RTL8201EL: Pull High for RMII mode (RTL8201E(L)-VB-GR only)
Pull Low for MII mode

PHY_VDD33

R46 4.7K — RX_CTL/RMII — R47 4.7K(NC)

RMII Signals:
REF_CLK - Pin 22
CRS_DV - Pin 36
RXD[1:0] - Pin 16, 14
TX_EN - Pin 27
TXD[1:0] - Pin 24, 23
RX_ER - Pin 39

PHY_AVDD33

XTAL1 — Y1 25MHz — XTAL2
C1 27pF — C2 27pF
R6 2.49K — RSET

PHY_VDD33

Note 2: The Trace length from C56, C57 to 8211CL Pin 44,45 must be within 1 cm. The trace width from PHY_AVDD33 to Pin 44,45 should>40mils

PHY_AVDD33

VDDREG — R61 0 — C56 22uF — C57 0.1uF

RTL8201EL:C56(NC),C57(NC),R61(NC)

RTL8211CL:
RXDLY pull high:R93(NC),R95(NC)
RXDLY pull low:R94(NC),R2(NC)

RTL8201EL:
R93(NC),R95(NC),R94(NC),R2(NC),D1

PHY_VDD33

LED2_RXDLY_COL — C48 100pF — R93 0 — R94 0 — D1 LED2 — R2 510 — R95 510

C48,C49,C50 Reserve for EMI. close to LAN connector

RTL8201EL:C3(NC)
RTL8211CL:C3(NC),C45(NC)

C3 10uF — C45 1uF

Note:RTL8201EL:Pin40 is Output
RTL8211CL:Pin40 is Input

PHY_VDD33

PHY_VDD12

R92 4.7K — R79 0 — R84 4.7K

RTL8201EL:R79(NC),R92(NC)
Pull high(R92): Enable repeater mode
RTL8211CL:R84(NC),R92(NC)

LED0_AD0 — C49 100pF — R96 0 — R97 0 — D2 LED0 — R98 510 — R99 510

RTL8211CL/8201EL:
PHYAD0=1:R96(NC),R99(NC)
PHYAD0=0:R97(NC),R98(NC)

CON1 — RJ45S1X1 — U2 YL18-3002S — U7 RTL8211CL RTL8201EL

PHY_VDD33

Note: Interruption Function
RTL8201EL-VB-GR only

INTB — R7 4.7K

PHY_VDD12

AVDD12/PWOUT12D — C42 10uF — C43 .1uF — R63 0 — R64 0

PHY_AVDD12

RTL8201EL:R64(NC),C42(NC)
RTL8211CL:R63(NC),C42(NC)

LED1_AD1 — C50 100pF — R100 0 — R101 0 — D3 LED1 — R102 510 — R103 510

RTL8211CL/8201EL:
PHYAD1=1:R100(NC),R103(NC)
PHYAD1=0:R101(NC),R102(NC)

C5 .01uF — C6 .01uF — C8 .01uF — C9 .01uF

C10 .1uF — C12 .01uF — C11 .1uF — C13 .01uF — C16 1000pF/2KV-X-SA — C15 1000pF/2KV-X-SA — R14 75-1-SS — R15 75-1-SS — R16 75-1-SS — R17 75-1-SS

Reference Transformer Part No. list
YL18-3002S
YuTai Electronics Co.,LTD
TEL:86-574-63620701,63621610
http://www.yutai-elec.com
EMAIL: nico_yu@yeah.net

Connect ENSWREG/RXER to PHY_VDD33 to enable Switching regulator or connect ENSWREG/RXER to GND to disable Switching regulator.

PHY_VDD33

ENREG/RXER/FXEN — R65 0 — R66 0(NC)

RTL8201EL :R65(NC),R66 (4.7K)
Pull Low(R66):UTP mode
Pull High(R65):Fiber mode
RTL8211CL:R65(0 ohm),R66(NC)

VDD33/VDD25 — R55 4.7K — PHYRSTB — R56 0 — PCIRST — C54 0.1uF

For wake on LAN function, please mount R55 C54 and remove R56

Place filter network close to RX_CLK. Reserved for EMI

RX_CLK — R49 22 — RX_CLK_N — C46 NC

RX_CTL/RMII	R48 22	RX_CTL_N	
RXD0	R50 22	RXD0_N	
RXD1/TXDLY	R51 22	RXD1_N	
RXD2/AN0	R52 22	RXD2_N	
RXD3/AN1	R53 22	RXD3_N	

Close to PHY Reserve for EMI

VDD12/CRS_RPTR	R35 0	CRS_N	CRS_N
LED2_RXDLY_COL	R36 0	COL_N	COL_N
ENREG/RXER/FXEN	R37 0	ENREG/RXER_N	

RTL8211CL:R35(NC),R36(NC),R37(NC)

PHY_AVDD12
RX_CTL_N
RX_CLK_N
ENREG/RXER_N
RXD0_N
RXD1_N
RXD2_N
RXD3_N

TX_CLK
TX_CTL
TXD0
TXD1
TXD2
TXD3
REGOUT

PHY_VDD33

MDIO — R38 1.5K

U8 — MDI0+ MDI0- MDI1+ MDI1- GND — C60 0.1uF — VDD33

U9 — MDI2+ MDI2- MDI3+ MDI3- GND — C61 0.1uF — VDD33

MDIO — MDIO
MDC — MDC

U8,U9 Reserve for cable discharge.

PHY_VDD33

R69	4.7K	LED2_RXDLY_COL	R70	4.7K(NC)
R71	4.7K	LED1_AD1	R72	4.7K(NC)
R73	4.7K(NC)	LED0_AD0	R74	4.7K
R75	4.7K(NC)	RXD2/AN0	R76	4.7K
R77	4.7K(NC)	RXD3/AN1	R78	4.7K
R85	4.7K	RXD1/TXDLY	R86	4.7K(NC)

VDD33/VDD25

GND

RTL8211CL:
R76,R78: Config for all capability
R71,R74: PHY Address=01
R69,R85: Without TX/RX Delay

RTL8201EL:
R69:MII Interface
R70:SNI Interface
R71,R74: PHY Address=01

VDD33/VDD25 — R80 0 — R81 0

PHY_VDD33

PHY_VDD25

RTL8201EL:R81(NC)
RTL8211CL: R80 for 3.3V RGMII
R81 for 2.5V RGMII

Title			
Size A2	Document Number		Rev
Date: Friday, October 16, 2009		Sheet	of