Ethernet DMX Bridge V0.4
codm.de 2018
CC-BY-SA

open hardware

IC1 VREG-OKI-78SR-5.0/1.5-W36
VIN VOUT
GND
F1 PFRA 030
D1 SK34A
VCC
GND
C5 100nF

U1 AP2210K
VIN OUT
EN
GND BYP
C3 1µF
C6 2.2µF
+5V
+3V3
R1 68
PWR
GND

R3 4,7
R4 4,7
R5 100
X1-3 X1-2 X1-1
B A
GND

X2-2 X2-1
VCC
GND

U3 W5500
RST_N
RSVD RSVD RSVD RSVD RSVD
PMODE2 PMODE1 PMODE0 NC AGND
INT_N
MOSI
MISO
SCLK
SCS_N
XO
XI/CLKIN
GND
VDD
ACTLED
DUPLED
LINKLED
SPDLED RSVD 1V20 AVDD TOCAP AGND VBG AVDD AGND AVDD AGND NC
TXN TXP AGND AVDD RXN RXP DNC AVDD AGND EXRES1 AVDD NC
INT_N
MOSI
MISO
SCLK
SCSN
RST
GND
+3V3D

R11 10k
R12 10k

R8 1M
R10 0R
Y1 IT-L30-010
C7 18pF
C8 18pF
GND
+3V3D
C9 10uF/16V
C10 0.1uF
GND
ACTLED
LINKLED

C11 10nF
C12 4.7uF
GND GND GND

C13 0.1uF
C14 10uF/16V
+3V3
GND

R14 33R TXP
R15 33R TXN
R16 33R
R17 33R
RXP
RXN
R13 12.4k 1%
GND

R19 49R9 1%
R21 49R9 1%
R22 10R 1%
+3V3
C19 22nF
GND
C17 6.8nF
C18 6.8nF
R18 49R9 1%
R20 49R9 1%
C16 10nF
GND

TXP
TXN
TCT
RCT
RDP
RDN

T1G$1
TXN TCT TXP RDP RCT RDN GND
75R 75R
75R 75R
1000pF/2KV
J1 J4 J2 J3 J7 J6 J5 J8

Z1*2 T1GND
GND
ACTLED
LINKLED
R23 330R T1YELLOW
R24 330R T1GREEN
+3V3D

ISP
MISO +5V
SCLK MOSI
RST   GND

RESET DTSM-6
GND
RST

IC3 24AA025E48
SCL WP A2 A1 A0
VCC SDA GND
EEPROM
ARRAY
+5V
SCL
SDA
GND

JP3
+5V
RXD
TXD
GND
DTR
C15 100nF
RST

U2 ATMEGA328P-AU
VCC_2
VCC
AVCC
ADC6
ADC7
AREF
PB0 PB1 PB2 PB3 PB4 PB5 PB6 PB7
PC0 PC1 PC2 PC3 PC4 PC5 PC6
PD0 PD1 PD2 PD3 PD4 PD5 PD6 PD7
GND_2 GND_3 GND
+5V
C4 100nF
C1 22pF
C2 22pF
Q1 16MHz
SCSN MOSI MISO SCLK
SDA SCL
RXD TXD
R2 10k
GND

IC2 MAX485
RO RE DE DI
VCC A B GND
R9 120
JP1
D2 SM712
A B
+5V
GND