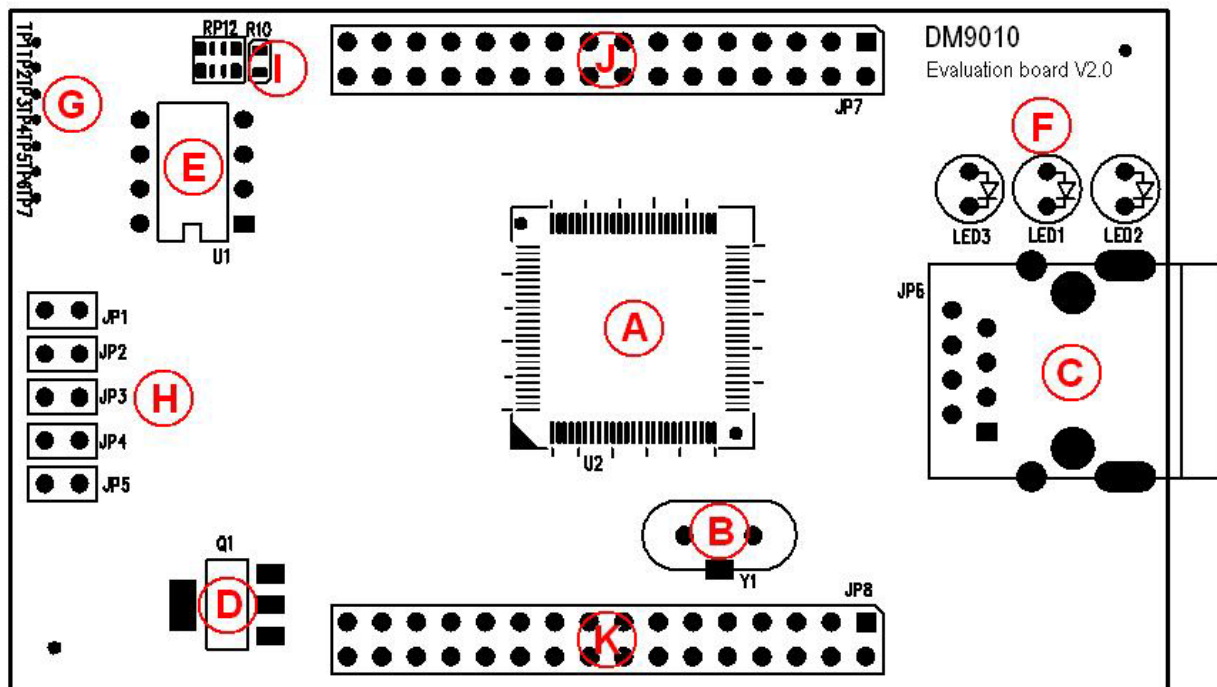


DM9010 Evaluation Board V2.0

User Menu

The user menu for the DM9010 evaluation board provides information for a design engineer to be able to connect the DM9010 to any architecture. The diagram of DM9010 evaluation board is shown below. .



| | | | |
|---|---|---|--------------------------------|
| A | DM9000 | G | GPIO Control Status Test Point |
| B | 25MHz Crystal | H | Jumper |
| C | RJ45 integrated with 10/100 Base-Tx Magnetics | I | Reverse MII Mode Setting |
| D | 5V TO 3.3V Regulator | J | MII / 32BIT Connector |
| E | 93LC46 | K | 8/16 BIT Connector |
| F | Link Status LED | | |

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

A. DM9010

The Davicom DM9010 is an ISA & 32/16/8-bits local bus supported 10/100Mbps Ethernet controller which is designed for the embedded system applications. The AUTO-MDIX 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. RJ45 integrated with 10/100 Base-Tx Magnetics

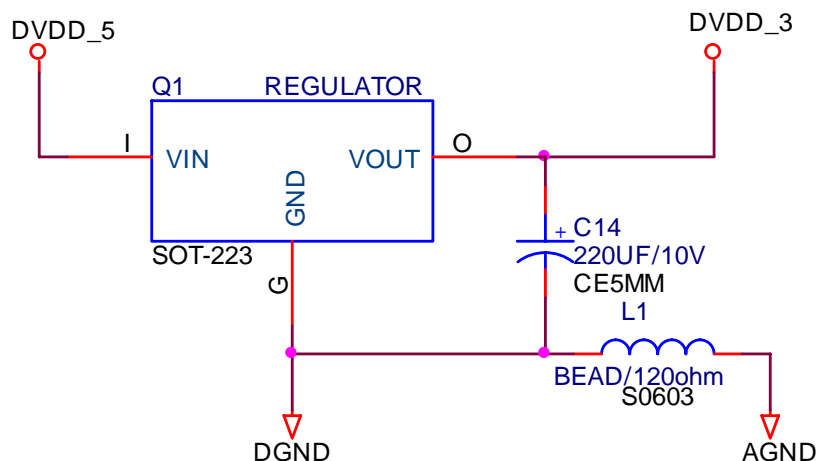
The suitable transformers shown as follows are provided with for design engineers' reference.

YCL PTC1111-31N1

Bothhand LU1S041CX

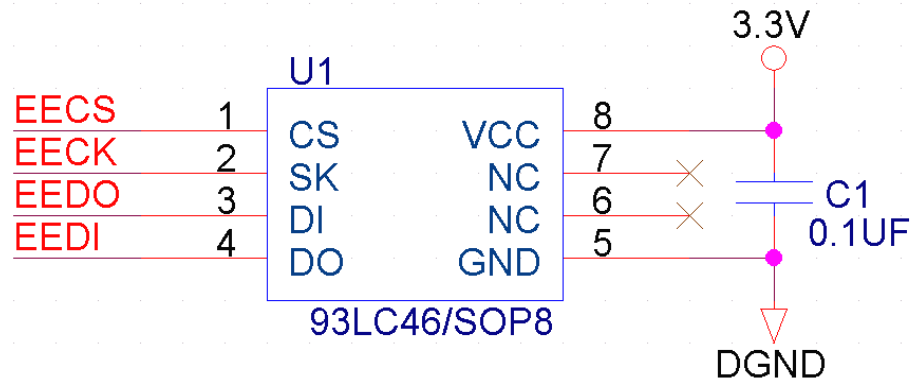
D. 5V to 3.3V Regulator

The reference circuit of 5V to 3.3V regulator is shown below. The type of regulator is SOT-233. The design engineer must be aware that the specification of the regulator chosen should be the same as the regulators mention above and the output voltage should be fixed on 3.3V.



E. 93LC46

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



F. Link Status LEDs

There are three link status LEDs on the DM9010 evaluation board. The detail information of these LEDs is presented in the following.

1. The LED1 is speed LED. It represents the link speed is 10M or 100Mbps. If the LED1 is on, the link speed is 100Mbps. If the 100 LED is off, the link speed is 10Mbps or link fails (depend on the LED2).
2. The LED2 is link LED. If the LED2 is on, it represents the link is good. If the LED2 is blinking, it presents data are transmitting or receiving. If the LED2 is off, it presents the link fails.
3. The LED3 is full duplex LED. In LED mode 1, it represents the link speed is Half or Full duplex mode. If the LED3 is on, it means DM9010 is in the full duplex mode. If the LED3 is off, then DM9010 is in the half duplex mode or link fails (depend on the LED2).

G. GPIO Pin Control Status Test Point

H. Jumper

1. JP1:

On: EEPROM used.

OFF: EEPROM not used.

2. JP2:

On: set in 32-bit mode.

Off: set in 16-bit mode.

3. JP3:

On: The INT pin output type is open-collect.

Off: The INT pin output type is force output.

4. JP4:

On: The INT pin polarity is active low.

Off: The INT pin polarity is active high.

5. JP5:

On: Force in external MII mode.

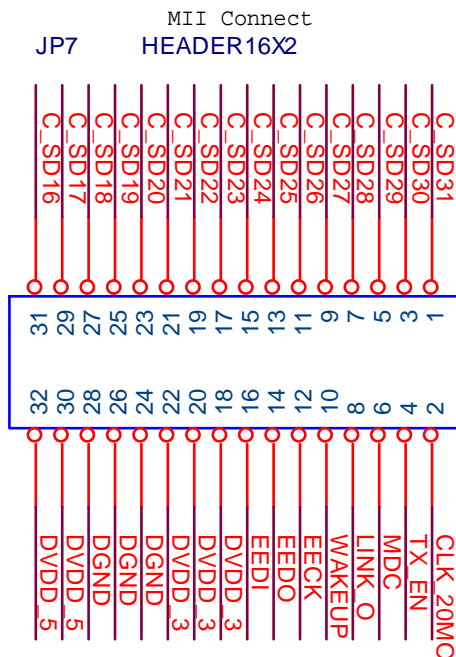
Off: Force in internal MII mode.

I. Reverse MII Mode Setting

The LINK_O pin is a strap pin to determine the external MII interface is the reversed MII interface (pull-up) or normal MII interface (pull-low). To mount the RP12 and R10 will set the external MII interface is reserved MII interface. (Please note that the reversed MII mode is not supported in the 32-bit mode.)

J. MII / 32BIT Connector

It is the MII/32Bit interface pin connector. The following figures show the pin configuration in MII /32Bit interface mode.



K. 8/16 BIT Connector

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

