## 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 | MOSI   | PA7> SPI1_MOSI |
| OUTPUT Module A CH2 – SPEED X  | CS1    | PA4            |
| OUTPUT Module B CH1 – Torque Y | CS2    | PC4            |
| OUTPUT Module A CH2 – SPEED Y  | 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            |
|                                | CH1    | PC0> ADC1_IN10 |
| ADC                            | CH2    | PC1> ADC1_IN11 |
|                                | CH3    | PC2> ADC1_IN12 |
|                                | CH4    | PC3> ADC1_IN13 |
| PWM                            | CH1    | PE9            |
|                                | CH2    | PE11           |
|                                | CH3    | PE13           |
|                                | CH4    | PE14           |