ETH_A3.3V

C1 1uF
C3 100nF
C5 100nF
FB L2
C7 1uF
C8 100nF
GND
+3.3V

+1.8V
ETH_1.8V
ETH_A1.8V
ETH_PLL1.8V
FB L1
FB L3
C2 1uF
C4 100nF
C6 100nF
C9 100nF
GND

U4 K8001

ETH_1.8V
ETH_A1.8V
ETH_A3.3V
ETH_PLL1.8V
+3.3V

13 VDD
31 VDD
38 VDD
47 VDD
7 VDD2
24 VDD2

21 COL — ETH_COL
22 CRS — ETH_CRS
25 INT — ETH_INT
26 LED0 — ETH_LED0
27 LED1 — ETH_LED1
28 LED2
29 LED3
2 MDC — ETH_MDC
1 MDIO — ETH_MDIO
42 NC
43 NC
30 PD_N
37 REXT
48 RST_N — ETH_RST_N
10 RXC — ETH_RXC
6 RXD0 — ETH_RXD0
5 RXD1 — ETH_RXD1

+3.3V 4.7K R1
GND 6.65K R2

45 XO
46 XI — ETH_CLK
41 TXP
40 TXM
14 TXER — ETH_TXER
16 TXEN — ETH_TXEN
20 TXD3 — ETH_TXD3
19 TXD2 — ETH_TXD2
18 TXD1 — ETH_TXD1
17 TXD0 — ETH_TXD0
15 TXC — ETH_TXC
34 SD_FXEN
33 RXP
32 RXM
11 RXER — ETH_RXER
9 RXDV — ETH_RXDV
3 RXD3 — ETH_RXD3
4 RXD2 — ETH_RXD2
RXD1 — ETH_RXD1
RXD0 — ETH_RXD0

ETH_TXD[0..3]
ETH_RXD[0..3]

8 12 23 35 36 39 44 GND
GND

C10 100nF  C11 100nF
+3.3V
GND

49.9 R3
49.9 R4
49.9 R5
49.9 R6
+3.3V

J4
1 TX+
2 TX-
3 VCC
4 GND
5 GND
6 VCC
7 RX+
8 RX-
9 LED1A
10 LED1K
11 LED2A
12 LED2K
14 SHIELD
13 SHIELD
RJ45-48025

+3.3V
GND
ETH_LED0 — 220 R7
ETH_LED1 — 220 R8

1M R9
C12 47nF
GND

Copyright: Andres.Calderon@emQbit.com / Juan.Brinez@emQbit.com

ETH_A3.3V

FB
L2

C1 C3 C5 C7 C8
1uF 100nF 100nF 1uF 100nF

ETH_1.8V        ETH_A1.8V        ETH_PLL1.8V

INDUCTOR        INDUCTOR
L1              L3

C2 C4    C6    C9
C  C     C     C

GND

ETH_1.8V
ETH_A1.8V
ETH_A3.3V
ETH_PLL1.8V

3.3V

49.9 49.9 49.9 49.9
R3   R4   R5   R6

ETH_COL    21  COL   VDD  13
ETH_CRS    22  CRS   VDD  31
ETH_INT    25  INT   VDD  38
           26  LED0  VDD  47
ETH_LED0   27  LED1  VDD2 7
ETH_LED1   28  LED2  VDD2 24
           29  LED3

ETH_MDC    2   MDC
ETH_MDIO   1   MDIO
           42  NC        XO   45
3.3V  4.7K 43  NC        XI   46    ETH_CLK
      R1   30  PD_N      TXP  41
      6.65K 37 REXT      TXM  40
GND   R2            U4   TXER 14    ETH_TXER
ETH_RST_N  48  RST_N     TXEN 16    ETH_TXEN
ETH_RXC    10  RXC  K8001 TXD3 20   ETH_TXD3
ETH_RXD0   6   RXD0      TXD2 19    ETH_TXD2   ETH_TXD[0..3]
ETH_RXD1   5   RXD1      TXD1 18    ETH_TXD1
                         TXD0 17    ETH_TXD0
                         TXC  15    ETH_TXC
                         SD_FXEN 34
                         RXP  33
                         RXM  32
                         RXER 11    ETH_RXER
                         RXDV 9     ETH_RXDV
                         RXD3 3     ETH_RXD3
                         RXD2 4     ETH_RXD2
              GND              ETH_RXD1
         8 12 23 35 36 39 44   ETH_RXD0   ETH_RXD[0..3]

GND

J4
1  TX+
2  TX-
3.3V  3  VCC
GND   4  GND
      5  GND
      6  VCC
      7  RX+
      8  RX-

3.3V  9  LED1A
ETH_LED0  220  10 LED1K
          R7
              11 LED2A  SHIELD 14
ETH_LED1  220  12 LED2K  SHIELD 13
          R8

RJ45-48025

1M    C12
R9    47nF

GND

C10  C11
100nF 100nF

GND

Copyright: Andres.Calderon@emQbit.com  /  Juan.Brinez@emQbit.com