STM32 FFB Joystick V.100.100

Hardware: STM32F407 Discovery board.

2x DAC8563 board output +/- 10V for AC servo Panasonic 400W Torque mode.

2x 2000PPR Encoder

Buttons, Analog channels – optional.

* Pin Map for DAC8563 board:

|  |  |  |  |
| --- | --- | --- | --- |
|  | DAC8563 – SPI1 | SCK | PA5------> SPI1\_SCK |
|  | OUTPUT Module A CH1 – Torque X  OUTPUT Module A CH2 – SPEED X  OUTPUT Module B CH1 – Torque Y  OUTPUT Module A CH2 – SPEED Y | MOSI | PA7------> SPI1\_MOSI |
|  | CS1 | PA4 |
|  | CS2 | PC4 |
|  | CLR | PB10 |
|  |  | LDAC | PB11 |
|  |  |  |  |
|  | Encoder X Axis | PIN A | PB4 |
|  |  | PIN B | PB5 |
|  | Encoder Y Axis | PIN A | PB6 |
|  |  | PIN B | PB7 |
|  | Motor Driver X Axis | ENABLE | PC5 |
|  |  | DIR | PB1 |
|  | Motor Driver Y Axis | ENABLE | PB0 |
|  |  | DIR | PB2 |
|  | ADC | CH1 | PC0------> ADC1\_IN10 |
|  | CH2 | PC1------> ADC1\_IN11 |
|  | CH3 | PC2------> ADC1\_IN12 |
|  | CH4 | PC3------> ADC1\_IN13 |
|  | PWM | CH1 | PE9 |
|  |  | CH2 | PE11 |
|  |  | CH3 | PE13 |
|  |  | CH4 | PE14 |