Reference Schematic for LAN9252-HBI-Multiplexed Mode

Configurations
HBI Multiplexed mode
EEPROM - 24FC512 (High)
2Port mode
Port0 & Port1 = Copper

<table>
<thead>
<tr>
<th>Page No.</th>
<th>Schematic Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Title</td>
</tr>
<tr>
<td>2</td>
<td>Power Supply</td>
</tr>
<tr>
<td>3</td>
<td>LAN9252(Part1)</td>
</tr>
<tr>
<td>4</td>
<td>LAN9252(Part2), Strap &amp; EEPROM</td>
</tr>
<tr>
<td>5</td>
<td>Copper Mode Interface</td>
</tr>
</tbody>
</table>
POWER SUPPLY

3 V REGULATOR, 3A
(3V3 fixed when Rb=470E)

U1

VIN 2
ENABLE 1
TRIM 5
VOUT 4

R1 1K
SW1 1101M2S3CQE2 C&K

R2 4.7uF
C2 10uF 25V

R3 10K
C3 0.1uF

R4 470E 1%
C4 10uF

R5 3.3k 1%
C5 1.1uF

TP1 RED

TP2 ORANGE

VIN 2
VOUT 4

D1 GRN

J1 PJ-002AH Cui Stack

R3 330E
C1 4.7uF
DNP

R4A1 33E 1%

U1

3V3
5V
0V

TP1 RED

TP2 ORANGE

VIN 2
VOUT 4

D1 GRN

J1 PJ-002AH Cui Stack

R3 330E
C1 4.7uF
DNP

R4A1 33E 1%

U1

3V3
5V
0V
Note: PIN 4_OSCVSS need to connect Chip Gnd.
**LAN9252**

Microchip

Note: In SoC
If RD & WR is different pins then
RD need to connect with pin 31 & WR need to connect with pin 30

If RD & WR are same pin, then RD_WR need to Connect with pin 31,
and the ENB need to connect with pin 30

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### Strap Details

Signals Functions
- **GPIO0** = LINKACTLED/TO/LEDPOL/CHIP_MODE0
- **GPIO1** = UNLINKACTLED/TO/LEDPOL/CHIP_MODE1
- **GPIO2** = RUNLED/LEDPOL2/E2PSIZE

**GPIO [0:2] & LED_POL_Strap**

**CHIP_MODE[1:0]**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>RUNLED</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>GPIO0</td>
<td></td>
</tr>
</tbody>
</table>

**FX_Mode_Strap_1 & 2**

- **FXSDB/FXLOSB**
- **FXSDA/FXLOSA**

**FX_Los_Strap_1 & 2**

- **ATEST/FXLOSEN**

**I2C EEPROM**

To use Lower size EEPROM - 24C04,
Strap-E2PSIZE(GPIO2) to be changed to LOW

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**HBI Multiplexed Mode**

The LED is set as active high,
Low EEPROM Size P/N = 24C04
1k bits (128 x 8) through 16k bits (2k x 8)

The LED is set as active low,
EEPROM Size P/N = 24FC512
32k bits (4K x 8) through 512k bits (64K x 8) or 4Mbits (512K x 8) (LAN9252 only) [Default]

Higher size EEPROM - 24FC512 used as Default
Strap-E2PSIZE(GPIO2) is HIGH
To use Lower size EEPROM - 24C04,
Strap-E2PSIZE(GPIO2) to be changed to LOW

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LAN9252-HBI Multiplexed Mode

LAN9252(Part2), Strap & EEPROM

Lane 4 5
Rev AB

Project Name: Board Name: Board Size: Board Date: Friday, May 22, 2015

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**Chennai India**
Note: Capacitors C25 through C28 are optional for EMI purposes and are not populated on the LAN9252 evaluation board. These capacitors are required for operation in an EMI-constrained environment.

Note: Capacitors C30 through C33 are optional for EMI purposes and are not populated on the LAN9252 evaluation board. These capacitors are required for operation in an EMI-constrained environment.