

SPI UART I2C

VS

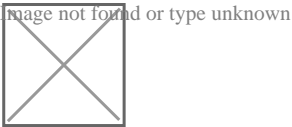
1 0

5V

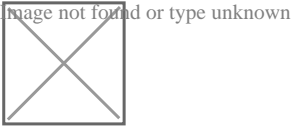
“0” 0V

“1” 5V

01000011 “C”



01000011 “C”

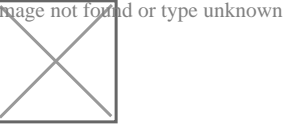


SPI

SPI

SPI

SPI MOSI (Master Output/Slave Input) –  
(Slave Select/Chip Select) –



SPI

I2C UART

MISO (Master Input/Slave Output)

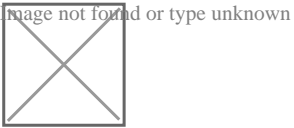
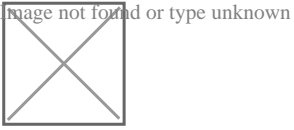
SPI

SPI

UART

CS/SS /

CS/SS



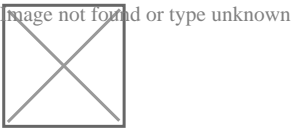
# MOSI MISO

MOSI

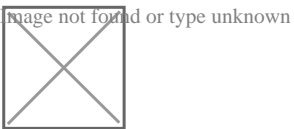
MISO

SPI

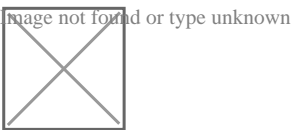
1.



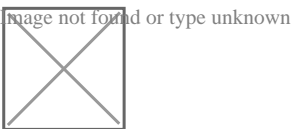
2. SS / CS



3. MOSI



4. MISO



SPI

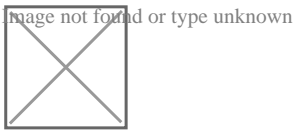
SPI

I2C

I2C

MISO MOSI

SPI I2C UART I2C UART

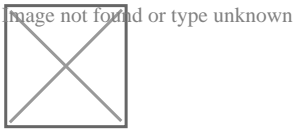


UART / SPI I2C IC

UART UART SPI

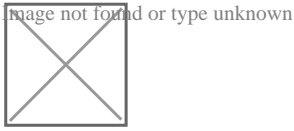
# UART

UART UART UART CPU UART UART

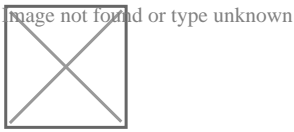


UART UART

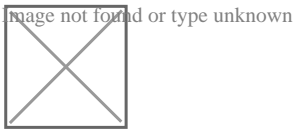
UART bps UART UART



UART Tx UART Rx



UART 1 5 9 UART 1 2



UART UART UART

5 8 9

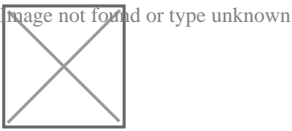
UART

UART

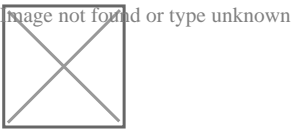
1

UART

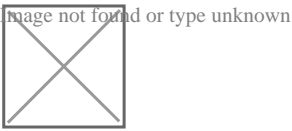
1. UART



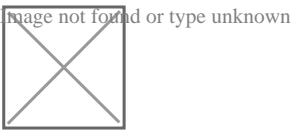
2. UART



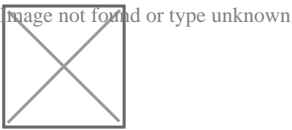
3. UART      UART      UART



4. UART



5. UART



UART

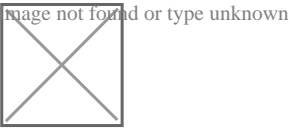
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• 9

• UART 10

# I2C

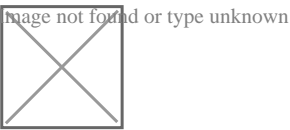
I2C Philips SPI UART SPI



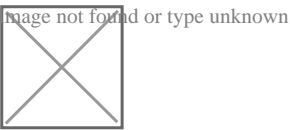
SDA (Serial Data) -

SCL (Serial Clock) -

I2C SDA SPI I2C

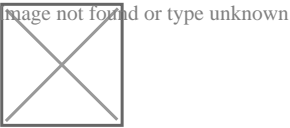


I2C msg msg / ACK / NACK



SCL SDA

SCL SDA



7 10

/

ACK/NACK ACK/NACK ACK

I2C SPI —

ACK SDA

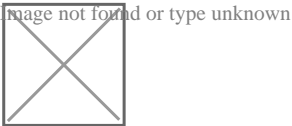
/

/

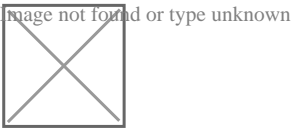
ACK 8 ACK / NACK

1. SCL SDA

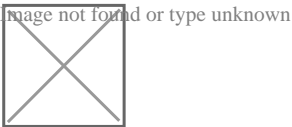
2. 7 10 /



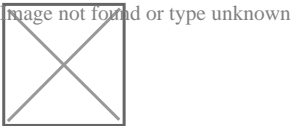
3. SDA ACK SDA



4.



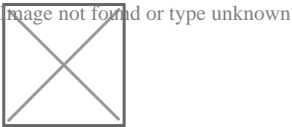
5. ACK



6. SCL SDA

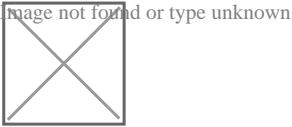
VS

I2C 7 128(27) 10 1,024(210)



VS

I2C SDA SDA SDA



## I2C

- UART 10
- UART
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- SPI
- 8

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Revision #2

Created 31 March 2022 12:28:37 by

Updated 31 March 2022 12:32:30 by