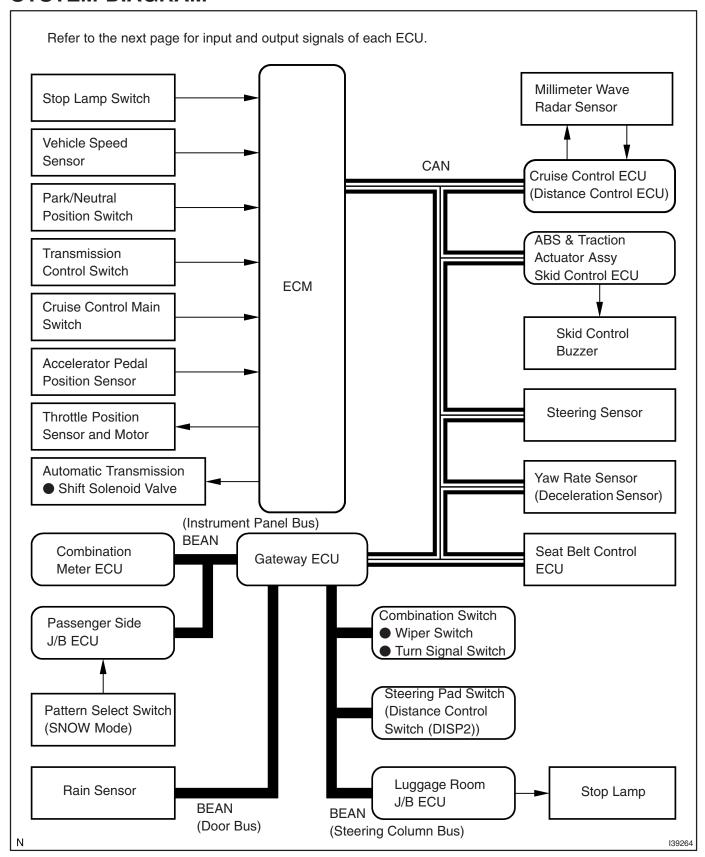
5

SYSTEM DIAGRAM



5

Input and output signals of each ECU

Transmitting ECU (Transmitter)	Receiving ECU	Signals	CommunicationMethod
ECM	Cruise Control ECU (Distance Control ECU)	A/T transmission signal Cruise control operation signal Cruise control low speed operation signal Accelerator pedal idle signal Set vehicle time signal Cruise control cancel signal Brake demand response signal Stored vehicle speed signal Current vehicle speed signal Cruise control switch signal Brake control operation signal Cruise control demand throttle opening angle signal Radar light emission prohibiting signal Dynamic radar cruise designation signal Brake control interrupting signal Steering wheel signal Cruise control demand opening angle signal	CAN
Cruise Control ECU (Distance Control ECU)	ECM	Millimeter wave radar sensor beam optical axis deviation signal Millimeter wave radar sensor malfunction signal Millimeter wave radar sensor grime signal Bad weather detection signal Communication error signal (from cruise control ECU (distance control ECU) to millimeter wave radar sensor) Communication error signal (from ECM to cruise control ECU (distance control ECU)) Communication error signal (from skid control ECU to cruise control ECU (distance control ECU)) Yaw rate communication error signal Steering sensor communication error signal Distance control ECU voltage signal Dynamic radar cruise designation response signal Estimated vehicle speed signal Vehicle—to—vehicle distance control signal Relative vehicle speed signal Brake control demand signal Throttle fully closed demand signal Approach warning signal (VSC buzzer demand signal) Cruise target deceleration gradient signal Vehicle—to—vehicle distance control acceleration signal	CAN
ECM	Skid Control ECU	Cruise target deceleration gradient signal Cruise target deceleration signal Throttle fully close demand signal Brake control demand signal Dynamic radar cruise control designation signal Cruise control operation signal	CAN
Skid Control ECU	Cruise Control ECU (Distance Control ECU)	 Wheel speed signal Speed sensor power drop signal Speed sensor condition signal Yaw rate sensor signal Yaw rate sensor zero point error signal 	CAN

Transmitting ECU (Transmitter)	Receiving ECU	Signals	CommunicationMethod
Skid Control ECU	ECM	Brake component malfunction signal Brake control malfunction signal Drive wheel slip signal Cruise control cancel signal Skid control buzzer malfunction signal Communication logic error signal (from ECM to skid control ECU) Brake demand response signal Brake control interrupting signal Brake control operation signal	CAN
Steering Angle Sensor	Cruise Control ECU (Distance Control ECU)	+B open circuit malfunction signal Sensor malfunction signal Steering angle signal Sensor zero point signal	CAN
Yaw Rate & Deceleration Sensor	Cruise Control ECU (Distance Control ECU)	Yaw rate sensor signal Yaw rate sensor zero point error signal Yaw rate sensor voltage signal	CAN
ECM	Combination Meter ECU	Cruise control diagnosis signal (DTC) Preceding vehicle detection signal Approach warning signal Vehicle—to—vehicle distance signal Millimeter wave radar sensor grime signal Bad weather detection signal Vehicle—to—vehicle distance control signal Vehicle—to—vehicle distance control check mode signal Vehicle—to—vehicle distance control standby condition signal Constant speed cruise signal CRUISE indicator operation signal Cruise control warning signal Dynamic radar cruise warning signal Cruise control vehicle speed signal	• CAN • BEAN (Instrument Panel Bus)
Cruise Control ECU (Distance Control ECU)	Combination Meter ECU	Millimeter wave radar sensor optical axis deviation signal Vehicle—to—vehicle distance signal Preceding vehicle detection signal	• CAN • BEAN (Instrument Panel Bus)
Passenger Side J/B ECU	ECM	ECT SNOW mode switch signal	• CAN • BEAN (Instrument Panel Bus)
Rain Sensor	Cruise Control ECU (Distance Control ECU)	LO operation signal HI operation signal	• CAN • BEAN (Door Bus)
Combination Switch	Cruise Control ECU (Distance Control ECU)	Turn switch signal Wiper switch position signal	• CAN • BEAN (Steering Column Bus)
Steering Pad Switch (DISP 2)	ECM	Steering pad switch (DISP 2) signal	• CAN • BEAN (Steering Column Bus)
Luggage Room J/B ECU	ECM Cruise Control ECU (Distance Control ECU)	Stop lamp operating condition signal	CAN BEAN (Steering Column Bus)
Seat Belt Control ECU	Combination Meter ECU	Pre–crash system error signal	• CAN • BEAN (Instrument Panel Bus)
Cruise Control ECU (Distance Control ECU)	Seat Belt Control ECU	Vehicle-to-vehicle distance signal Estimated vehicle speed signal Pre-crash system monitor signal Millimeter wave radar sensor grime signal	CAN