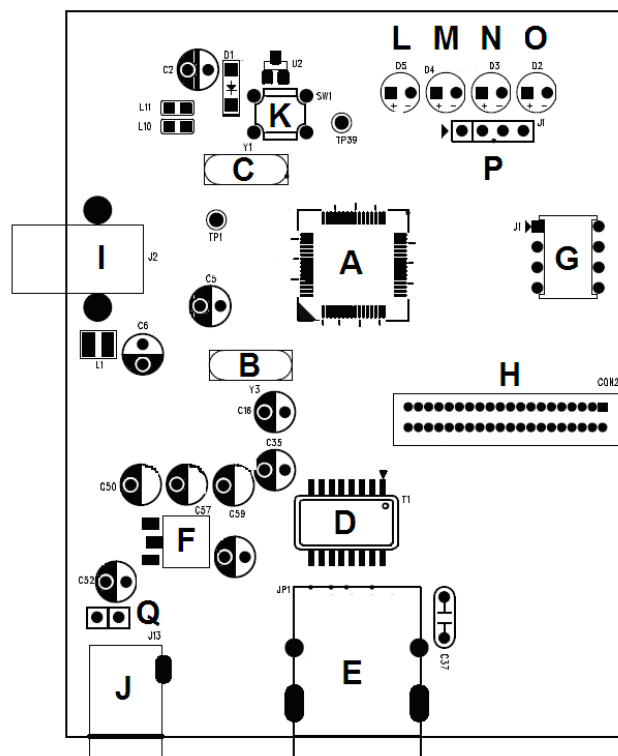


DM9620/21 USB2.0 to 10/100M Fast Ethernet Controller Evaluation Board User Manual

Applicable version information:

EVB version: 1.0, Circuit version: 1.0

The user manual for the DM9620/21 USB2.0 to 10/100M Fast Ethernet Controller evaluation board provides information for a design engineer to be able to connect the DM9620/21 to any architecture. The DM9620/21 USB2.0 to 10/100M Fast Ethernet Controller evaluation board is shown below:



A	DM9620/21	J	DC 5V in Jack
B	25MHz Crystal	K	Reset Button
C	12MHz Crystal (Optional)	L	Ethernet Link status LEDs
D	Ethernet Transformer	M	Ethernet Speed status LEDs
E	RJ-45 Phone Jack	N	Ethernet FDX status LEDs
F	5V to 3.3V Regulator	O	USB status LEDs
G	93LC46 EEPROM	P	Test pin
H	MI I Interface Connector	Q	+5V Jumper
I	USB Connector		

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

A. DM9620/21

The DM9620/21 USB to 10/100Mbps Fast Ethernet controller is a high performance and highly integrated ASIC with embedded SSRAM for packet buffering. It enables low cost and affordable Fast Ethernet network connection to desktop, notebook PC, and embedded system using popular USB ports.

It has an USB interface to communicate with USB host controller and is compliant with USB specification V1.0, V1.1 and V2.0. It implements 10/100Mbps Ethernet LAN function based on IEEE802.3, and IEEE802.3u standards.

DM9620/21 integrates an on-chip 10/100Mbps Ethernet PHY to simplify system design and provides an optional media-independent interface (MII/RMII/Rev_MII).

B. 25MHz Crystal

The requirement of the crystal is of 25MHz +/-30ppm.

Vendor	Part Number
NSK	D97-002_25M
ITTI	1300574-25.000MHZ

C. 12MHz Crystal (Optional)

The requirement of the crystal is of 12MHz +/-30ppm.

Vendor	Part Number
NSK	D97-002_12M
ITTI	1300574-12.000MHZ

D. Ethernet Transformer

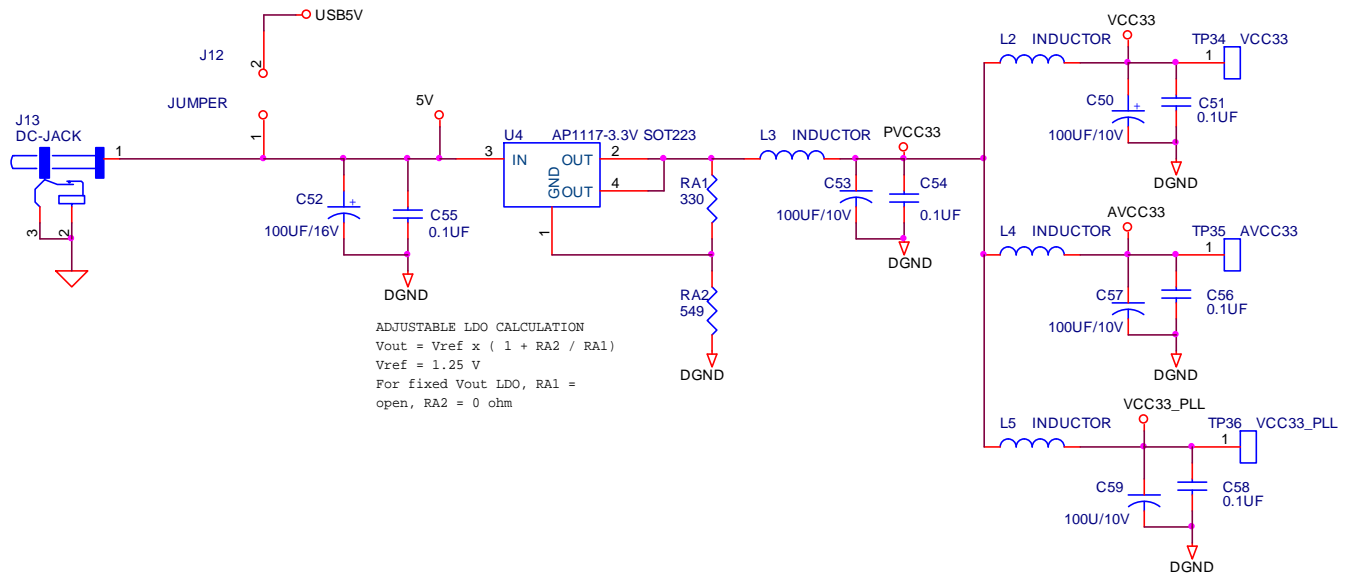
The suitable transformers shown as follows are for the design engineers' reference.

Vendor	Part Number
MAGCOM	HS9016, HS9024
Delta	LFE8563-DC, LFE8563T-DC

E. RJ-45 Phone Jack

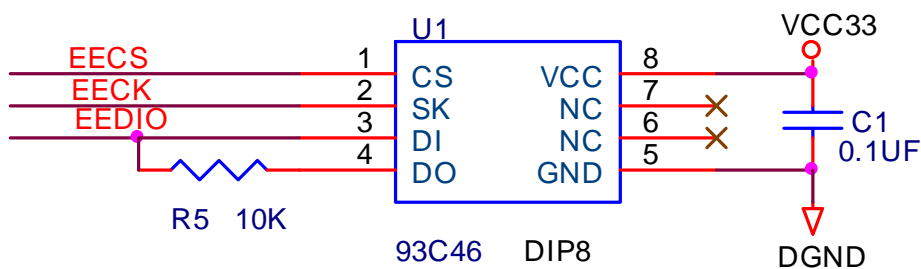
F. 5V to 3.3V Regulator

The reference circuit of 5V to 3.3V regulator is shown below. The design engineer should take notice of that the specification of the regulator chosen should have output voltage of 3.3V +/- 5%.

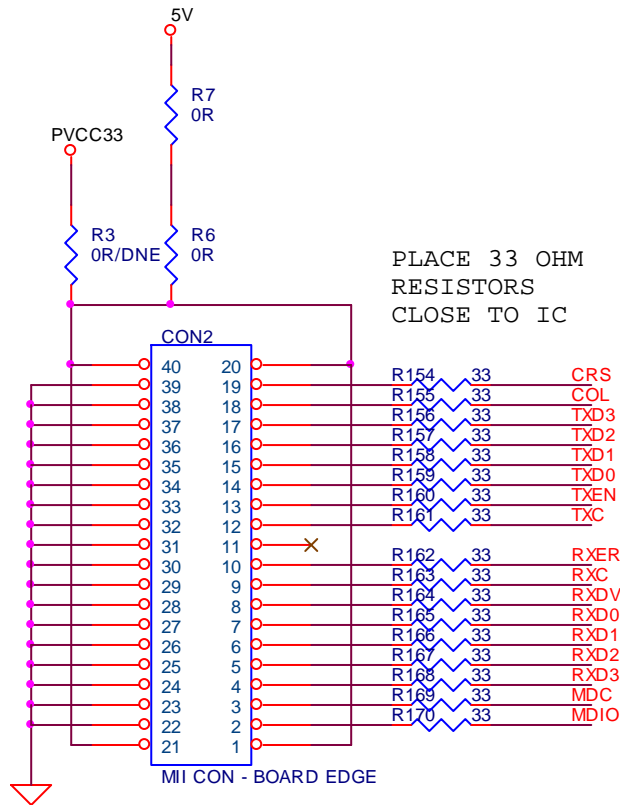


G. 93LC46 EEPROM

The package of 93LC46 is DIP-8pins and the pin out of the 93LC46 should be the same as the figure below.



H. MII Interface Connector



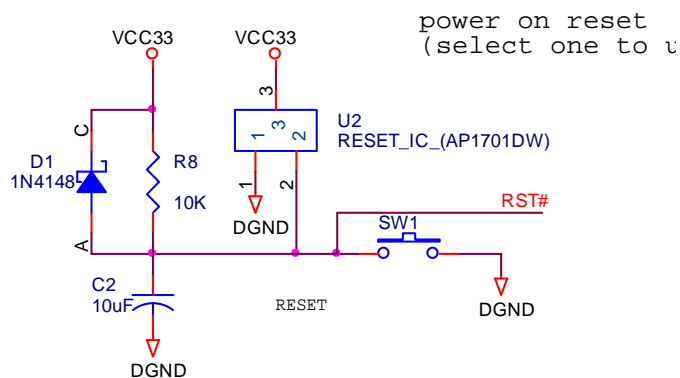
I. USB Connector (Type B)

J. DC 5V in Jack

DC 5V power support for DM9620/21 Evaluation board.

K. Reset Button

Support system Reset Button.



L. Ethernet Link status LEDs

The LINK LED is the link LED. If the LINK LED is on, it represents the link status is good. If the LINK LED is off, then the link status is off.

M. Ethernet Speed LEDs

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.

N. Ethernet FDX status LEDs

The Ethernet FDX LED represents the Full Duplex or Half Duplex status

If the Ethernet FDX LED is on, the Duplex is Full. If the Ethernet FDX LED is off, the Duplex is Half.

O. USB status LEDs

The USB status LEDs represents USB status in High speed.

P. Test Pin

For Testing only.

Q. +5V Jumper:

Close: USB support +5V

Open: DC Jack support +5V