Button box

UP
DWN
PWR
D7
D6
D5
+5V

IO10 IO11 IO12 IO2

Virtual terminal 115200

RXD
TXD
RTS
CTS

RXD
TXD

Motor controller

IBT 2
L_IS   M+
R_IS   M-
L_EN
R_EN   S-
L_PWM   S+
R_PWM
IO6
IO3
VCC
GND

I2C Dispaly 128x64

LCD1
UG-2864HSWEG01

GND C2P C2N C1P C1N VBAT VSS VDD IREF VCOMH VCC VLSS CS RES D/C R/W E/RD D[0..7] BS[0..2]

1,30 2 3 4 5 6 7 8 9 26 27 28 29 13 14 15 16 17

D2 D1 D0   BS0 BS1 BS2
D[0..7]   BS[0..2]
AD4 AD5

Arduino Nano

U1
D0   VIN   30
D1   3V3   17
D2   5V   27
D3   GND   4/29
D4   RST   3/28   RESET
D5   AREF   18   AREF
D6   A7   26   AD7
D7   A6   25   AD6
D8   A5   24   AD5
D9   A4   23   AD4
D10   A3   22   AD3
D11   A2   21   AD2
D12   A1   20   AD1
D13   A0   19   AD0

IO0   2
IO1   1
IO2   5
IO3   6
IO4   7
IO5   8
IO6   10
IO7   11
IO8   12
IO9   13
IO10 14
IO11 15
IO12 16
IO13

ARDUINO NANO

+3V3 +5V
VIN

IO10 SS   IO1   RXD
IO11 MOSI   IO0   TXD
IO12 MISO
IO13 SCK

IO14 AD0
IO15 AD1
IO16 AD2
IO17 AD3
IO18 AD4
IO19 AD5
      SDA
      SCL

+5V

RESET
IO13

LED & Reset

MAX6675 or MAX31855

CJ
U2
28.00   T+   SCK   5   IO9
         T-   SO   7   IO7
              CS   6   IO8
TC1
MAX31855

PUMP & IGNITION SOCKET

AD0
AD1
1B   COM   9
2B   1C   16
3B   2C   15
4B   3C   14
5B   4C   13
6B   5C   12
7B   6C   11
      7C   10
ULN2003A

+5V   +24V
RL3 5V
PUMP

RL4 5V   +24V
+12V
RL5 12V
IGNITION