

Software Architecture

Renesas Operative System

HAL/Common

ADC Thrd

PWM Thrd

Encoder
Thrd

PID
Control
Thr

LCD
Touchscreen

Driver I/O
Port

Driver
Clock

External
Interrupt

Port
Config

Resolution

Port
Config

Period

Init Duty
Cycle

Port
Config

Algorithm

Port
Config

Init Config

Hardware Architecture

uC

Bench Station

USB

PWM

ADC

RAM
/ROM

SPI

LCD
Touchs
creen

Power
Supply

Motor

Driver

Powe
Supply

Debbuger

DC/DC
Converter

Encoder

Hall-
Effect
Sensor

H-Bridge
Driver