

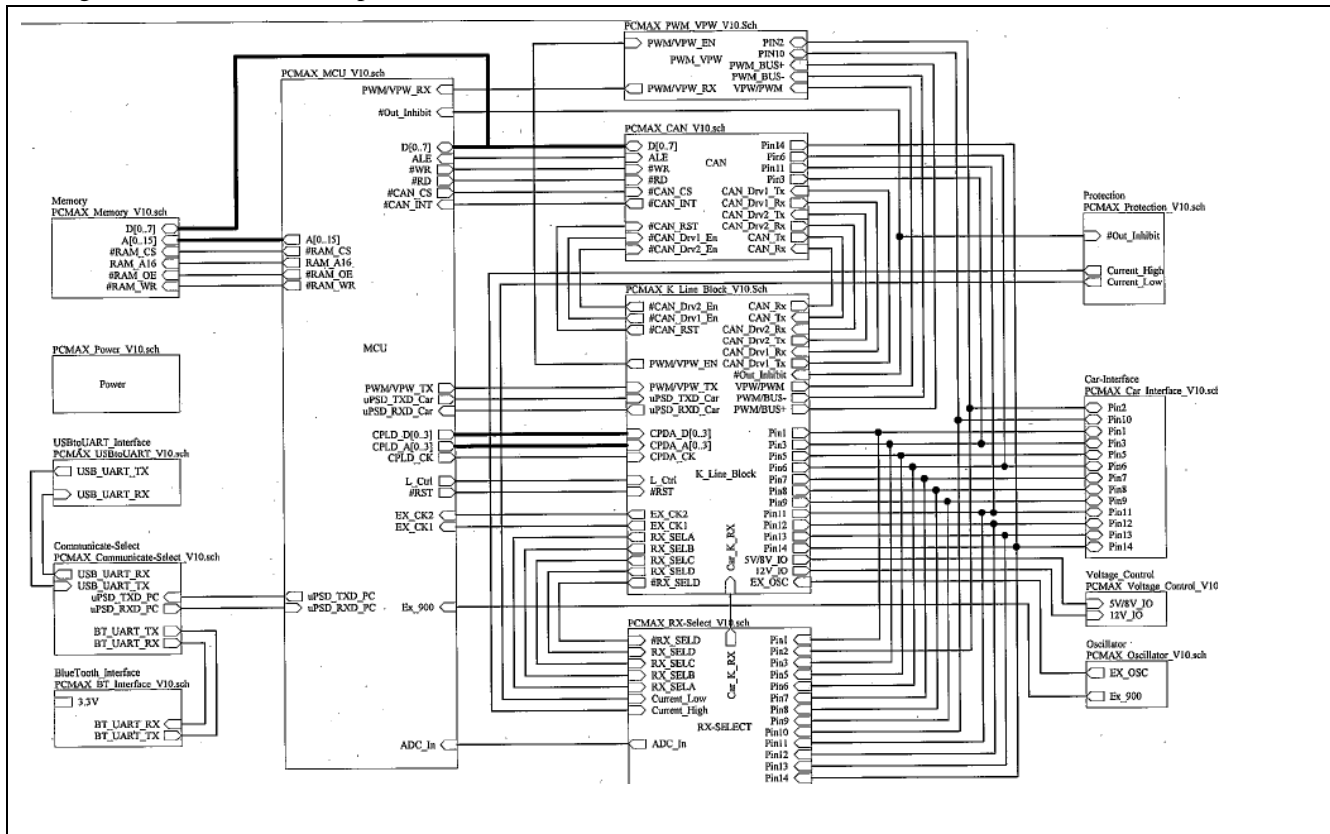
PC-MAX Circuit Theory

PC-MAX needs external working voltage DC 12V 1A. Internal power supply is as fig. 2 below. PC-MAX contains two parts, PC-MAX main unit and adaptor that connects with PC (in wireless communication). When using cable, PC-MAX is connected with PC through USB cable. PC-MAX communicates with vehicle to diagnose by the software installed in PC.

Communication with PC-MAX main unit have two ways, wired and wireless. When PC-MAX main unit detects the wired connection, it will use wired communication. Wired communication will use USB connection like fig. 5. When wired communication is disconnected, main unit will switch to wireless communication automatically. Frequency for wireless communication is RF 2.4GHz, using Bluetooth communication protocol for data communication as fig. 6. MOD 1 in fig. 6 is Bluetooth communication module. Both parts of Bluetooth could receive and transfer information.

Working relationship inside PC-MAX main unit is shown in fig. 1. When receiving instruction from PC, MCU will distribute to PWM_VPW, CAN, K_Line_Block, RX_Select, Voltage_Control and Protection modules following the instruction as shown in fig. 1. After relative processing, it will communicate with vehicle through Car-Interface module.

Fig. 1 (modules relationship)



The diagram shows the IS61C1024AL-12TI memory chip (U4) connected to a system. The chip has 20 pins. Address lines A0-A15 are connected to pins 20-4. Address lines A16-A19 are connected to pins 10-13. Data lines D0-D7 are connected to pins 21-28. Control signals CS2, nCS1, nOE, and nWE are connected to pins 6, 30, 32, and 5 respectively. VDD is connected to pin 8 and GND to pin 24. A 5V supply is connected to pin 8 through a 105 capacitor. The chip is labeled U4 and IS61C1024AL-12TI.

[illegible]

Fig. 6 (Bluetooth component, wireless connection)

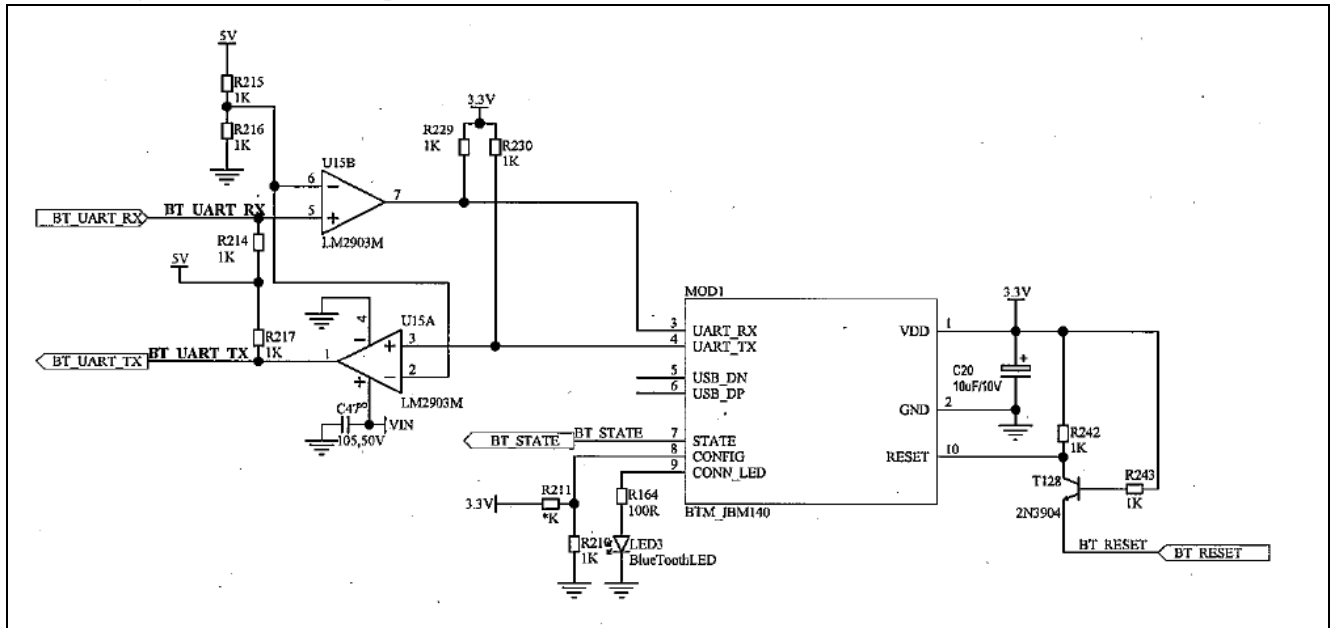


Fig. 7 (connector that connects with vehicle)

