

MULTIPLEX COMMUNICATION

1. General

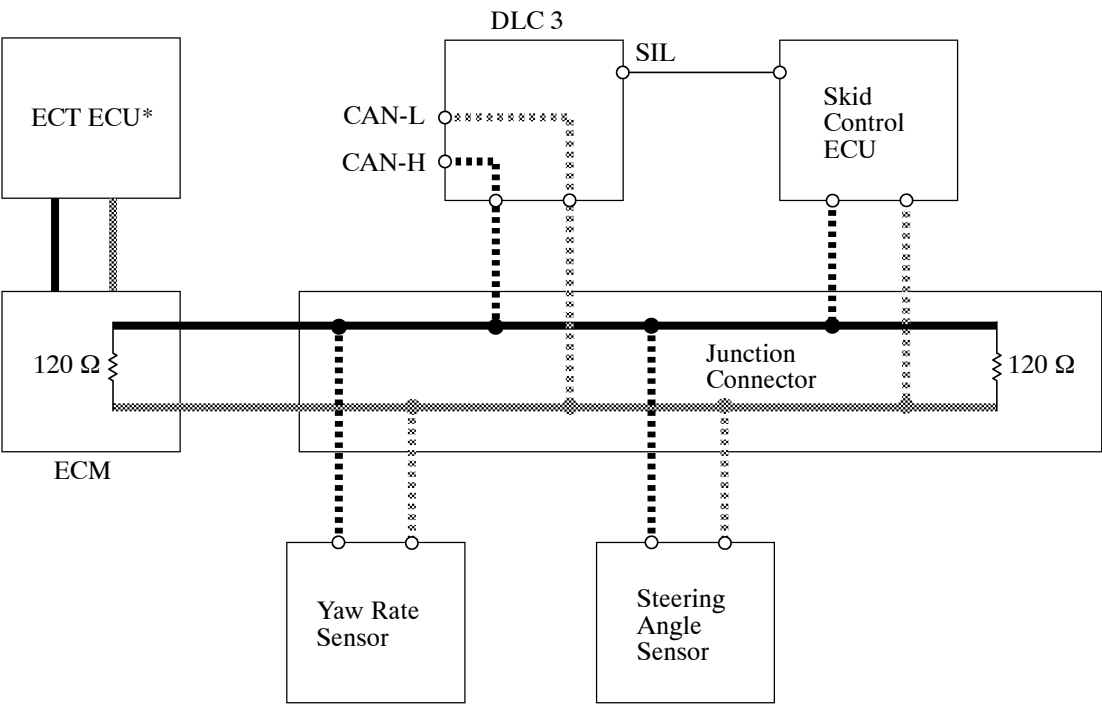
- CAN (Controller Area Network) communication has been adopted in the brake control system of the vehicles equipped with the VSC (Vehicle Stability Control) system.
- CAN is a type of on-vehicle multiplex communication system that performs excellent data communication and error detection between ECUs and sensors.
- CAN uses twisted-pair wires, consisting of two wires, CAN-H and CAN-L, which have different voltages to establish communication.
- The CAN in new Land Cruiser/ Land Cruiser Prado is connected to the skid control ECU, engine ECU, steering angle sensor, yaw rate and deceleration sensor, ECT ECU (Electronic Control Transmission) (1KD engine model only) and DLC3 (Data Link Connector). However, the diagnosis information from the skid control ECU is output from the SIL line.

Characteristic

- The wiring harness routing is simplified because communication among all the ECUs connected to CAN is made possible through the use of a pair of communication wires.
- Its communication speed is faster than the BEAN (Body Electronics Area Network) used on other models.

Communication Type	CAN	BEAN
Communication Speed	500 Kbps	MAX: 10 Kbps

System Diagram



*: 1KD engine model only

- : CAN Main Bus Line (High)
- - - : CAN Main Bus Line (Low)
- : CAN Sub Bus Line (High)
- . - . : CAN Sub Bus Line (Low)
- : Serial Communication Line