual mode UP
Shift switch (DOWN)	B281	25	0 V	At shift lever manual mode DOWN
Shift button switch	B281	14	0 V	When shift lever release button is operated
P range switch	B281	13	0 V	Shift range P position
Impact sensor	B281	5	8 V or more	Impact sensor ON (Model with impact sensor)
Fuel level sensor	B281	19	0 — 102.3 Ω	Resistance differs according to the fuel level (Displays resistance combining level gauge main and sub)
Ambient sensor	B281	3	0.5 — 4.5 V	SIG
	B281	10	0 V	GND
Seat belt switch (Driver's seat)	i84	4	0 V	When driver's seat belt is worn
Seat belt switch (Passenger's seat)	i84	13	0 V	When passenger's seat belt is worn
Seat belt warning light (Driver's seat)	i84	20	0 V	When driver's seat belt is worn
Seat belt warning light (Passenger's seat)	B280	27	0 V	When passenger's seat belt is worn
Rear wiper switch (ON)	B281	6	0 V	Rear wiper switch ON
Rear wiper switch (INT)	B281	18	0 V	Rear wiper switch ON
Rear washer switch	B281	27	0 V	Rear washer switch ON
Rear wiper power supply	B280	21	10 — 13 V	Ignition switch ON
Rear wiper ON output	B280	1	10 — 13 V	Rear wiper switch ON
Rear wiper return	B280	8	0 V	At wiper reversing
		1 — 8	0 V	
Room light output	B280	3	0 V	When LOCK, UNLOCK with keyless entry

Description	Connector No.	Terminal No.	Signal (V)	Note
			Ignition switch ON (engine OFF)	
Map light output	B280	2	0 V	When using map light
		9	0 V	When using map light
Key ring illumination output	B280	4	0 V	Ignition key removed, driver's door open
Turn hazard output	B280	12	0 V	When operating keyless entry answer back
Keyless buzzer output	i84	6	10 — 13 V	When operating keyless entry answer back
Security horn output	B280	11	0 V	When operating security horn
Security indicator light	i84	33	0 V	At ignition key removed, immobilizer operating
TPMS registration check signal input	B281	4	0 V	When inputting registration check signal
Keyless communication	i84	9	Serial communication	At keyless entry signal received
High-speed CAN circuit (Hi)	B280	20	Between B20 — B30 Serial communication	At communicating (Sending and receiving)
High-speed CAN circuit (Lo)	B280	30		
Low-speed CAN circuit 1 (Hi)	i84	27	Between A25 — A26 Serial communication	At communicating (Sending and receiving)
Low-speed CAN circuit 1 (Lo)	i84	26		
Low-speed CAN circuit 2 (Hi)	B280	26	Between B25 — B27 Serial communication	At communicating (Sending and receiving) (Model with auto A/C)
Low-speed CAN circuit 2 (Lo)	B280	25		
Immobilizer antenna	B281	20 — 21	Serial communication	
Immobilizer communication (Main)	B280	18 (Back-up 28)	Serial communication	
Subaru Select Monitor communication	B280	19	Serial communication	

B: WIRING DIAGRAM

Refer to the electrical wiring diagram. <Ref. to WI-109, WIRING DIAGRAM, CAN Communication System.>