The user menu for the DM9000A 8/16-bit evaluation board provides information for a design engineer to be able to connect the DM9000A to any architecture. The DM9000A 8/16-bit evaluation board is shown below.

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The detailed description of the table above is shown respectively below.

A. DM9000A

The Davicom DM9000A is an 8/16bits local bus supported 10/100Mbps Ethernet controller which is designed for the embedded system applications. The AUTO-MDIIX switching capability to fit straight through or crossover cables is also included.

B. 25MHz Crystal

The requirement of the crystal is of 25MHz +/-50ppm.

C. 10/100M Transformer

The suitable transformers shown as follows are for the design engineers’ reference.

- GTS FC-621SM
- YCL PH163539
- BOTHHAND TS6121CX

D. RJ-45

E. 5V TO 3.3V Regulator

The reference circuit of 5V to 3.3V regulator is shown below. The type of regulator Q1 is SOT-223. The design engineer should take notice of that the specification of the regulator chosen should be the same as the regulator Q1 mentioned above and the output voltage should be fixed on 3.3V.
F. 93LC46

The package of 93LC46 is SOP8. In addition, the specification of the 93LC46 should be the same as the figure below.

![Diagram of 93LC46 SOP8 package](image)

G. Link Status LEDs

1. The LINK/ACT LED is the link LED. If the LINK/ACT LED is on, it represents the link status is good. If the LINK/ACT LED is blinking, it presents that data are transmitting or receiving. If the LINK/ACT LED is off, it is probably that the link status is off or failure.

2. The SPEED LED represents the link speed is 10M or 100Mbps.
   - If the SPEED LED is on, the link speed is 100Mbps.
   - If the SPEED LED is off, the link speed is 10Mbps or link fails (depend on the LINK/ACT LED).

H. 8/16bit Mode and EEPROM Setting

1. JP1:
   - The EECS pin is a strap pin to determine data bus width. It is pulled high for 8 bit and pulled low for 16bit.
   - ON: 8 bit mode.
   - OFF: 6 bit mode.

2. JP2:
   - On: EEPROM used.
   - OFF: EEPROM not used.

I. ISA/uP mode Setting

The LED1 pin is for SPEED LED and can be regarded as ISA IO16 function by changing EEPROM setting. In EEPROM, if the bit[15] of WORD 7 is set to 1, the LED1 will be acted as IO16 function instead of SPEED LED.

The LED2 is for LINK/ACT LED and also can be regarded as IOWAIT function by changing EEPROM setting. In, EEPROM, if bit[13:12] of WORD6 is set to 1, the LED2 will be acted as IOWAIT function instead of LINK/ACT LED.

In DM9000A evaluation board, JP3 is used to set LED1 pin either for SPEED LED or for IO16.
function. JP4 is used to set the LED2 pin either for LINK/ACT LED or for IOWAIT function. The following list is the configuration for ISA and uP mode.

1. uP mode setting:
2. ISA mode setting:
3. MDC/MDIO mode setting

J. RJ45 Connector

The following diagram is the pin configuration of RJ45 connector.

![RJ45 Connector Diagram]

K. 8/16BIT Interface Connector

The following figure shows the pin configuration in 8/16Bit interface mode.

![8/16BIT Interface Connector Diagram]