**PO2EBL\_ELECTRIC BLENDER**

**GDD DOCUMENT**

**Version 1.0**

**Draft**

# Document Status

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# Document History

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| **Version** | **Date** | **Author** | **Change** |
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| 1.0 | 01/24/2020 | Ali Samir | Initial Creation |
| 1.1 | 01/24/2020 | Mohamed M. Farag | Adding initial APIs for components |

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# Introduction

## 1.1 Project Description

The Electric Blender System is an appliance created by KENOVO. The electric blender system has 3 speeds that can be configured by the user with high safety to avoid system failure caused by unexpected voltage peaks.

## 1.2 Block diagram

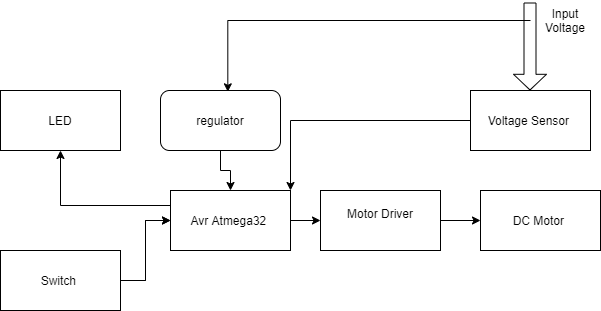
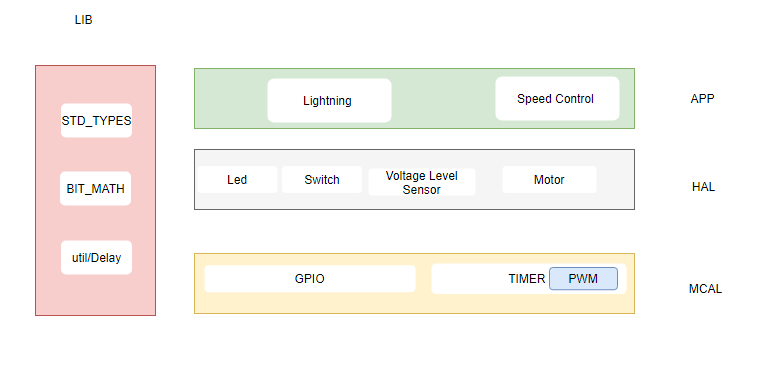


Figure 1 Block Diagram

# Input Output signals

# Software features

# Static Architecture



# APP Components APIs

# SHAL Components APIs

LED:

ErrorSt LedInit(void);

ErrorSt LedOn(void);

ErrorSt LedOff(void);

Switch

ErrorSt SwitchInit(void);

ErrorSt SwitchRead(u8 Copy\_u8Port, u8 Copy\_u8Pin, u8 \*Copy\_u8Ptr);

Motor

ErrorSt MotorInit(void);

ErrorSt MotorSetSpeed(u8 Copy\_u8Speed);

ErrorSt MotorStop(void);

Voltage Sensor

ErrorSt VoltageSensorInit(void)

ErrorSt VoltageSensorRead(\*Copy\_u8Ptr)

# MCAL Components APIs

GPIO

ErrorSt GPIOSetPinDir(u8 Copy\_u8Port, u8 Copy\_u8Pin, u8 Copy\_u8Dir);

ErrorSt GPIOSetPinVal(u8 Copy\_u8Port, u8 Copy\_u8Pin, u8 Copy\_u8val);

ErrorSt GPIOGetPinVal(u8 Copy\_u8Port, u8 Copy\_u8Pin, u8 \*Copy\_u8Ptr);

TIMER

ErrorSt TimerInit(void);

ErrorSt TimerStart(void);

ErrorSt TimerStop(void);