Memory devices and communication protocols:

SDRAM- DDR PROTOCOL- SDRAM synchronized with the clock speed that the microprocessor is optimised for.

HARDDISK- SATA2 OR SATA3-magnetic storage medium for a computer. It can store terabytes of information.

EEPROM- I2C- it is a user modifiable ROM. It can be erased and reprogrammed repeatedly by applying an electrical voltage that is higher than normal.

FLOPPY DISK-ISA BUS- It is a storage composed of a thin and flexible disk of a magnetic storage medium in a square or nearly square plastic enclosure lined with a fabric that removes dust particles from the spinning disk.

SPI FLASH-SPI- commonly used for storage and data transfer in portable devices.

SD CARD- SD and SPI BUS MODE- SD cards are small thumbnail sized memory storage cards.

EMMC- PCIE- small storage device made up of NAND flash memory and a storage controller.

SSD – SATA or PCIE-It use flash based memory ,which is much faster than a traditional mechanical hard disk.

Laptop devices and communication protocols and its uses:

KEYBOARD (used for typing the letters and numbers): HID PROTOCOL- It is for putting information including letters, words and numbers into your computer.

MONITOR:

HARDDISK (used to store data): SATA2 or SATA 3- magnetic storage medium for a computer.

MOUSE: RS 232C PROTOCOL- mouse is a handheld hardware input device that controls a cursor in a GUI for pointing ,moving and selecting text, icons, files and folders on your computer.

FLEX CAN

Flex CAN controller is a highly configurable , synthesizable core implementing the CAN protocol ,CAN with Flexible Data rate (Can FD) and CAN 2.0 B protocol specifications, built from silicon proven technology.

Features- full implementation of CAN FD and CAN 2.0 B.

Individual Rx mask register per mailbox.

Transmission abort capability

LIN

LIN means local interconnect Network is a serial network protocol used for communication between components in vehicles. It is used for low-speed applications. It is a single wire, serial network protocol that supports communications up to 19.2KbIT/s at a bus length of 40m.

ETHERNET

Ethernet protocol is a typical LAN technology .It transmits data at speed up to 10 Mb/s .It transmits and receives data through cables. This facilitates network communication between 2 or more different types of network cables such as from copper to fiber optic. Ethernet connections are faster, more reliable, and is more secure.