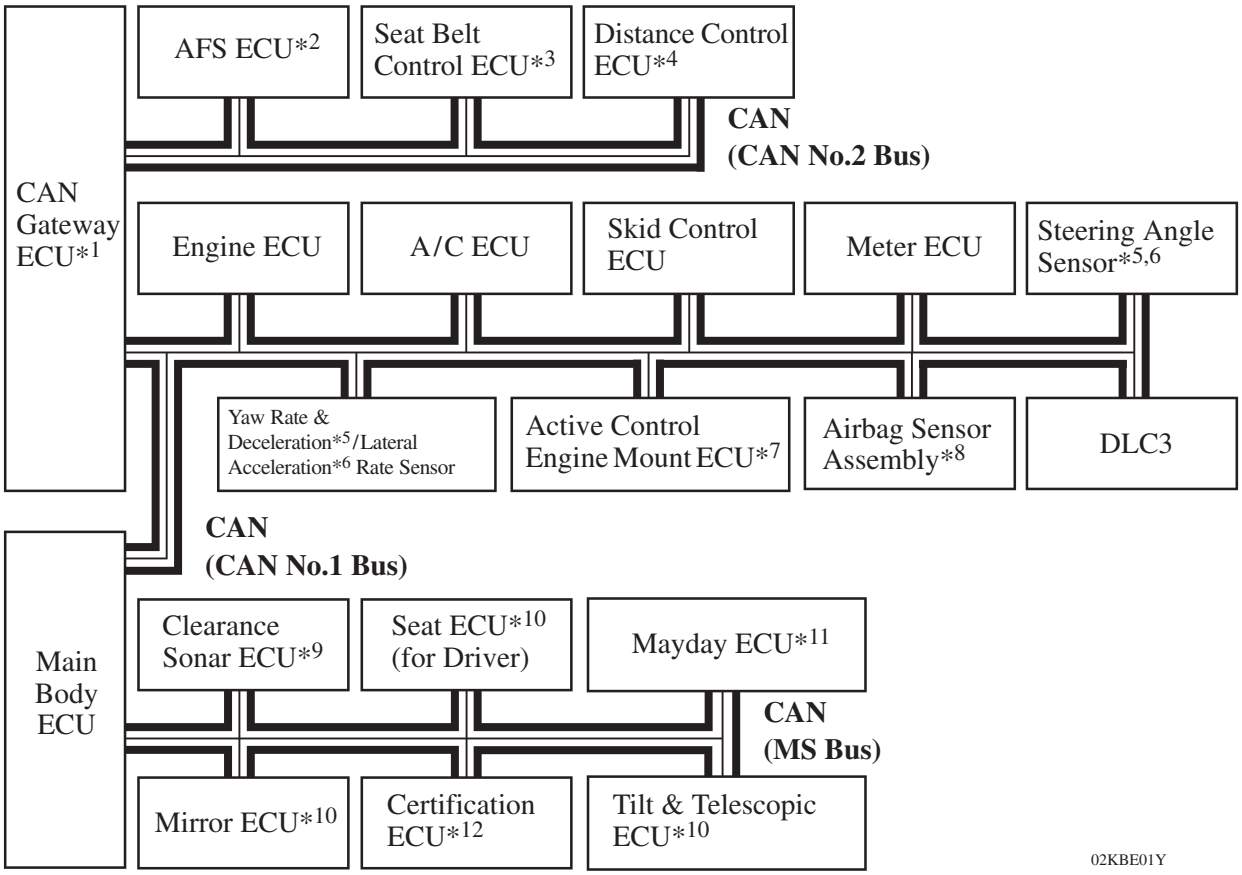
BODY ELECTRICAL

MULTIPLEX COMMUNICATION

■ DESCRIPTION

- The multiplex communication system of the new Camry uses the CAN (Controller Area Network) to achieve a streamlined wiring harness configuration.
- The CAN (Controller Area Network) is classified into two types according to communication speed. The HS (High Speed)-CAN is used for the power train, chassis and body electrical systems, and the MS (Medium Speed)-CAN is used for the body electrical system.
- The HS-CAN consists of two buses (the CAN No.1 bus and CAN No.2 bus) and the MS-CAN consists of one bus (MS bus). ECUs with gateway functions (the CAN gateway ECU and main body ECU)are used to transmit data between the buses.
- Due to the introduction of the CAN system for the power train, chassis and body electrical systems, the BEAN (Body Electronics Area Network) is no longer used on this model.
- A customized body electronics system is used, enabling the control functions of the ECUs to be set using an intelligent tester II. For details, see page BE-14.

▶ System Diagram ◀



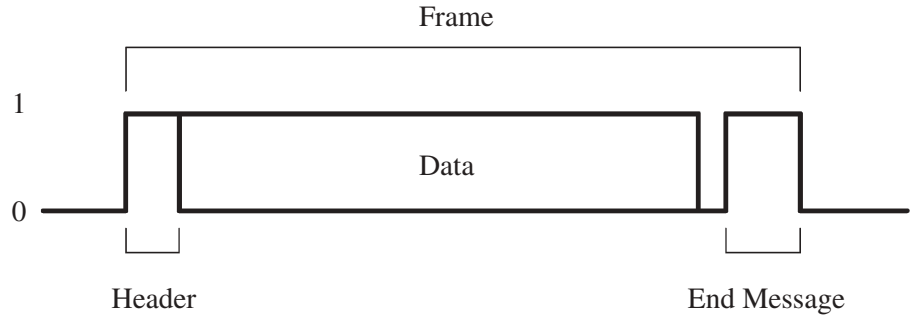
*1: Installed only when CAN No.2 bus is used
*2: Models with intelligent AFS
*3: Models with the pre-crash safety system
*4: Models with the dynamic radar type cruise control system
*5: Except 2AZ-FE engine models with vehicle stability control (VSC) system for Australia and G.C.C. Countries
*6: 2AZ-FE engine models with vehicle stability control (VSC) system for Australia and G.C.C. Countries
*7: Models with the power tilt & power telescopic column
*8: Models with SRS airbag system
*9: Models with the Toyota parking assist system
*10: Models with the memory system
*11: Models with the Toyota Link system
*12: Models with the smart entry and start system

— REFERENCE —

MPX communication uses serial communication data that consists of bits and frames in order to exchange information among the various ECUs. This allows a reduction of the amount of wiring on the vehicle.

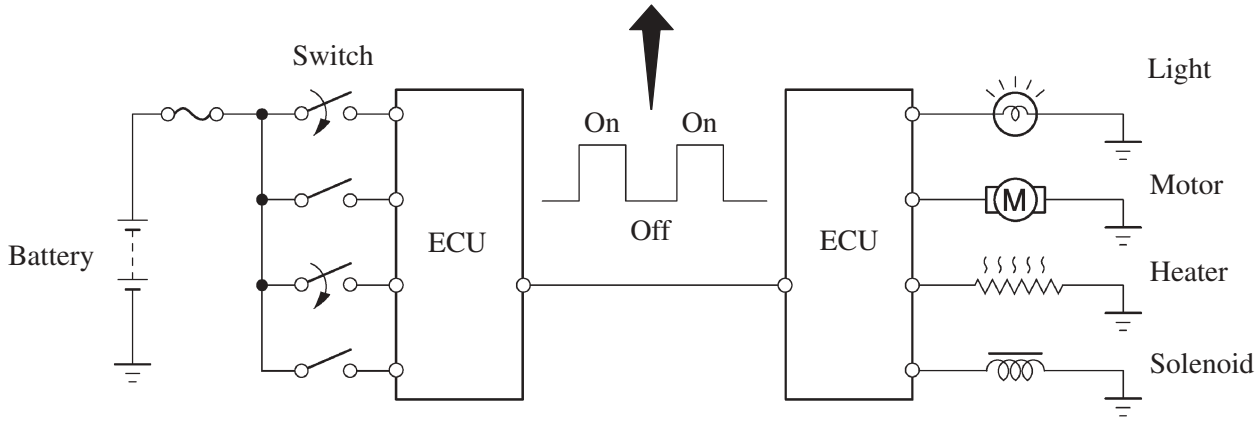
- *A bit is the basic unit of communication that is used to represent information. A bit is represented by binary values of "0" or "1".*
- *A frame is a body of data that is transmitted together. A frame contains a header that indicates the beginning, and an end message that indicates the end.*

▶ Conceptual Drawing ◀



240BE05

Serial Communication Data



240BE03