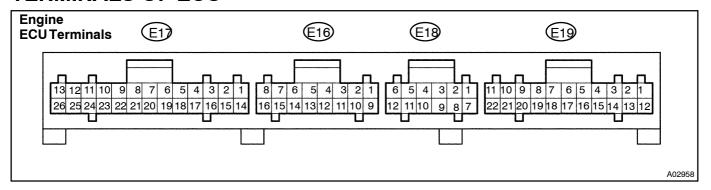
## **TERMINALS OF ECU**

DI31M-02



Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
BATT (E19 -1) - E1 (E17 -14)	B-R - BR	Always	9 ~ 14
+B(E19 -12) - E1(E17 -14)	B-Y - BR	IG switch ON	9 ~ 14
VC (E16 -1) - E2 (E16 -9)	L-R - BR-W	IG switch ON	4.5 ~ 5.5
VCC (E18 -6) - E2C (E18 -4)	L-R - BR-W	IG switch ON	4.5 ~ 5.5
"/* (Fig. 5) FRO (Fig. 6)	F 14	Accelerator pedal fully closed	0.6 ~ 1.3
/A (E18 –5) – E2C (E18 –4)	R-Y -BR-W	Accelerator pedal fully opened	2.8 ~ 4.5
1/4.C (E/E 40) EDD (E/E 4)	D.I. DD 144	Always  IG switch ON  IG switch ON  IG switch ON  Accelerator pedal fully closed	0.6 ~ 1.3
VAS (E18-12) - E2C (E18-4)	P-Ľ – BR-W		2.8 ~ 4.5
	1:05 ET . DD .W	IGswitch ON IGswitch ON IGswitch ON IGswitch ON Accelerator pedal fully closed Accelerator pedal fully opened Accelerator pedal fully opened Accelerator pedal fully closed Accelerator pedal fully opened Accelerator pedal fully opened Accelerator pedal fully opened Apply vacuum 40 kPa (300 mmHg, 11.8 in.Hg) Apply vacuum 135 kPa (1,000 mmHg, 39.4 in.Hg) Idling, air intake temp. 0 °C (32 °F) to 60 °C (140 °F) Idling, engine coolant temp. 60 °C (140 °F) to 120 °C (248 °F) IG switch ON (at engine cold) Cranking Idling IG switch ON	9 ~ 14
IDL (E18-9) - E2C (E18-4)	ĽG -B - BR-W	Accelerator pedal fully opened	0 ~ 3
EFFECTION OF THE COLUMN	ET.: DD 11/	Apply vacuum 40 kPa (300 mmHg, 11.8 in.Hg)	1.0 ~ 1.8
PIM (E16 -2) - E2 (E16 -9)	P~L' − BR−W	Apply vacuum 135 kPa (1,000 mmHg, 39.4 in.Hg)	2.3 ~ 4.2
THA (E16 -3) - E2 (E16 -9)	W-G - BR-W	Idling, air intake temp. 0 °C (32 °F) to 60 °C (140 °F)	0.2 ~ 3.8
THW (E16 -4) - E2 (E16 -9)	G-B - BR-W	Idling, engine coolant temp. 60 °C (140 °F) to 120 °C (248 °F)	0.1 ~ 1.5
	B-R - BR-W *1	IG switch ON (at engine cold)	0.5 ~ 3.8
THF (E16 -5) - E2 (E16 -9)	G-R - BR-W *2		
STA (E19 –11) – E1 (E17 –14)	B-W - BR	Cranking	6.0 or more
TDC+ (E17 –17) – TDC– (E17–16)	B – W	Idling	Pulse generation (See page DI-21)
NE+ (E17 -19) - NE- (E17-18)	L – G	Idling	Pulse generation (See page DI-21)
SP1 (E19 -9) - E1 (E17 -14)	V – BR	1	Pulse generation
		IG switch ON	9 ~ 14
TCV (E17 -11) - E01 (E17 -13)	R-Y - W-B	Idling	Pulse generation (See page DI-24)
SPVD (E17 –12) – E1(E17–14)	L-Y - BR	IG switch ON	9 ~ 14
SPVF (E17 -25) - E1 (E17 -14)	L-R - BR	Idling	Pulse generation (See page DI-71)
EGR (E17 – 24) – E01 (E17–13)	R-G - W-B	IG switch ON	9 ~ 14
		EGR ON	Pulse generation (See page DI-85)

\*1: LHD \*2: RHD

Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
		VSV OFF (idling)  VSV ON (after IG switch OFF for 2 sec.)  VSV for atmospheric pressure leaning OFF  VSV for atmospheric pressure leaning ON  IG switch ON  IG switch ON  A/C switch ON (at idling)  A/C switch OFF  IG switch ON  At A/C cut controlled  (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)  Accelerator pedal fully closed  Accelerator pedal fully opened  Idling  IG switch ON  Check engine warning light lights up  Except check engine warning light lights up  Except glow indicator light lights up  Except glow indicator light lights up  For 0.5 sec. after IG switch ON  IG switch ON  IG switch ON  Id switch ON  At intake heater ON  Idling  Heater blower switch OFF  IG switch ON  Heater blower switch OFF  Push on power heater switch  At shift position in first position  At other shift position in first position  Idling, Turn steering wheel  IG switch ON  Connecthand -held tester to DLC3  Idling  Idling	9 ~ 14
S/TH (E17-10) - E01 (E17-13)	W-L – W-B		0~3
		VSV OFF (idling)  VSV ON (after IG switch OFF for 2 sec.)  VSV for atmospheric pressure leaning OFF  VSV for atmospheric pressure leaning ON  IG switch ON  IG switch ON  A/C switch OFF  IG switch ON  At A/C cut controlled (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)  Accelerator pedal fully closed  Accelerator pedal fully opened  Idling  IG switch ON  Check engine warning light lights up  Except check engine warning light lights up  Except glow indicator light lights up  Except glow indicator light lights up  For 0.5 sec. after IG switch ON  Heater blower switch OFF  IG switch ON  Heater blower switch OFF  Push on power heater switch  At shift position in first position  At other shift position in first position  Id switch ON  Connecthand -held tester to DLC3	9 ~ 14
PA (E17-9) - E01 (E17-13)	W-R – W-B	VSV for atmospheric pressure leaning ON	0~3
MREL (E19-3) - E01 (E17-13)	B-W - W-B	IG switch ON	9 ~ 14
IGSW (E19-14) - E1 (E17-14)	B-R - BR	IG switch ON	9 ~ 14
		VSV OFF (idling)  VSV ON (after IG switch OFF for 2 sec.)  VSV for atmospheric pressure leaning OFF  VSV for atmospheric pressure leaning ON  IG switch ON  IG switch ON  AC switch ON (at idling)  A/C switch OFF  IG switch ON  At A/C cut controlled  (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)  Accelerator pedal fully closed  Accelerator pedal fully opened  Idling  IG switch ON  Check engine warning light lights up  Except check engine warning light lights up  Except glow indicator light lights up  Except glow indicator light lights up  For 0.5 sec. after IG switch ON  IG switch ON  IG switch ON  Id switch ON  At intake heater ON  Idling  Heater blower switch OFF  IG switch ON  Heater blower switch OFF  Push on power heater switch  At shift position in first position  Idling, Turn steering wheel  IG switch ON  Connecthand -held tester to DLC3  Idling	0 ~ 1.5
AC1 (E18-2) - E1 (E17-14)	W-G – BR	A/C switch OFF	9 ~ 14
		IG switch ON	9 ~ 14
ACT (E18-8) - E1 (E17-14)	L-B - BR	(Driving below 30 km/h, accelerator pedal fully opened for	0~3
		VSV OFF (idling)  VSV ON (after IG switch OFF for 2 sec.)  VSV for atmospheric pressure leaning OFF  VSV for atmospheric pressure leaning ON  IG switch ON  IG switch ON  A/C switch OFF  IG switch ON  At A/C cut controlled  (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)  Accelerator pedal fully closed  Accelerator pedal fully opened  Idling  IG switch ON  Check engine warning light lights up  Except check engine warning light lights up  Except glow indicator light lights up  Except glow indicator light lights up  For 0.5 sec. after IG switch ON  IG switch ON  IG switch ON  Id switch ON  At intake heater ON  Idling  Heater blower switch OFF  IG switch ON  Heater blower switch OFF  Push on power heater switch  At shift position in first position  At other shift position in first position  Idling, Turn steering wheel  IG switch ON  Connecthand –held tester to DLC3  Idling  Idling	9 ~ 14
PDL (E18-3) - E1 (E17-14)	GR – BR	Accelerator pedal fully opened	0~3
TAC (E18-7) - E1 (E17-14)	B – BR	Idling	Pulse generation
TC (E19-4) - E1 (E17-14)	P-B - BR	IG switch ON	9 ~ 14
		Check engine warning light lights up	0~3
W (E19-5) - E1 (E17-14)	W – BR	Except check engine warning light lights up	9 ~ 14
		Glow indicator light lights up	0~3
G-IND (E18-1) - E1 (E17-14)	Y–R – BR	Except glow indicator light lights up	9 ~ 14
DATA (E16-6) - E1 (E17-14)	G-B - BR	For 0.5 sec. after IG switch ON	Pulse generation
CLK (E16 -14) - E1 (E17 -14)	G-W - BR	For 0.5 sec. after IG switch ON	Pulse generation
THWO (E19 -8) - E1 (E17 -14)	Y-B - BR	IG switch ON	Pulse generation (See page DI-96)
	R - BR	IG switch ON	0 ~ 3
EGRC (E17 -3) - E1 (E17 -14)		Maintain engine speed at 1500 rpm after warming up	9 ~ 14
		IG switch ON	0~3
IREL (E19 -2) - E1 (E17 -14)	G`-Y − BR	At intake heater ON	9 ~ 14
SPVD (E17 -12) - E1 (E17 -14)	L-Y - BR	Idling	Pulse generation (See page DI-71)
		W-L - W-B VSV OFF (idling) VSV ON (after IG switch OFF for 2 sec.) VSV for atmospheric pressure leaning OFF VSV for atmospheric pressure leaning ON B-W - W-B IG switch ON B-R - BR IG switch ON B-R - BR IG switch ON At A/C switch ON At A/C cut controlled (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)  Accelerator pedal fully closed Accelerator pedal fully opened IG switch ON Accelerator pedal fully opened IG switch ON Accelerator pedal fully pened IG switch ON Accelerator pedal fully opened IG switch ON Accelerator pedal fully opened IG switch ON Accelerator pedal fully opened IG switch ON Check engine warning light lights up Except check engine warning light lights up Except glow indicator light lights up Except glow indicator light lights up IG switch ON At intake heater ON At intake heater ON At intake heater ON L-Y-BR IG Switch ON Heater blower switch OFF L-W-BR IG Switch ON Heater blower switch OFF Push on power heater switch Push off power heater switch At other shift position in first position At other shift position in first position IG Switch ON V-W-BR Connecthand - held tester to DLC3 Idling Idl	0~3
VCH (E17-23) - E1 (E17-14)	Y'-R'-BR		9 ~ 14
SVR (E19 -13) - E1 (E17 -14)	L-W - BR	IG switch ON	0 ~ 1.5
MOTE (Fig. 5)		VSV OFF (idling)  VSV ON (after IG switch OFF for 2 sec.)  VSV for atmospheric pressure leaning OFF  VSV for atmospheric pressure leaning ON  IG switch ON  IG switch ON  A/C switch ON (at idling)  A/C switch OFF  IG switch ON  At A/C cut controlled (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)  Accelerator pedal fully closed  Accelerator pedal fully opened  Idling  IG switch ON  Check engine warning light lights up  Except check engine warning light lights up  Except glow indicator light lights up  For 0.5 sec. after IG switch ON  IG switch ON  IG switch ON  IG switch ON  At intake heater ON  Idling  Heater blower switch OFF  IG switch ON  Heater blower switch OFF  Push on power heater switch  At shift position in first position  At onnecthand –held tester to DLC3  Idling  Idling  Idling  Idling  Connecthand –held tester to DLC3  Idling	0 ~ 3
VCT (E16 -7) - E1 (E17 -14)	L-B – BR		9 ~ 14
		VSV ON (after IG switch OFF for 2 sec.)  VSV for atmospheric pressure leaning OFF  VSV for atmospheric pressure leaning ON  IG switch ON  A/C switch ON  A/C switch ON (at idling)  A/C switch OFF  IG switch ON  At A/C cut controlled (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)  Accelerator pedal fully closed  Accelerator pedal fully opened  Idling  IG switch ON  Check engine warning light lights up  Except check engine warning light lights up  Glow indicator light lights up  Except glow indicator light lights up  For 0.5 sec. after IG switch ON  IG switch ON  IG switch ON  At intake heater ON  Idling  Heater blower switch OFF  IG switch ON  Heater blower switch OFF  Push on power heater switch  At shift position in first position  Idling, Turn steering wheel  IG switch ON  Connecthand -held tester to DLC3  Idling	0~3
HSW (E19 -20) - E1 (E17 -14)	B -L - BR		9 ~ 14
		G-W - BR For 0.5 sec. after IG switch ON  Y-B - BR IG switch ON  Haintain engine speed at 1500 rpm after warming up  IG switch ON  At intake heater ON  L-Y - BR Idling  Heater blower switch ON  Heater blower switch OFF  L-W - BR IG switch ON  Heater blower switch OFF  L-B - BR F-L - BR Push on power heater switch  At other shift position in first position  At other shift position in first position	9 ~ 14
FSW (E17-7) - E1 (E17-14)	R`-L' – BR	At other shift position in first position	0~3
PS (E16 -8) - E1 (E17 -14)	P – BR	Idling, Turn steering wheel	0~3
		IG switch ON	9 ~ 14
SIL (E19 –15) – E1 (E17 –14)	V-W - BR	Connect hand -held tester to DLC3	Pulse generation
IMI (E19 –17) – E1 (E17 –14)	L-B - BR	Idling	Pulse generation
IMO (E19 -6) - E1 (E17 -14)	L-R - BR	A few sec. after engine staring	Pulse generation