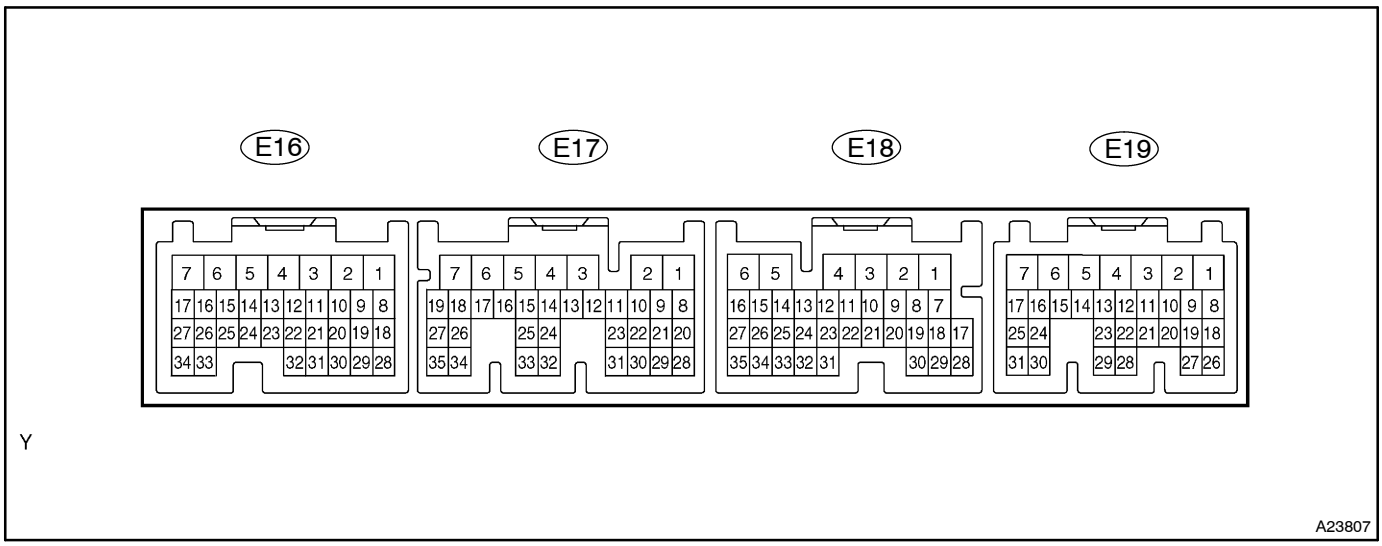
DIDY4–01

TERMINALS OF ECU



HINT:
Each engine ECU terminal's standard voltage is shown in the table below.
In the table, first follow the information under "Condition". Look under "Symbols (Terminal No.)" for the terminals to be inspected. The standard voltage between the terminals is shown under "STD Voltage".
Use the illustration above as a reference for the engine ECU terminals.

Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage
BATT (E19–6) – E1 (E16–1)	B–R – BR	Always	9 to 14 V
+B (E19–1) – E1 (E16–1)	B–Y – BR	Ignition switch ON	9 to 14 V
VC (E16–18) – E2 (E16–28)	L–R – BR	Ignition switch ON	4.5 to 5.5 V
VCC (E18–33) – E2C (E18–34)	L–R – BR–W	Ignition switch ON	4.5 to 5.5 V
VA (E18–27) – E2C (E18–34)	R–Y – BR–W	Accelerator pedal fully closed	0.3 to 0.8 V
		Accelerator pedal fully opened	2.9 to 4.9 V
VAS (E18–35) – E2C (E18–34)	P–L – BR–W	Accelerator pedal fully closed	0.3 to 0.8 V
		Accelerator pedal fully opened	2.9 to 4.9 V
IDL (E19–15) – E1 (E16–1)	LG–B – BR	Accelerator pedal fully closed	9 to 14 V
		Accelerator pedal fully opened	0 to 3 V
PIM (E17–25) – E2 (E16–28)	P–L – BR	Apply vacuum 40 kPa (300 mmHg, 11.8 in.Hg)	1.0 to 1.8 V
		Apply vacuum 135 kPa (1,000 mmHg, 39.4 in.Hg)	2.3 to 3.2 V
THOP (E17–5) – E1 (E16–1)	GR – BR	Engine warmed up, idling	9 to 14 V
		After ignition switch ON, once within 5 sec.	0 to 3 V
THAF*[1] (E16–31) – E2 (E16–28)	Y–B – BR	Ignition switch ON	0.2 to 3.8 V
THA (E16–20) – E2 (E16–28)	W–G – BR	Idling, air intake temp. 0°C (32°F) to 80°C (176°F)	0.5 to 3.4 V
THW (E16–19) – E2 (E16–28)	G–B – BR	Idling, engine coolant temp. 60°C (140°F) to 120°C (248°F)	0.2 to 1.0 V
THF (E16–29) – E2 (E16–28)	G–R – BR	Ignition switch ON (at engine cold)	0.5 to 3.4 V
VG*[1] (E17–24) – EVG*[1] (E17–32)	L–Y – G–W	Idling, A/C switch OFF	0.2 to 4.9 V
STA (E 17–9) – E1 (E16–1)	B–R – BR	Cranking	6.0 V or more
TDC+ (E 16–11) – TDC– (E16–10)	B – W	Idling	Pulse generation (See page DI–59)
NE+ (E 16–27) – NE– (E16–34)	L – G	Idling	Pulse generation (See page DI–56)

SP1 (E18–30) – E1 (E16–1)	V – BR	Ignition switch ON Rotate driving wheel slowly	Pulse generation
VNT*[1] (E17–4) – E01 (E16–7)	B – W–B	Ignition switch ON	9 to 14 V
		Idling	Pulse generation (See page DI–96)
TCV (E 16–5) – E01 (E16–7)	R–Y – W–B	Ignition switch ON	9 to 14 V
		Idling	Pulse generation (See page DI–67)
SPVD (E 17–7) – E1 (E16–1)	L–Y – BR	Idling	Pulse generation (See page DI–82)
SPVF (E 17–6) – E1 (E16–1)	L–R – BR	Idling	Pulse generation (See page DI–82)
EGR (E 16 – 4) – E01 (E16–7)	R–G – W–B	Ignition switch ON	9 to 14 V
		Engine warmed up, idling	Pulse generation (See page DI–128)
PA (E 16–2) – E01 (E16–7)	W–R – W–B	VSV for atmospheric pressure leaning OFF	9 to 14 V
		VSV for atmospheric pressure leaning ON	0 to 3 V
MREL (E 19–8) – E01 (E16–7)	B–W – W–B	Ignition switch ON	9 to 14 V
IGSW (E 19–9) – E1 (E16–1)	B–R – BR	Ignition switch ON	9 to 14 V
AC1 (E18–15) – E1 (E16–1)	W–G – BR	A/C switch ON (at idling)	0 t o 1.5 V
		A/C switch OFF	9 to 14 V
ACT (E 18–4) – E1 (E16–1)	L–B – BR	Ignition switch ON	9 to 14 V
		At A/C cut controlled (Driving below 30 km/h (18.6 mph), accelerator pedal fully opened for 5 sec.)	0 to 3 V
PDL (E 18–16) – E1 (E16–1)	GR – BR	Accelerator pedal fully closed	9 to 14 V
		Accelerator pedal fully opened	0 to 3 V
TAC (E 19–5) – E1 (E16–1)	B – BR	Idling	Pulse generation
TC (E 19–11) – E1 (E16–1)	P–B – BR	Ignition switch ON	9 to 14 V
W (E19–12) – E1 (E16–1)	W – BR	Check engine warning light lights up	0 to 3 V
		Warning light other than check engine warning light lights up	9 to 14 V
DATA (E 16–26) – E1 (E16–1)	LG – BR	For 0.5 sec. after ignition switch ON	Pulse generation (See page DI–117)
CLK (E 16–33) – E1 (E16–1)	L – BR	For 0.5 sec. after ignition switch ON	Pulse generation (See page DI–117)
THWO (E 18–14) – E1 (E16–1)	Y–B – BR	Ignition switch ON	Pulse generation (See page DI–141)
LU+A (E 16–15) – E1 (E16–1)	G–R – BR	Ignition switch ON	Pulse generation (See page DI–91)
LU–A (E16–14) – E1 (E16–1)	G–W – BR	Ignition switch ON	Pulse generation (See page DI–91)
LU+B (E 16–13) – E1 (E16–1)	V – BR	Ignition switch ON	Pulse generation (See page DI–91)
LU–B (E16–12) – E1 (E16–1)	G – BR	Ignition switch ON	Pulse generation (See page DI–91)
EGRC (E 16–21) – E1 (E16–1)	R – BR	Ignition switch ON	0 to 3 V
		Maintain engine speed at 1,500 rpm after warming up	9 to 14 V
VCH*[2] (E18–3) – E1 (E16–1)	Y–R – BR	Heater blower switch ON	9 to 14 V
		Heater blower switch OFF	0 to 3 V

SVR (E 16–23) – E1 (E16–1)	L–W – BR	Ignition switch ON	9 to 14 V
SCV*1 (E16–9) – E1 (E16–1)	Y – BR	Ignition switch ON	9 to 14 V
NSW (E17–8) – E1 (E16–1)	B–W – BR	Ignition switch ON, shift lever P or N position	0 to 3 V
		Ignition switch ON, shift lever not in P or N position	9 to 14 V
IREL (E18–1) – E1 (E16–1)	G–Y – BR	Ignition switch ON (engine coolant temperature is 10°C (50°F) or more)	9 to 14 V
		Intake heater ON	0 to 3 V
STP (E18–19) – E1 (E16–1)	G–W – BR	Ignition switch ON, brake pedal depressed	7.5 to 14 V
		Ignition switch ON, brake pedal released	0 t o 1.5 V
ST1– (E18–12) – E1 (E16–1)	R–G – BR	Ignition switch ON, brake pedal released	7.5 to 14 V
		Ignition switch ON, brake pedal depressed	0 t o 1.5 V
VCT (E19–4) – E1 (E16–1)	L–B – BR	Heater blower switch ON	0 to 3 V
		Heater blower switch OFF	9 to 14 V
HSW*2 (E18–32) – E1 (E16–1)	B–L – BR	Push on power heater switch	0 to 3 V
		Push off power heater switch	9 to 14 V
FSW (E19–28) – E1 (E16–1)	R–L – BR	With shift lever in first position	9 to 14 V
		With shift lever not in first position	0 to 3 V
PS (E17–10) – E1 (E16–1)	P – BR	Idling, turn steering wheel	0 to 3 V
		Ignition switch ON	9 to14 V
SIL (E 19–18) – E1 (E16–1)	V–W – BR	Connect intelligent tester II to DLC3	Pulse generation
IMI (E 19–23) – E1 (E16–1)	L–B – BR	Idling	Pulse generation
IMO (E 19–29) – E1 (E16–1)	L–R – BR	A few sec. after engine staring	Pulse generation

HINT:
*1: Only for Europe
*2: M/T