

For Hardware design,

1. DM9000A has auto-MDIX feature and DM9000E doesn't this feature. Therefore, selecting transformer is difference. Please refer DM9000A datasheet, chapter 11.
2. About EEPROM interface, DM9000E has four pins (EEDI, EEDO, EECK and EECS) to control EEPROM. But DM9000A only has three pins (EEDIO, EECK and EECS).
3. About power, DM9000A builds in 3.3V to 2.5V regulator and pin 2 and pin 9 are output pin.
4. The clock in the inside of DM9000A is quick. Suggest adding the resistor on DATA bus and the capacitor on IOW and IOR pin to avoid signal noise.

For Software design,

1. User can use DM9000E driver to run on DM9000A board. But dm9000e driver can't perform dm9000A performance effectively.
2. DM9000A use two-packet mode to transmit packets and DM9000E is one-packet mode. The driver uses the parameter (tx_pkt_cnt) to control the number of transmitted packets.
3. Attached file is the different list of driver source code. Give you reference.