

■ MULTIPLEX COMMUNICATION

1. Description

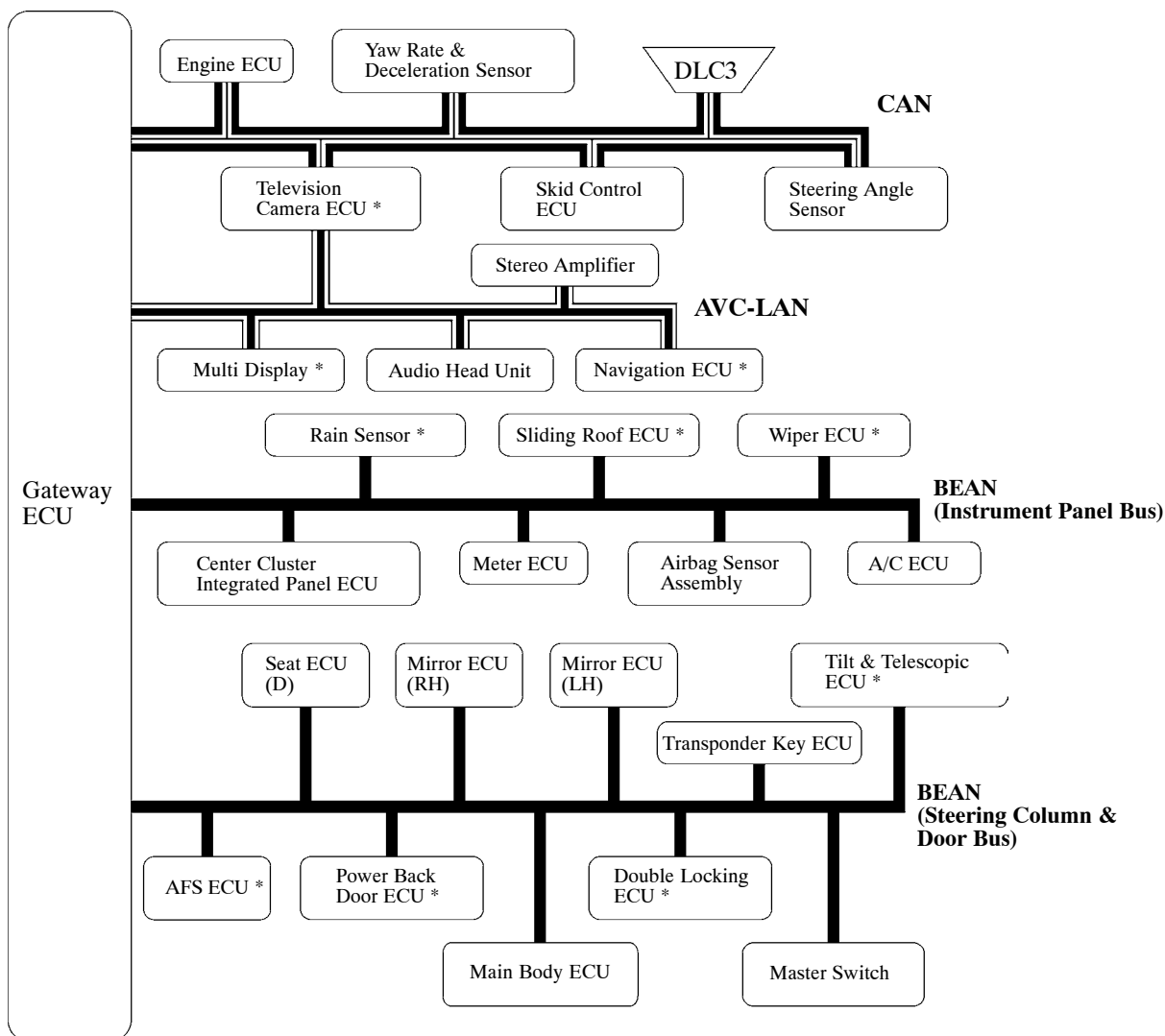
The multiplex communication in the new RX350 has the following features:

- The CAN (Controller Area Network) has been connected to the Gateway ECU. Because of this change, a transfer protocol function has been added (between BEAN and CAN) to the Gateway ECU to allow communication between the two different networks.
- The number of BEAN (Body Electronics Area Network) communication lines has been increased from one to two.
- On the previous model, the Engine ECU was connected to the BEAN (Body Electronics Area Network). On the new RX350, the Engine ECU is connected to the CAN (Controller Area Network).
- Except G.C.C. Countries
The Television Camera ECU that was connected only to the AVC-LAN (Audio Visual Communication - Local Area Network) is now connected to both the AVC-LAN and CAN (Controller Area Network).
- G.C.C. Countries
The Television Camera ECU has been abolished.

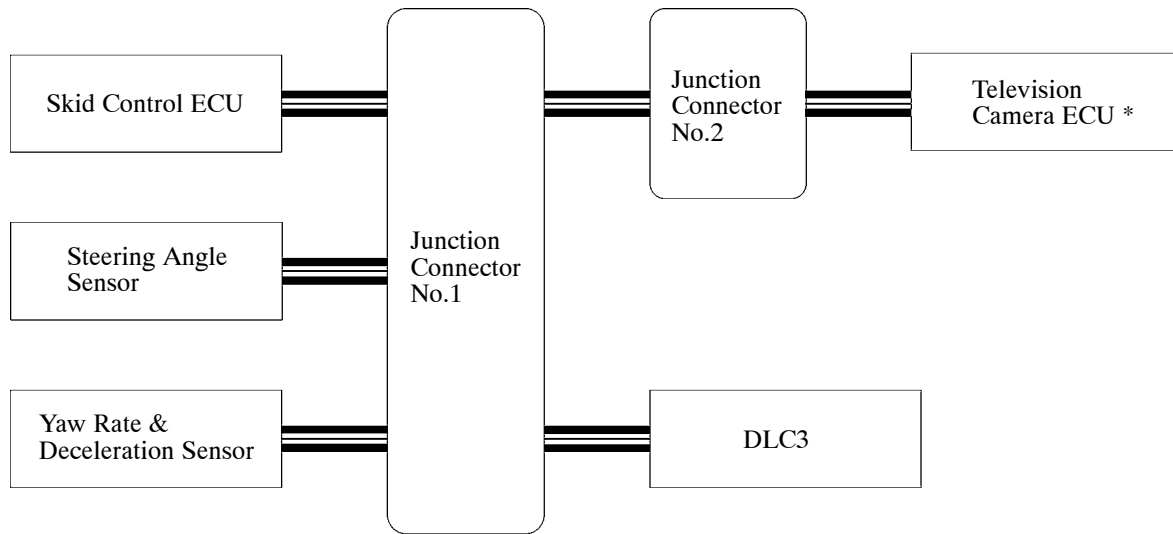
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► System Diagram ◀

*: Option



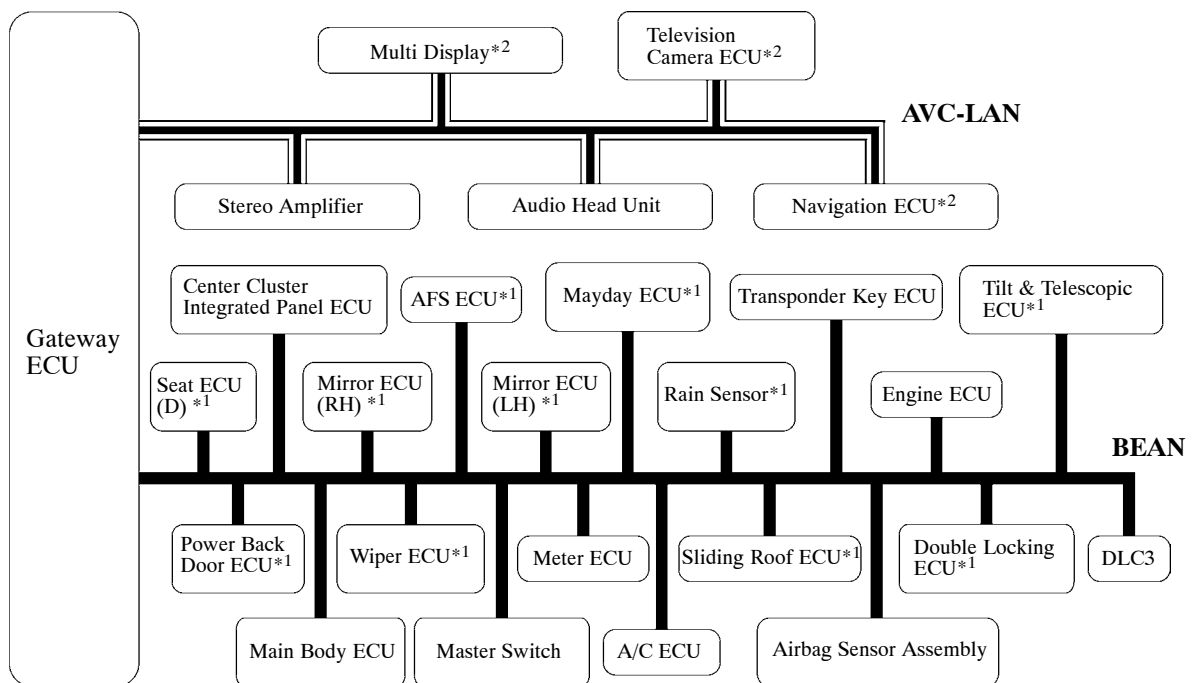
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CAN for RX330

0280BE05C

*1: Optional Equipment
*2: Models with Multi Display



BEAN and AVC-LAN for RX330

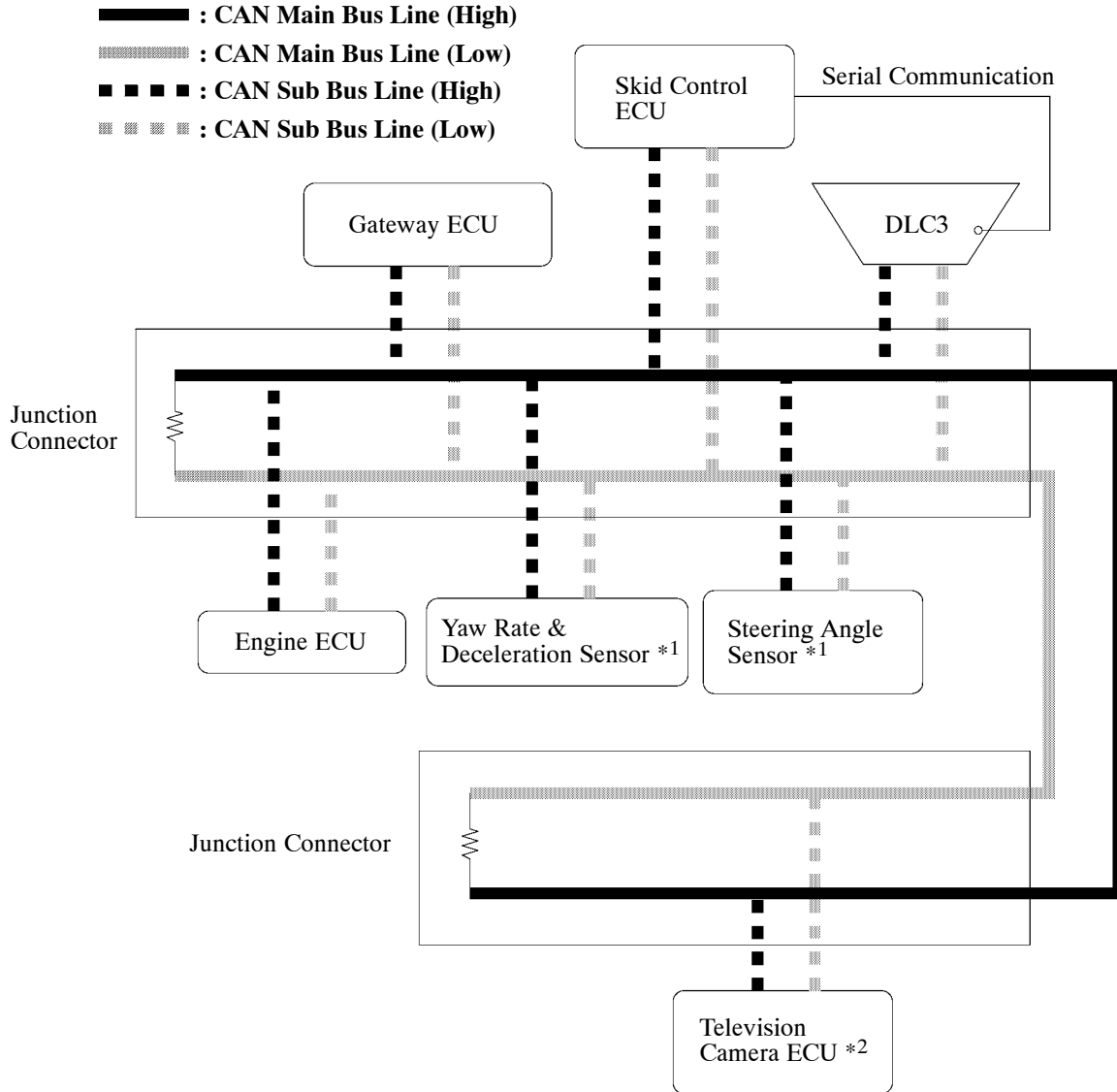
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2. CAN

General

The following ECUs are now connected to the CAN (Controller Area Network):

- Gateway ECU
- Engine ECU



*1: With VSC (Vehicle Stability Control)

*2: With Back Guide Monitor System (Except G.C.C. Countries)

Fail Safe

If any communication bus malfunctions, each system related to the CAN uses a fail-safe function to operate as follows:

●: Master Control ECU / ○: Sub Control ECU

System		VSC System	Back Guide Monitor System	Combination Meter
ECU	Engine ECU	○	○	○
	Skid Control ECU	●	○	○
	Steering Angle Sensor	○	○	—
	Yaw Rate & Deceleration Sensor	○	—	—
	Television Camera ECU	—	●	—
	Combination Meter	—	—	●
Control in the event of a communication error		VSC System does not operate	<ul style="list-style-type: none"> • Back Guide Monitor System does not operate in the event of an Engine ECU communication error • Back guide function only does not operate in the event of an Steering Angle Sensor communication error (Rear view monitor function operates normally) 	Indicator Light does not light up
Indication of fault		VSC/ABS Warning Light lights up	Back Guide Monitor System does not operate	Indicator Light does not light up
Memory ECU of DTC		Skid Control ECU		
DTC		U0073: CAN communication error U0100: Engine ECU U0123: Yaw Rate Sensor U0124: Deceleration Sensor U0126: Steering Angle Sensor	—	—

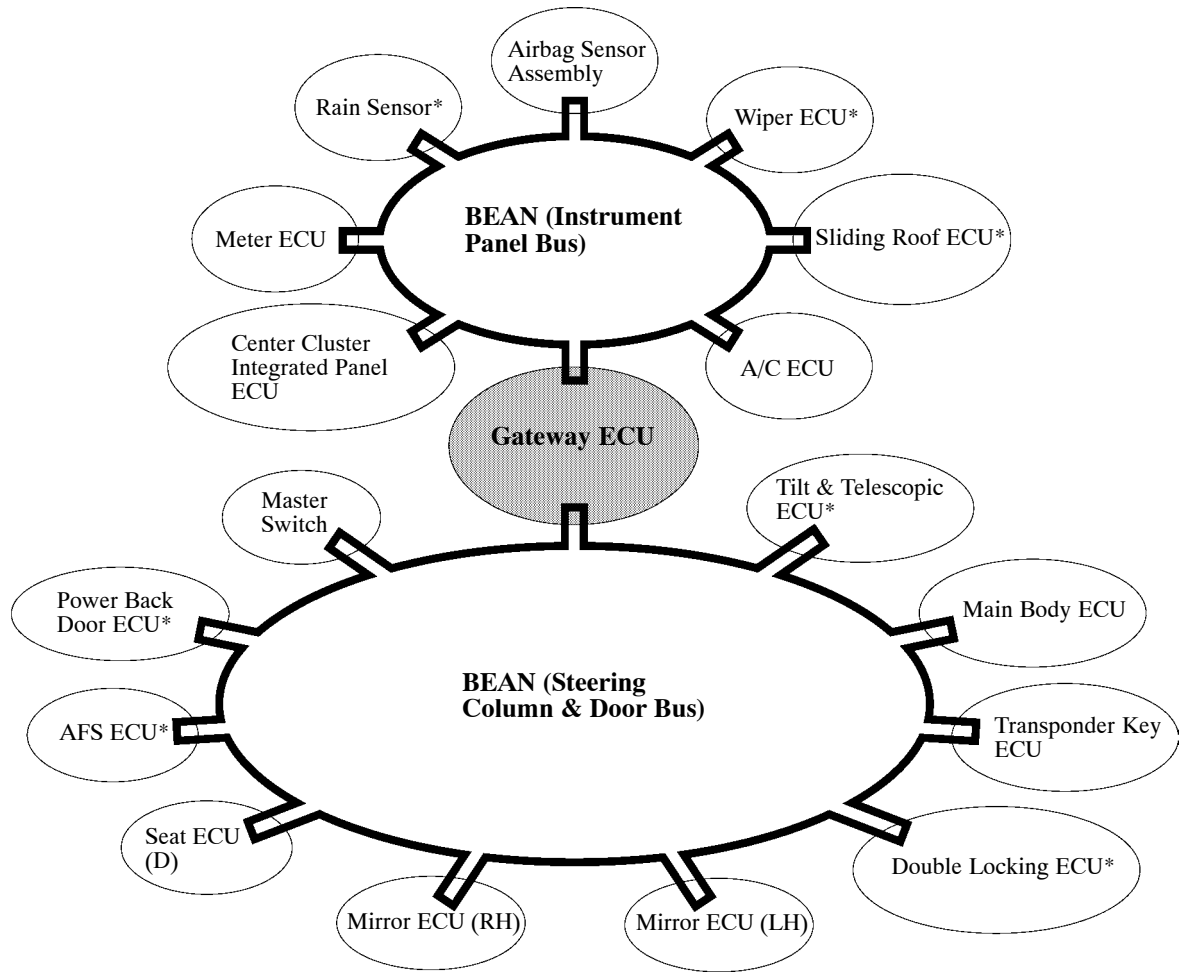
Service Tip

The Engine ECU of the new RX350 uses the CAN protocol for diagnostic communication. Therefore, a hand-held tester and a dedicated adapter [CAN VIM (Vehicle Interface Module)] are required for accessing diagnostic data. For details, see the LEXUS RX350 Repair Manual Supplement (Pub. No. RM0280E).

3. BEAN

General

The BEAN (Body Electronics Area Network) consists of 2 buses: the instrument panel bus and the steering column & door bus.



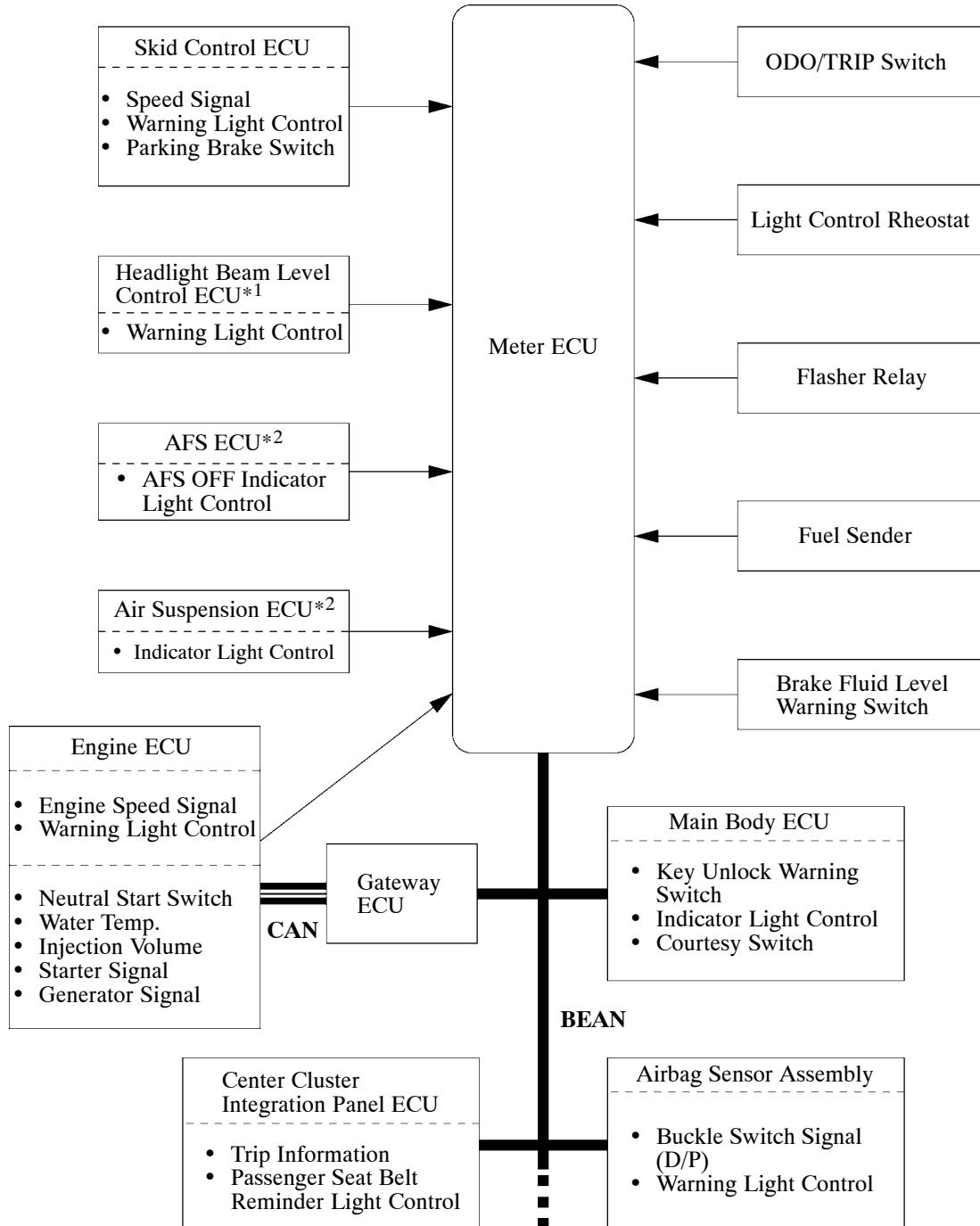
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■ METER

1. Combination Meter

- On the previous RX330/RX300, MIL and low oil pressure warning light signals were input to the meter through the BEAN communication circuits. On the new RX350, these signals are directly input to the meter.
- On the previous RX330/RX300, VSC, ABS, and Brake warning light signals were directly input to the meter. On the new RX350, these signals are input to the meter through the BEAN and CAN communication circuits.

► System Diagram ◀



*1: For Coil Suspension Models with HID
 *2: Optional Equipment

■ AIR CONDITIONER

1. Description

General

The air conditioner system in the new RX350 has the following features:

- A continuously variable capacity type A/C compressor has been adopted.

► Performance ◀

Model			New	Previous
Heater	Heat Output	W (Kcal/h)	5750 (4950)	←
	Air Flow Volume	m ³ /h	340	←
	Power Consumption	W	210	←
Air Conditioner	Cooling Capacity	W (Kcal/h)	5800 (4990) *1 *3 5900 (5070) *2	5800 (4990)
	Air Flow Volume	m ³ /h	530 *1 *3 520 *2	←
	Power Consumption	W	260	←

► Specifications ◀

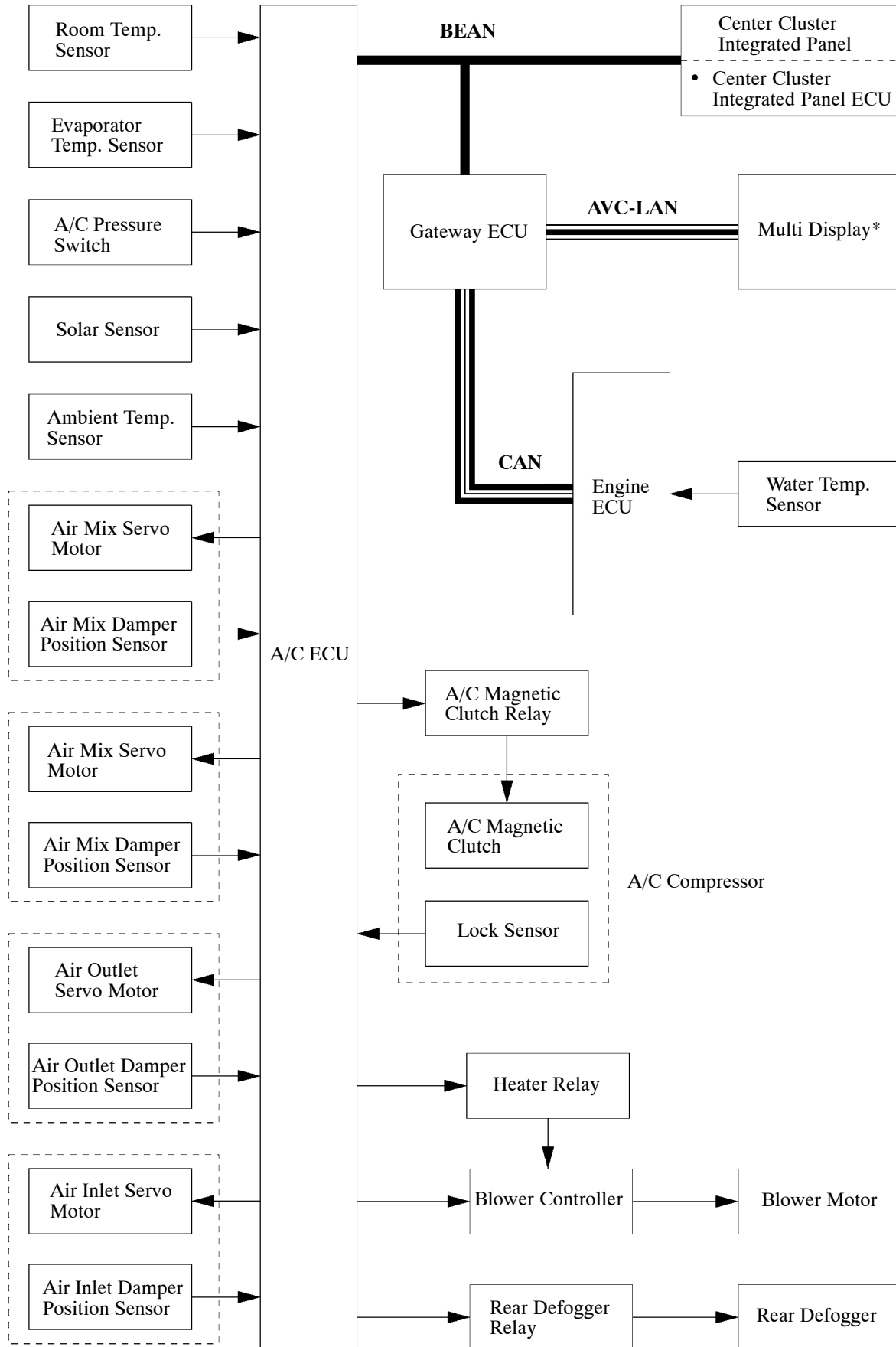
Model			New	Previous
Ventilation and Heater Core	Heater Core	Type	Straight Flow (Full-path Flow)	←
		Size W × H × L	222.3 × 150 × 27 (8.8 × 5.9 × 1.1)	←
		Fin Pitch	1.8 (0.07)	←
	Blower	Motor Type	K70	S80Fs-12.5T
		Fan Type	Shroud Fan	←
		Fan Size Dia. × H	150 × 75 (5.9 × 3.0)	←
Air Conditioner	Condenser	Type	Multi-flow (Sub-cool)	←
		Size W × H × L	670 × 491.8 × 16 (26.4 × 19.4 × 0.6)	←
		Fin Pitch	3.95 (0.16) *1 3.15 (0.12) *2 *3	←
	Evaporator	Type	Revolutionary Super-slim Structure	←
		Size W × H × L	266.3 × 251 × 38 (10.5 × 9.9 × 1.5)	←
		Fin Pitch	3.0 (0.12) *1 *3 2.6 (0.10) *2	←
	Compressor	Type	6SBU16 *1 *3 7SBH17 *2	10S17
	Refrigerant	Type	HFC134a (R134a)	←
		Volume	g	600 ± 50

*1: Europe

*2: G.C.C. Countries

*3: Australia

System Diagram



*: Optional Equipment