Loco-Single V2.2

MCU

Controler
Atmega 328-P

VCC

R2 10k

100n C8
DTR

PC6(/RESET) 29
GND 21
AREF 20
AVCC 18

PB6(XTAL1/TOSC1) 7
PB7(XTAL2/TOSC2) 8

GND 3
GND 5
VCC 4
VCC 6

22p C3
22p C4
16MHz

100n C5

PC0(ADC0) 23 A0
PC1(ADC1) 24 A1
PC2(ADC2) 25 A2
PC3(ADC3) 26 A3
PC4(ADC4/SDA) 27 A4
PC5(ADC5/SCL) 28 A5
ADC6 19
ADC7 22

PD0(RXD) 30 TX
PD1(TXD) 31 RX
PD2(INT0) 32 D2
PD3(INT1) 1 D3
PD4(XCK/T0) 2 D4
PD5(T1) 9 D5
PD6(AIN0) 10 D6
PD7(AIN1) 11 D7

PB0(ICP) 12 D8
PB1(OC1A) 13 D9
PB2(SS/OC1B) 14 CS
PB3(MOSI/OC2) 15 SO
PB4(MISO) 16 SI
PB5(SCK) 17 SCK

IC1

CAN
CAN
220R R3

GND
GND

I2C1

DTR — DTR
TX — TX
RX — RX

CAN-CONTROLER

CAN-Interface
VCC
+12V

R1 10k
CS
SI
SO
SCK

VDD 20
RST 19
CS 18
SO 17
SI 16
NC' 15
SCK 14
INT 13
RX0BF 12
RX1BF 11

TXCAN 1
RXCAN 2
CLKOUT/SOF 3
TX0RTS 4
TX1RTS 5
NC 6
TX2RTS 7
OSC2 8
OSC1 9
VSS 10

MCP2515

C6 100n

Q1 8MHz

C1 22p
C2 22p

GND

DA1
TXD 1 RS 8
VSS 2 CANH 7
VDD 3 CANL 6
RXD 4 VREF 5

TJA1050

GND

GND
CL
CH
+B

POWER

U2
ST732M50RSOT23-5L_STM

+12V

GND 1
VIN 2

NC 5
NC_2 4
VOUT 3

100n C11

100n C15
16uF C16

5V
5V
VCC
VCC

R15 220R
+5V

GND

LED

VCC

LIGHT

D8
10k R9
Q3 NPN

Q4 NPN

33 R4

GND GND