STM_TXD
STM_RXD
GND
JP2
1
2
3
UART_STM

RPI_TXD
RPI_RXD
GND
JP1
1
2
3
UART_RPI

U$2
STM32F103C8T6_DEV

PCB1
RASPBERRY_PI_B+

RPI_NRST   P$1

RST_RUN   GND   P$2

RPI_3V3   1
3V3
GPIO02/SDA1
5V0   2
5V0   4   RPI_5V

STM_5V   3
STM_3V3   1*2
40
2*3
24

5V
3V3
VB
GND
RST

PC13   39
PC14   38   PWM_A0
PC15   37   PWM_A1

3   GPIO02/SDA1
5   GPIO03/SCL1
7   GPIO04/GCKL
6   GND
GND   39
TXD0/GPIO14   8   RPI_TXD
RXD0/GPIO15   10   RPI_RXD

PWM_A2   36
PWM   35
34
33
32

PA0
PA1
PA2
PA3
PA4

PB0   28   FREQ
PB1   27   SEN_A0
PB3   10
PB4   9
PB5   8
PB6   7

11   GPIO17/GEN0
13   GPIO27/GEN2
15   GPIO22/GEN3
GPIO18   12
GND   20
GEN4/GPIO23   16

SPI1_SCK   31
SPI1_MISO   30
SPI1_MOSI   29
16

PA5/SPI1_SCK
PA6/SPI1_MISO
PA7/SPI1_MOSI
PA8

PB7   6
PB8   5   LED_ERR
PB9   4

RPI_3V3   17   3V3
SPI1_MOSI   19   GPIO10/MOSI
SPI1_MISO   21   GPIO09/MISO
SPI1_SCK   23   GPIO11/SCLK
GEN5/GPIO24   25
GND   18
GEN6/GPIO25   22
CE0/GPIO08   24

STM_TXD   15
STM_RXD   14
13
12
11

PA9/USART1_TX
PA10/USART1_RX
PA11
PA12
PA15

PB10   26   SEN_A1
PB11   25   SEN_A2
PB12   20
PB13   19
PB14   18
PB15   17   SEN_ENABLE

9   GND
27   ID_SD
29   GPIO05
31   GPIO06
33   GPIO13
35   GPIO19
37   GPIO26
14   GND
CE1/GPIO07   26
ID_SC   28
GND   30
GPIO12   32
GND   34
GPIO16   36
GPIO20   38
GPIO21   40

Connector
J8

GND

GND

GND

Buy on eBay: STM32F103C8T6

Mounting holes
TR   BL   BR

GND

CPU / Main

mainBoard

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KK1
SK104-PAD

D1

U$1
LM350

IN OUT

ADJ

+15V

C1
47u/25V

C3
47u/25V

C4
100n

R2
240

750
R1

C5
100n

C6
1u

+5V

GND

GND

+5V

LED1

R3
150

GND

X1-1

X1-2
PWR12

+15V

GND

STM_3V33   RPI_3V3

+3V3

3V3
SJ1

STM_5V   RPI_5V

+5V

5V
SJ2

Power Supply

mainBoard

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Output not inverting.
Wrong symbol

IC2

SEN_A0	1	A	Y0	15	S1_3V
SEN_A1	2	B	Y1	14	S2_3V
SEN_A2	3	C	Y2	13	S3_3V
			Y3	12	S4_3V
			Y4	11	S5_3V
SEN_ENABLE	6	G1	Y5	10	
	4	G2A	Y6	9	
	5	G2B	Y7	7	

R4 18k

GND   GND

74HC138D

+3V3
16 VCC

IC2P

8 GND

GND

IC3

S1_DAT	4	D0	W	6
S2_DAT	3	D1		
S3_DAT	2	D2	Y	5	FREQ
S4_DAT	1	D3		
S5_DAT	15	D4		
	14	D5		
	13	D6		
	12	D7		
SEN_A0	11	A		
SEN_A1	10	B		
SEN_A2	9	C		
	7	G		

GND

GND

74HC151D

+3V3
16 VCC

IC3P

8 GND

GND

S1_3V   22-05-7038-03
         J1-1
S1_DAT   J1-2
         J1-3
GND

S2_3V   22-05-7038-03
         J2-1
S2_DAT   J2-2
         J2-3
GND

S3_3V   22-05-7038-03
         J3-1
S3_DAT   J3-2
         J3-3
GND

S4_3V   22-05-7038-03
         J4-1
S4_DAT   J4-2
         J4-3
GND

S5_3V   22-05-7038-03
         J5-1
S5_DAT   J5-2
         J5-3
GND

connectors:
PSK-KONTAKTE
PSK 254/3W
PSK 254/3W
PSK 254/3W
PSK 254/3W
PSK 254/3W

Sensors

mainBoard

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Motor Control

mainBoard

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connectors:
AKL 249-02
AKL 249-02
AKL 249-02
AKL 249-02
AKL 249-02

Output not inverting.
Wrong symbol

H1 H2 H3 H4
3.2 3.2 3.2 3.2

LED_ERR

LED2

R29
100

GND

Other Things

mainBoard

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