

Contrôleur Ethernet

The schematic diagram illustrates the wiring for a DP83848VYB Ethernet controller. The central component, U5, is a DP83848VYB IC. Its pins are connected to various external components and signals:

- Power and Ground:**
 - 3V3 supply is connected to pins 32, 48, and 22 (IOVDD33, AVDD33).
 - GND is connected to pins 35, 47, 15, 19, 36, 49, and 20 (IOGND, AGND, DGND, GNDPAD).
- Control and Status:**
 - Eth_PWRDOWN/INT is connected to pin 7 (PWR_DOWN/INT).
 - RESE_T_N is connected to pin 29.
 - TX_CLK is connected to pin 1.
 - TXD_0, TXD_1, TXD_2, TXD_3/SNI_MODE are connected to pins 3, 4, 5, and 6.
 - TX_EN is connected to pin 2.
 - MDIO is connected to pin 30.
 - MDC is connected to pin 31.
 - COL/PHYAD0 is connected to pin 42.
 - CRS/CRS_DV/LED_CFG is connected to pin 40.
 - RX_ER/MDIX_EN is connected to pin 41.
 - RX_DV/MI_MODE is connected to pin 39.
 - RXD_0/PHYAD1, RXD_1/PHYAD2, RXD_2/PHYAD3, RXD_3/PHYAD4 are connected to pins 43, 44, 45, and 46.
 - RX_CLK is connected to pin 38.
- Signal and Data:**
 - TDI, TDO, TCK, TMS, TRST# are connected to pins 12, 9, 8, 10, and 11.
 - TD+, TD-, RD+, RD- are connected to pins 17, 16, 14, and 13.
 - X1, X2 are connected to pins 34 and 33.
 - 25MHz_OUT is connected to pin 25.
 - LED_ACT/COL/AN_EN, LED_SPEED/AN1, LED_LINK/AN0 are connected to pins 26, 27, and 28.
 - RBIAS, PFBOUT, PFBIN1, PFBIN2 are connected to pins 24, 23, 18, and 37.
 - RESERVED, RESERVED are connected to pins 21 and 20.
- External Components:**
 - Resistors: R22 (2k2), R23 (1k5), R24 (2k2), R25 (2k2), R26 (2k2), R27 (2k2), R28 (2k2), R29 (2k2), R30 (2k2), R31 (2k2), R32 (2k2), R33 (2k2), R34 (2k2), R35 (2k2), R36 (33R), R37 (33R), R38 (33R), R39 (33R), R40 (33R), R41 (33R), R42 (33R), R43 (4k87).
 - Capacitors: C18 (100nF), C19 (100nF), C20 (100nF), C21 (100nF), C22 (100nF), C23 (100nF), C24 (100nF), C25 (100nF), C26 (100nF), C27 (10uF).
 - Transformer: X2 (7W-50.000MBA-T).
 - LED: D1 (Yellow).
 - Switch: S1 (SI-60062-F).