



Sistema de Seguridad para un Laboratorio

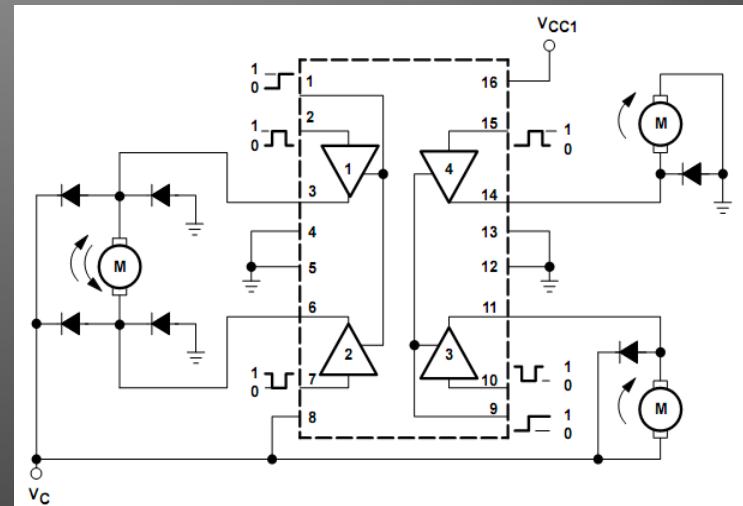
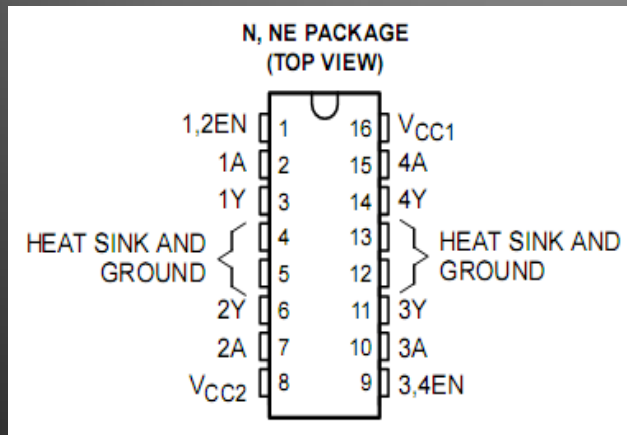
Víctor Manuel Asanza Armijos
Guillermo Xavier Calvopiña Martínez

OBJETIVOS Y ALCANCE DEL PROYECTO

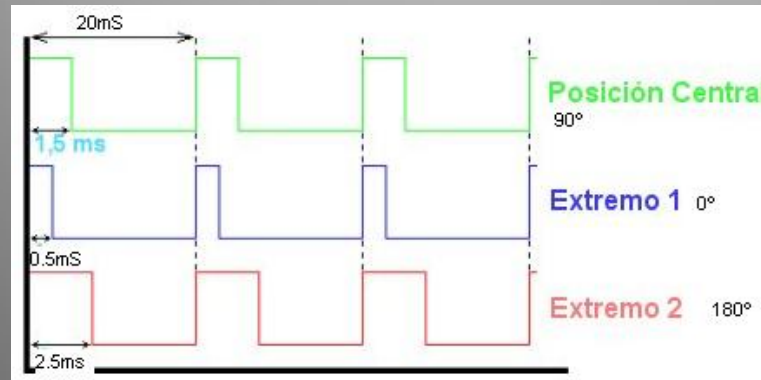
- *1.- Validación y control de acceso del personal del laboratorio.*
- *2.- Sensado y control de temperatura.*
- *3.- Control de luces.*
- *4.- . Acceso remoto a la cámara de monitoreo.*
- *5.- Visualización ante posibles detecciones.*

Base teórica de lo que se va a utilizar

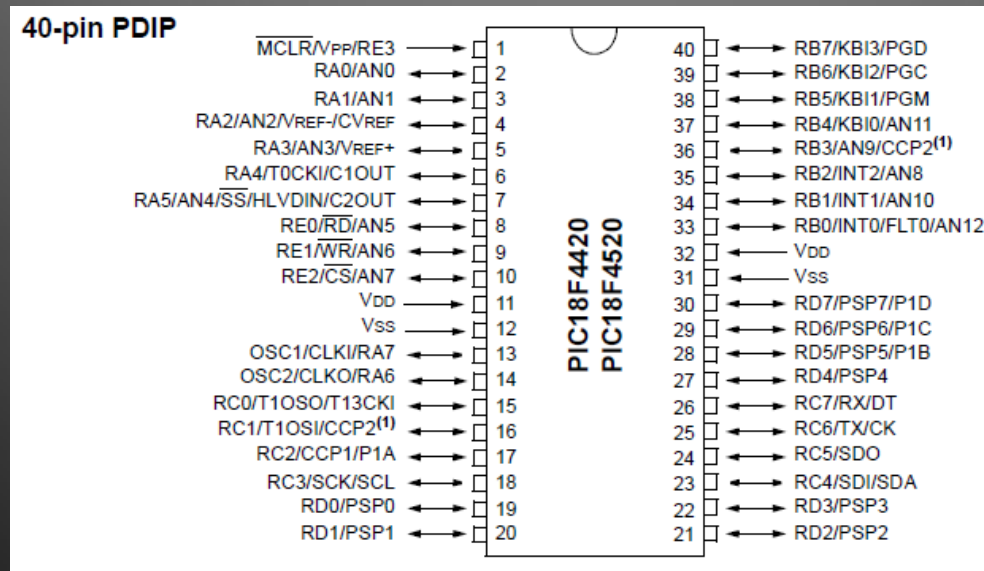
- MOTO DRIVER - L293



- Control PWM

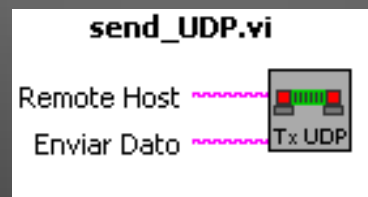
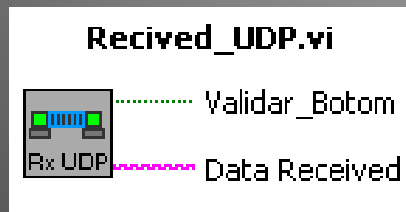


- PIC18F4520

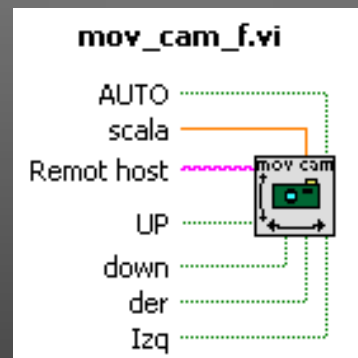
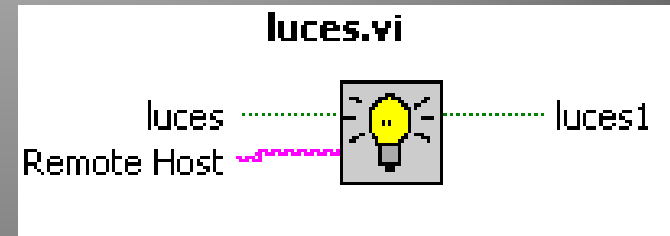
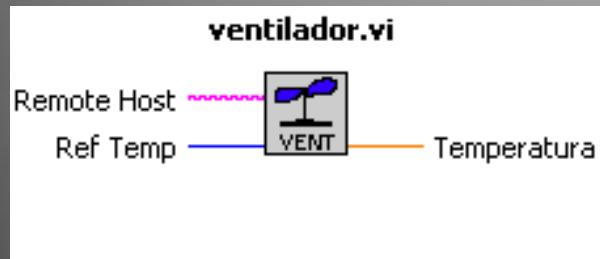


VI o función específica que utiliza

- TCP / IP

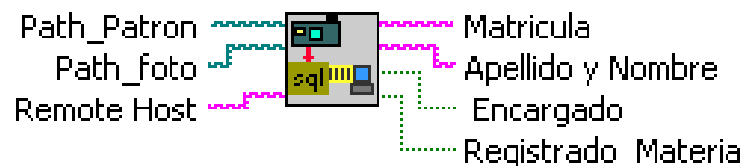


- Controladores

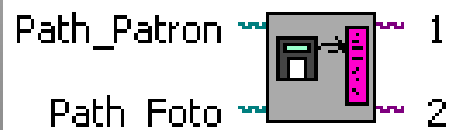


- Credencial

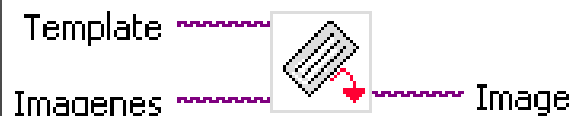
Foto - Database - Udp.vi



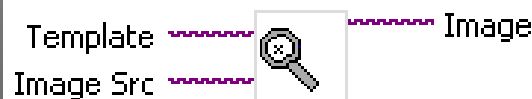
Preparar imagenes.vi



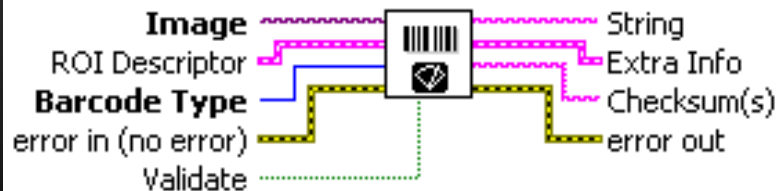
correccion de geometria.vi



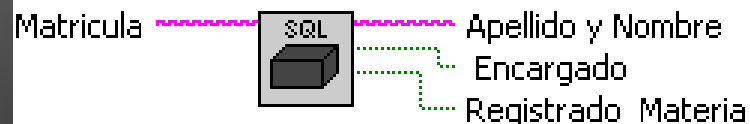
Localizacion_de_codigoBarra.vi



IMAQ Read Barcode

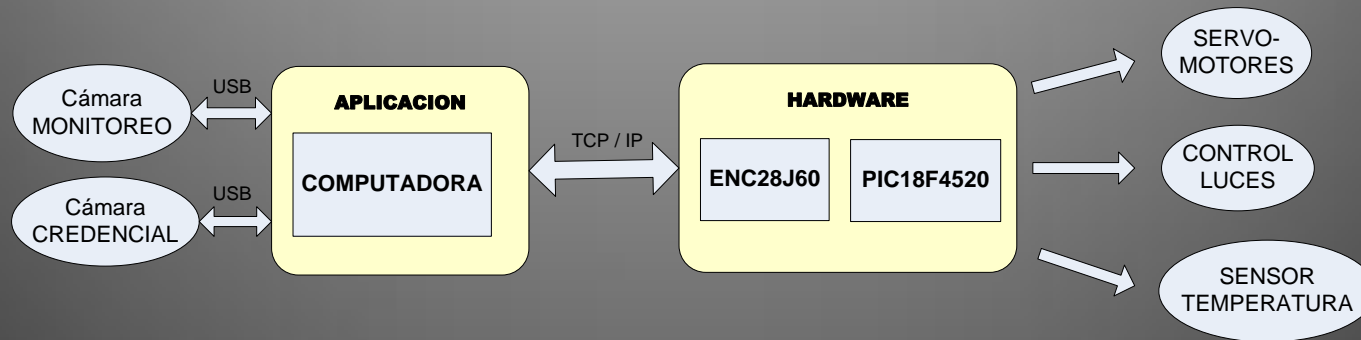


Consultar en Database.vi



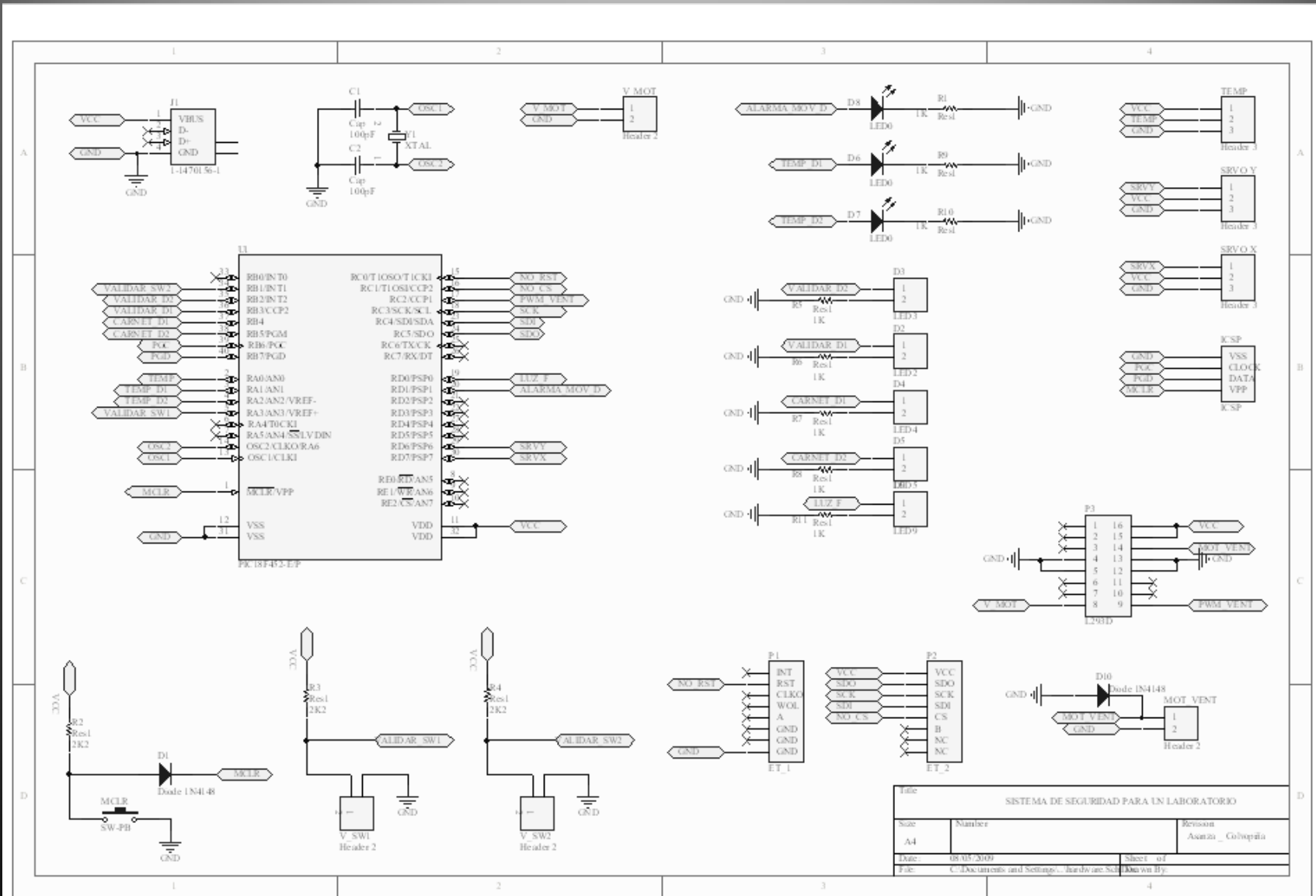
DISEÑO DE LA SOLUCIÓN

- *Diseño general*



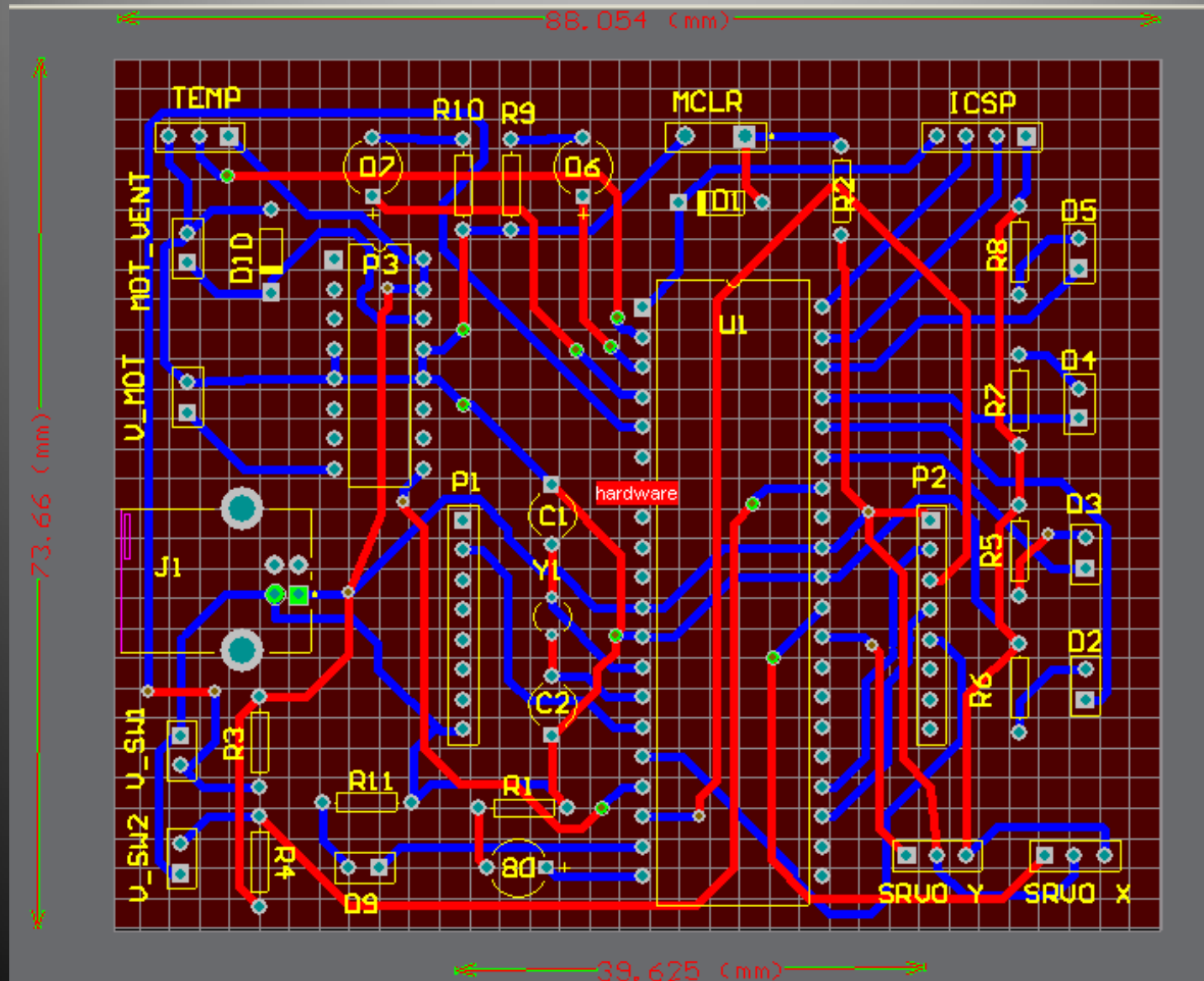
- *Protocolo de transmisión de datos*
- “VAV” -> encargado
- “VAE” -> estudiante
- “E”+“ADC” -> temp
- “BE”+ “velocidad ventilador” -> cero
- “BF”+“velocidad ventilador” -> ≠/ cero
- “L1” -> Luces ON, “L0” -> Luces OFF
- “MO”+“X_grad”+“Y_grad” -> servomotores

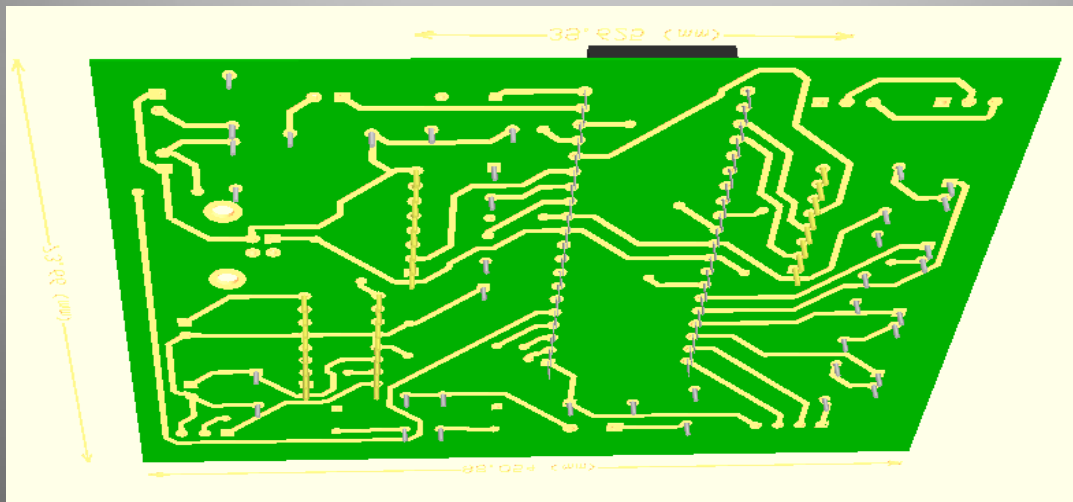
IMPLEMENTACION DEL HARDWARE



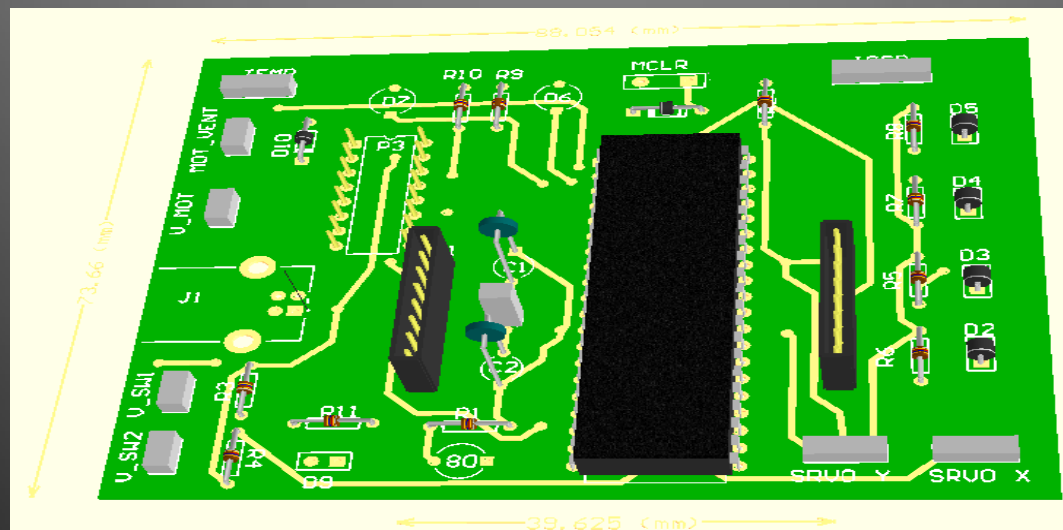
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SISTEMA DE SEGURIDAD PARA UN LABORATORIO		
Size	Number	Revision
A4		Asanza_Colopilla
Date:	08/07/2019	Sheet: 01
Path:	C:\Documents and Settings\... \Archivos de S...	Drawn by:

Ruteo de ALTIUM de las pistas en la tarje.





- Imagen 3D de la cara inferior de la tarjeta.



- Imagen 3D de la cara superior de la tarjeta.

Conclusiones

Recomendaciones