

COMPONENT NAME	SIGNAL TYPE	PINS	DESCRIPTION
4x4 matrix keyboard	AnalogIn for columns AnalogOut for lines Input-output signal	ROW1 => GP21 ROW2 => GP22 ROW3 => GP26 ROW4 => GP27 COL1 => GP0 COL2 => GP1 COL3 => GP2 COL4 => GP3	In this project the matrix keyboard is used to enter the PIN code which is key to open the food hatch.
TFT ST7735 display	Output signal	Vcc => 5 V - VBUS (Pin 40) GND => GND (Pin 38) CS => GP18 RESET => GP17 A0 => GP16 SDA => GP11 SCK => GP10 LED => 3.3 V (Pin 36)	In this project, a TFT ST7735 display is used to display: 1. home screen where we enter the PIN code, 2. screen for successfully entered PIN code, 3. screen for unsuccessfully entered PIN code.
Servo motor SG90	Output signal	PWM => GP28 Vcc => 5V - VBUS (Pin 40) GND => GND (Pin 23)	In this project, the SG90 servo motor is used to open the opening through which the cat food will come out.