I. Connecting components on a board

F1C200S[53] - **SDC0_DAT2** - GW1NRLV9[55]
F1C200S[54] - **SDC0_DAT3** - GW1NRLV9[54]
F1C200S[55] - **SDC0_CMD** - GW1NRLV9[53]
F1C200S[56] - **SDC0_SCK** - GW1NRLV9[51]
F1C200S[57] - **SDC0_DAT0** - GW1NRLV9[50]
F1C200S[58] - **SDC0_DAT1** - GW1NRLV9[49]

Z3:microSD[01] - **DAT2** - GW1NRLV9[33]
Z3:microSD[02] - **DAT3** - GW1NRLV9[34]
Z3:microSD[03] - **CMD** - GW1NRLV9[35]
Z3:microSD[05] - **SCK** - GW1NRLV9[36]
Z3:microSD[07] - **DAT0** - GW1NRLV9[37]
Z3:microSD[08] - **DAT1** - GW1NRLV9[38]

F1C200S[06] - **PD2/LCD_D2/I2C0_SDA** - NS2009_U10[09] - Y2[03] - FPC24_CAM[03]
F1C200S[18] - **PD12/LCD_D18/I2C0_SCL** - NS2009_U10[10] - Y2[15] - FPC24_CAM[05]

F1C200S[63] - **PA3/SPI1_MISO/UART1_TX** - Y1[05] - GW1NRLV9[48]
F1C200S[64] - **PA2/SPI1_SCK/UART1_RX** - Y1[06] - GW1NRLV9[47]
F1C200S[65] - **PA1/SPI1_MOSI** - Y1[04]
F1C200S[66] - **PA0/SPI1_CS** - Y1[03]

F1C200S[59] - **PC0/SPI0_SCK/UART1_RX** - GD5F1G_U2[06]
F1C200S[60] - **PC1/SPI0_CS** - GD5F1G_U2[01]
F1C200S[61] - **PC2/SPI0_MISO/UART1_TX** - GD5F1G_U2[02] - X2[01]
F1C200S[62] - **PC3/SPI0_MOSI** - GD5F1G_U2[05]

GD32F303[30] - PA9 **USART0_TXD** - GW1NRLV9[18] - Y5[03]
GD32F303[31] - PA10 **USART0_RXD** - GW1NRLV9[17] - Y5[04]
GD32F303[12] - PA2 **USART1_TXD** - **USART1_RXD** - GD32F103[10] USB-UART-2
GD32F303[13] - PA3 **USART1_RXD** - **USART1_TXD** - GD32F103[09] USB-UART-2

GD32F303[21] - PB10 **USART2_TXD** - GW1NRLV9[26]
GD32F303[22] - PB11 **USART2_RXD** - GW1NRLV9[27]
GD32F303[25] - PB12 **USART2_CK** - GW1NRLV9[25]

GD32F303[16] - PA6 **CS_DACA** - DAC7311_U20[01]
GD32F303[18] - PB0 **CS_DACB** - DAC7311_U25[01]
GD32F303[19] - PB1 **CS_ADS** - ADS1120_U28[02]
GD32F303[20] - PB2 **ADS_DRY** - ADS1120_U28[14]
GD32F303[26] - PB13 **SPI1_SCK** - ADS1120_U28[01] - DAC7311_U20[02] - DAC7311_U25[02]
GD32F303[27] - PB14 **SPI1_MISO** - ADS1120_U28[15]
GD32F303[28] - PB15 **SPI1_MOSI** - ADS1120_U28[16] - DAC7311_U20[03] - DAC7311_U25[03]

GD32F303[38] - PA15 **SPI2_CS** - W25Q64_U29[01]
GD32F303[39] - PB3 **SPI2_SCK** - W25Q64_U29[06]
GD32F303[40] - PB4 **SPI2_MISO** - W25Q64_U29[02]
GD32F303[41] - PB5 **SPI2_MOSI** - W25Q64_U29[05]

GD32F303[42] - PB6 **I2C0_SCL** - M24C64_U27[02]
GD32F303[43] - PB7 **I2C0_SDA** - M24C64_U27[05]

W25Q32_U9[01] - **SPI_CS** - GW1NRLV9[60]
W25Q32_U9[02] - **SPI_MISO** - GW1NRLV9[62]
W25Q32_U9[05] - **SPI_MOSI** - GW1NRLV9[61]
W25Q32_U9[06] - **SPI_SCK** - GW1NRLV9[59]

LED_GREEN[LD3-A]- **LED_G** - GW1NRLV9[31]

ESP-03_M1[10] - **RF_TXD** - GW1NRLV9[40]
ESP-03_M1[11] - **RF_RXD** - GW1NRLV9[41]

LED_BLUE[LD1-A] - **LED_B** - GW1NRLV9[39]
LED_RED[LD2-A] - **LED_R** - GW1NRLV9[32]

OSC_27MHz_Q2[03] - **CLOCK** - GW1NRLV9[52]

RST_M - GW1NRLV9[42] - GD32F303[07] - GD32F103[04] - F1C200S[70] - Y1[08] - Y4[09]

II. Connecting components using jumpers

GW1NRLV9[29] - **RXD_M** - Y4[01] **-----** Y4[02] - **USART0_TXD** - GD32F103[21] USB-UART-1
GW1NRLV9[28] - **TXD_M** - Y4[03] **-----** Y4[04] - **USART0_RXD** - GD32F103[22] USB-UART-1

GD32F103[08] - **SWDIOc** - Y6[05] **-----** Y6[06] - **SWDIO** - GD32F303[34]
GD32F103[07] - **SWCLKc** - Y6[07] **-----** Y6[08] - **SWCLK** - GD32F303[37]

GW1NRLV9[56] - **IOR14A** - Y2[27] ----- Y2[28] - **PE10/CSI_D7/SPI1_MISO/UART2_CTS** - F1C200S[39]
GW1NRLV9[57] - **IOR13A** - Y2[29] ----- Y2[30] - **PE9/CSI_D6/SPI1_CLK/UART2_RTS** - F1C200S[40]
GW1NRLV9[63] - **IOR5A** - Y2[31] ----- Y2[32] - **PE8/CSI_D5/SPI1_MOSI/UART2_RX** - F1C200S[41]
GW1NRLV9[30] - **IOB13B** - Y2[33] ----- Y2[34] - **PE7/CSI_D4/SPI1_CS /UART2_TX** - F1C200S[42]
GW1NRLV9[76] - **IOT37B** - Y2[41] ----- Y2[42] - **PE1/CSI_VS/I2C2_SDA/UART0_TX** - F1C200S[48]
GW1NRLV9[77] - **IOT37A** - Y2[43] ----- Y2[44] - **PE0/CSI_HS/I2C2_SCL/UART0_RX** - F1C200S[49]

RS806[01]-RESET_OUT-X6[01] **-----** X6[02] **RST_M** ----- X6[03] - BUTTOM_RST[1]
Set X6[01]---X6[02] - the reset signal RST_M is generated by the watchdog timer and the RESET button
Set X6[02]---X6[03] - the reset signal RST_M is generated only by the RESET button

III. Connecting components for the testing program

- Powering from USB :

X4[01]-----X4[02]

- Watchdog ON :

X6[01]-----X6[02]

- Connecting the F1C200S processor's serial port to USB-UART channel 1

Y4[01]---Y4[02] Connection via configuration GW1NRLV9
Y4[03]---Y4[04] Connection via configuration GW1NRLV9

- Connecting a system debugger to a microcontroller GD32F303

Y6[05]---Y6[06] - SWDIO
Y6[07]---Y6[08] - SWCLK

- For testing DAC7311 output and ADS1120 input:

Y7[03] ADS1120_**AIN1 ----- GNDA**-**Y7[02]**
Y7[06] ADS1120_**AIN3 ----- AOUTB**_DAC7311-**Y7[07]**