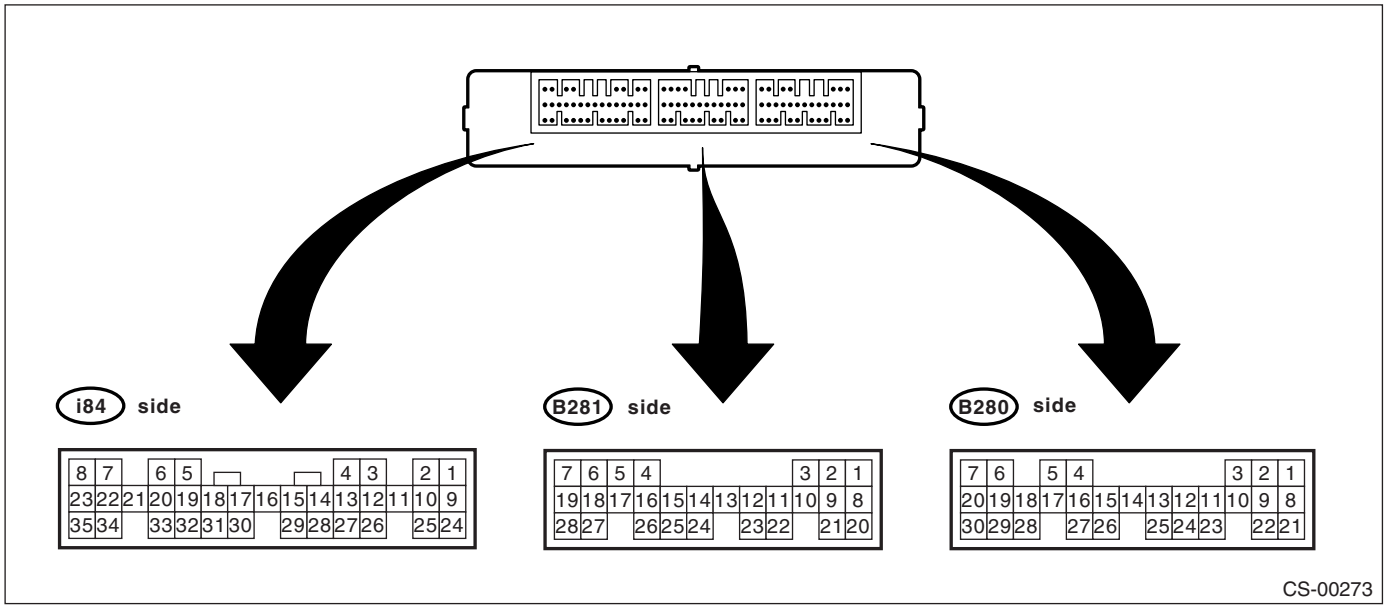
5. Control Module I/O Signal

A: ELECTRICAL SPECIFICATION



Description	Connector No.	Terminal No.	Signal (V) Ignition switch ON (Engine OFF)	Note
System control power supply	B281	C2	10 — 13 V	Always
Backup power supply	B280	B7	10 — 13 V	Always
Ignition power supply	i84	A1	10 — 13 V	Ignition ON
ACC power supply	i84	A24	10 — 13 V	ACC ON
Ground	i84	A21	0 V	Always
	B281	C9		
	B281	C8		
	B280	B22		
Key warning switch	B281	C7	10 — 13 V	When ignition key inserted
Stop light switch	B281	C23	10 — 13 V	When brake pedal depressed
Illumination control switch (Bright switch)	i84	A30	10 — 13 V (at dimmer ON)	Cancel the extinction of the clock and audio illumination
Illumination control switch	i84	A30	10 — 13 V (at dimmer ON)	Extinct the clock and audio illumination
Illumination volume (Vi1)	i84	A10	4.5 — 5.5 V	Small light ON
Illumination volume (Vi2)	i84	A2	0.5 — 4.5 V	—
Illumination volume (Vi3)	i84	A25	0 V	Ground circuit
Illumination output	i84	A5	10 — 13 V	Small light ON
Front fog light input	B281	C17	10 — 13 V	Front fog light ON
Door switch input Driver's seat	i84	A19	Less than 1 V (10 — 13 V at OFF)	Driver's door open (ON)
Door switch input Passenger's seat	i84	A32	Less than 1 V (10 — 13 V at OFF)	Passenger's door open (ON)
Door switch input Rear RH seat	i84	A18	Less than 1 V (10 — 13 V at OFF)	Rear RH door open (ON)
Door switch input Rear LH seat	i84	A31	Less than 1 V (10 — 13 V at OFF)	Rear LH door open (ON)
Door switch Trunk/Rear gate	i84	A17	Less than 1 V (10 — 13 V at OFF)	Trunk/Rear gate open (ON)
Manual switch (LOCK)	i84	A15	Less than 1 Ω	Door lock switch ON

Description	Connector No.	Terminal No.	Signal (V) Ignition switch ON (Engine OFF)	Note
Manual switch (UNLOCK)	i84	A29	Less than 1 Ω	Door unlock switch ON
Door lock power supply	i84	A34	10 — 13 V	Always
All door lock output	i84	A7	10 — 13 V	Manual lock switch, door key switch ON
Driver's door UNLOCK output	i84	A23	10 — 13 V	Driver's seat unlock signal ON
All door UNLOCK output	i84	A8	10 — 13 V	ALL door unlock signals ON
Rear gate UNLOCK output	i84	A22	10 — 13 V	When rear gate release switch ON with all seats unlocked
Rear gate release switch	B281	C22	0 V	Rear gate release switch ON
Key/shift lock power supply	B281	C1	10 — 13 V	Always
Shift lock output	B280	B6	10 — 13 V	Ignition switch ON, shift position "P" range, foot brake ON (Only AT)
Key locking output	B280	B5	10 — 13 V	Other than "P" range, ignition switch ON
Wiper deicer switch	i84	A14	0 V	Wiper deicer switch ON
Wiper deicer relay output	B280	B14	0 V	Wiper deicer relay ON
Rear defogger switch	i84	A28	0 V	Rear defogger switch ON
Rear defogger relay output	B281	B16	0 V	Rear defogger relay ON
Shift switch (ON)	B281	C26	0 V	At Manual mode
Shift switch (UP)	B281	C15	0 V	At Manual mode UP
Shift switch (DOWN)	B281	C25	0 V	At Manual mode DOWN
Shift button switch	B281	C24	0 V	When shift lever release button is operated
P range switch	B281	C13	0 V	Shift range P position
Impact sensor	B281	C5	8 V or more	Impact sensor ON (Model with impact sensor)
Fuel level sensor	B281	C19	0 — 102.3 Ω	Resistance differs according to the fuel level (displays resistance combining level gauge main and sub)
Ambient temperature sensor	B281	C3	0.5 — 4.5 V	SIG
	B281	C10	0 V	GND
Seat belt switch (driver's seat)	i84	A4	0 V	When driver's seat belt is worn
Seat belt switch (Passenger's seat)	i84	A13	0 V	When passenger's seat belt is worn
Seat belt warning light (driver's seat)	i84	A20	0 V	When driver's seat belt is worn
Seat belt warning light (Passenger's seat)	B280	C27	0 V	When passenger's seat belt is worn
Rear wiper switch (ON)	B281	C6	0 V	Rear wiper switch ON
Rear wiper switch (INT)	B281	C18	0 V	Rear wiper switch ON
Rear washer switch	B281	C27	0 V	Rear washer switch ON
Rear wiper power supply	B280	B21	10 — 13 V	Ignition switch ON
Rear wiper ON output	B280	B1	10 — 13 V	Rear wiper switch ON
Rear wiper return	B280	B8	0 V	At wiper reversing
		B1 — B8	0 V	
Room lamp output	B280	B3	0 V	When LOCK, UNLOCK with keyless entry
Map lamp output	B280	D2	0 V	When using map lamp
		D9	0 V	When using map lamp

Description	Connector No.	Terminal No.	Signal (V)	Note
			Ignition switch ON (Engine OFF)	
Key ring illumination output	B280	B4	0 V	Ignition key removed, driver's door open
Turn hazard output	B280	B12	0 V	When operating keyless entry answer back
Keyless Buzzer Output	i84	A6	10 — 13 V	When operating keyless entry answer back
Security horn output	B280	B11	0 V	When operating security horn
Security indicator light	i84	A33	0 V	At ignition key removed, immobilizer operating
TPMS registration check signal input	B281	C4	0 V	When inputting registration check signal
Keyless communication	i84	A9	Serial communication	At keyless entry signal received
High-speed CAN circuit (Hi)	B280	B20	Between B20 — B30 Serial communication	At communicating (sending and receiving)
High-speed CAN circuit (Lo)	B280	B30		
Low-speed CAN circuit 1 (Hi)	i84	A27	Between A25 — A26 Serial communication	At communicating (sending and receiving)
Low-speed CAN circuit 1 (Lo)	i84	A26		
Low-speed CAN circuit 2 (Hi)	B280	B26	Between B25 — B27 Serial communication	At communicating (sending and receiving) (Model with auto A/C)
Low-speed CAN circuit 2 (Lo)	B280	B25		
Immobilizer antenna	B281	C20 — C21	Serial communication	
Immobilizer communication (Main)	B280	B18 (Back-up B28)	Serial communication	
Subaru Select Monitor communication	B280	B19	Serial communication	

B: WIRING DIAGRAM

Refer to the electrical wiring diagram. <Ref. to WI-78, WIRING DIAGRAM, CAN Communication System.>