Alexandra-Irinuca CATRINESCU (66854) - POV

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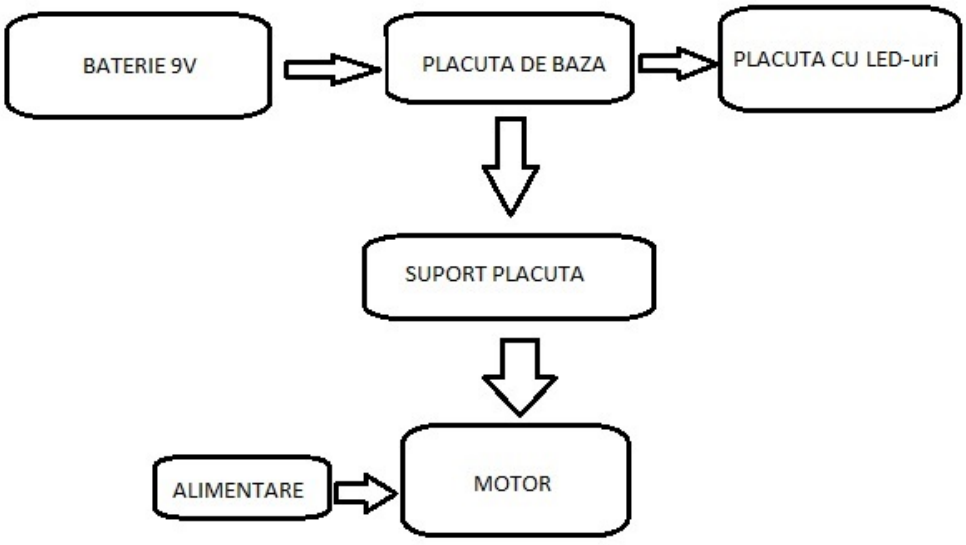
Introducere

Proiectul are ca scop realizarea unui sistem de afisaj bazat pe fenomenul optic “Persistence of vision”. Sistemul are in compozitie o coloana de LED-uri si un motor care roteste LED-urile formand o imagine in fata privitorului. Ideea de a realiza un astfel de dispozitiv mi-a venit in urma vizionarii unor filmulete pe Youtube.Mi s-a parut interesant modul in care cu o simpla coloana de LED-uri si un motor poti afisa o imagine.

Descriere generală

Schema bloc:



Hardware Design

Lista piese:

- 7 leduri
- baterie 9V
- motor imprimanta
- 9 rezistente
- fire
- intrerupator
- suport pentru placuta
- mufa alimentare
- 4 betisoare
- placa de test

Schema electrica:

Software Design

Limbaj de programare : C

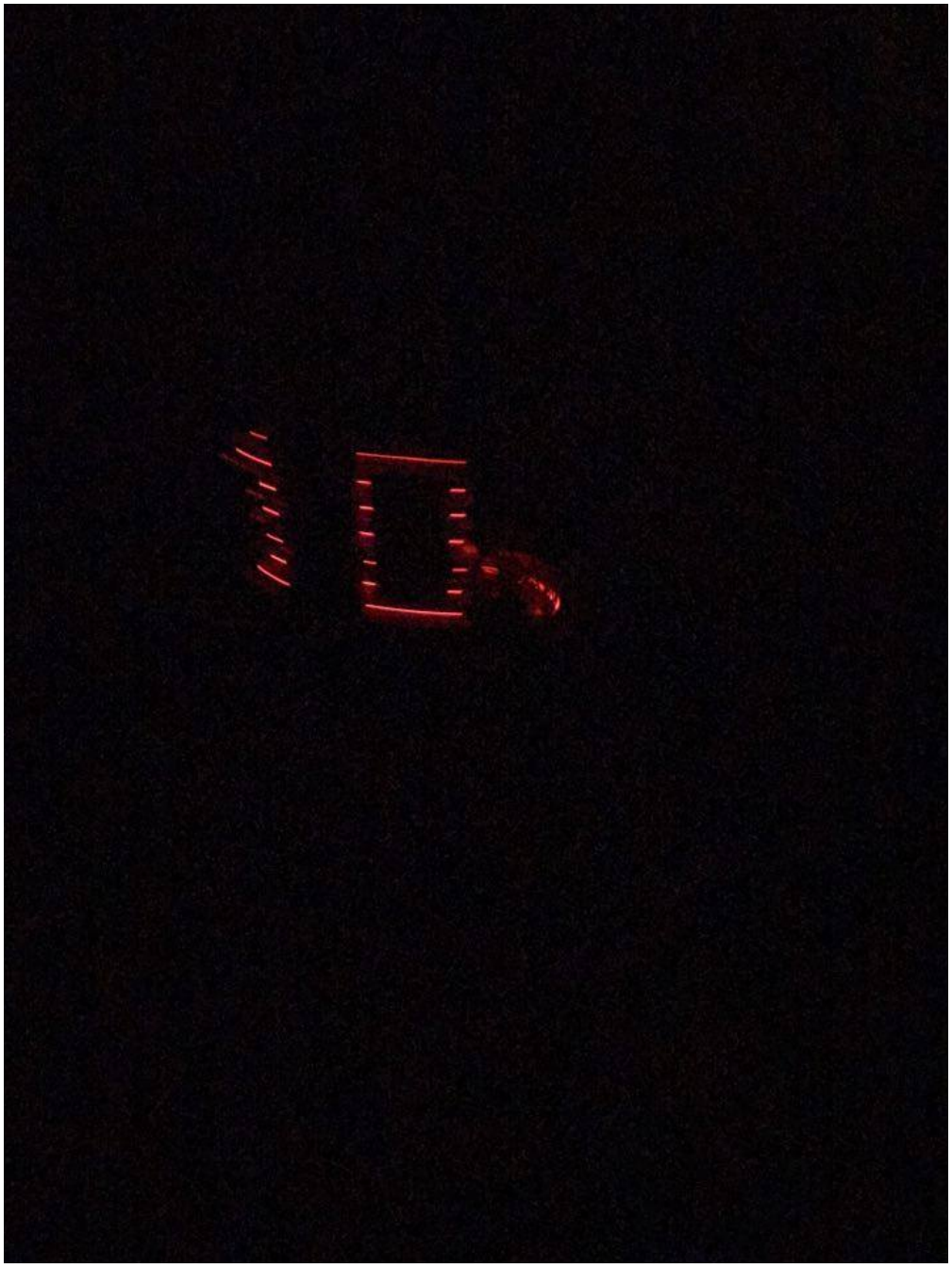
Compilator:AVR-gcc

Arhiva cu fisierul C si makefile

pov_2017.zip

Rezultate Obţinute

Am reusit sa obtin un dispozitiv functional.



Primul test:

https://www.youtube.com/watch?v=828PP7HSN_Y&feature=youtu.be

Versiune finala:

https://youtu.be/NKAEBjYpT9w

Concluzii

A fost un proiect interesant si mai dificil decat pare la prima vedere.

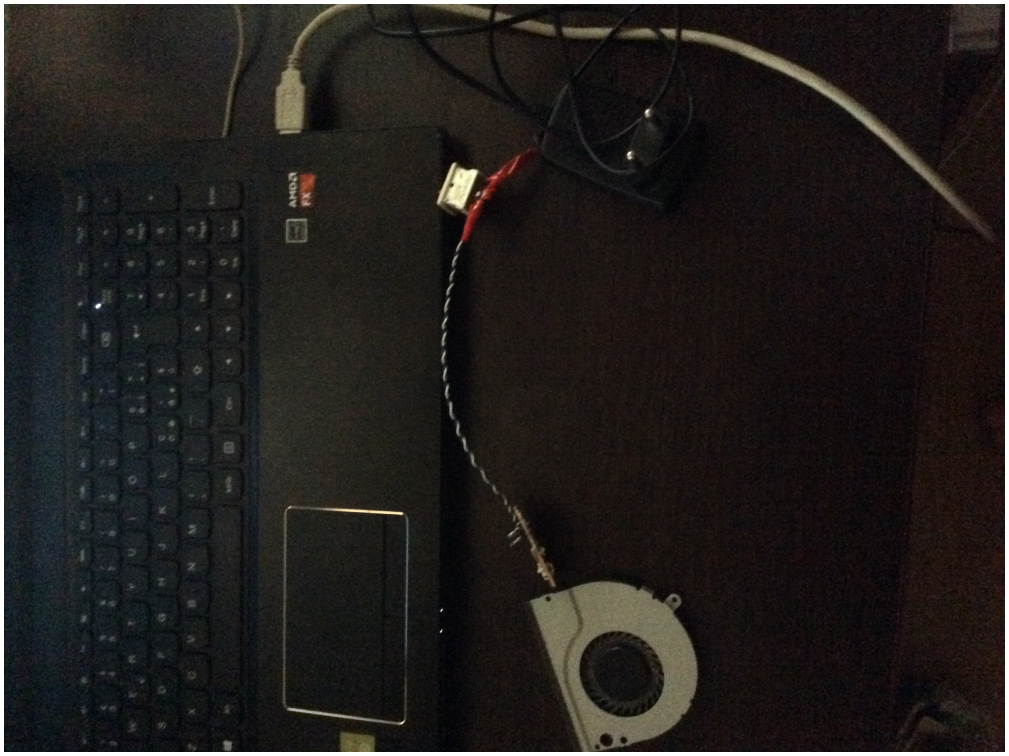
Download

Arhiva proiect:

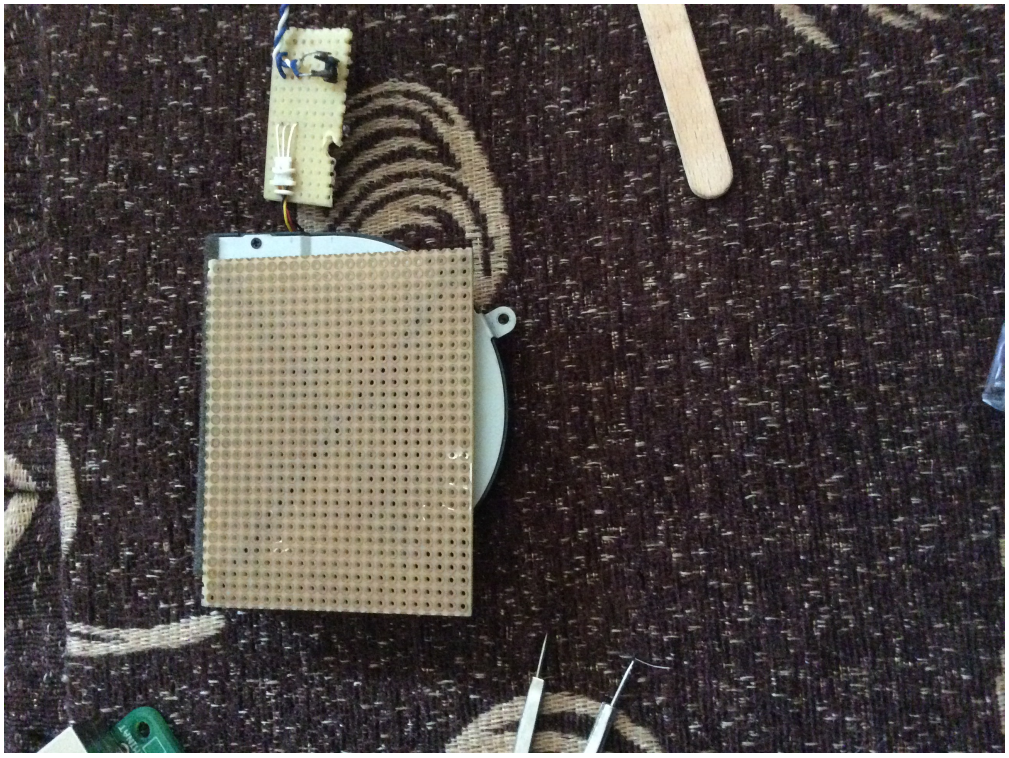
pov2017.zip

Jurnal

Initial am folosit un cooler de laptop

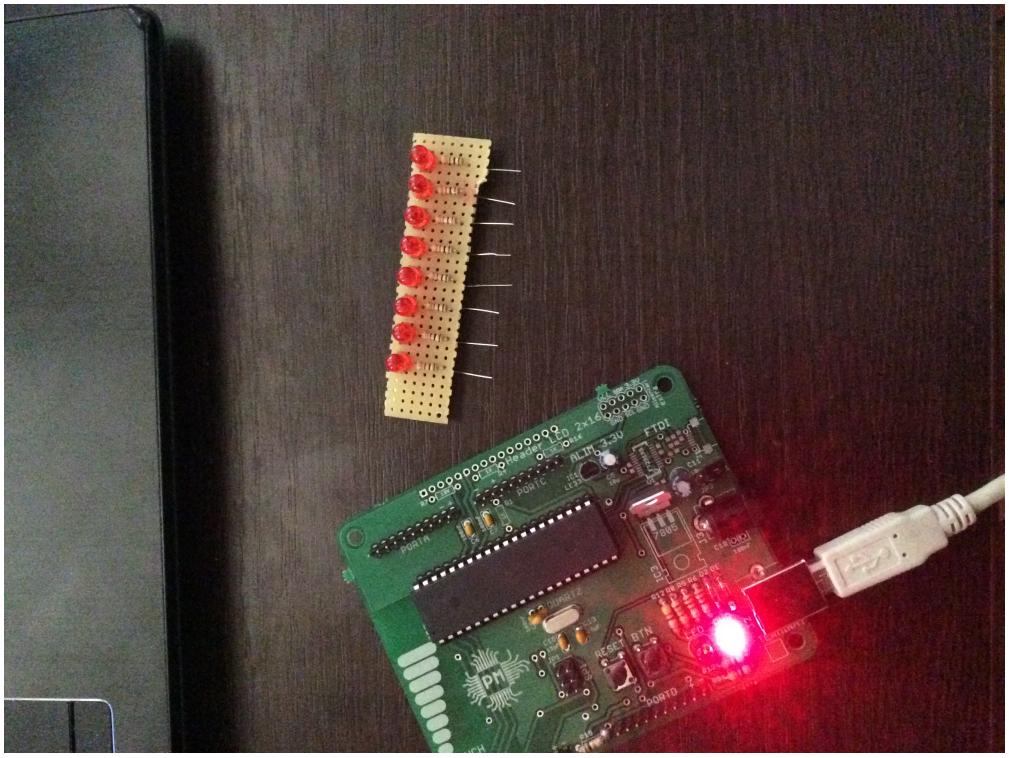


Pe el am lipit o bucata dintr-o placuta de test



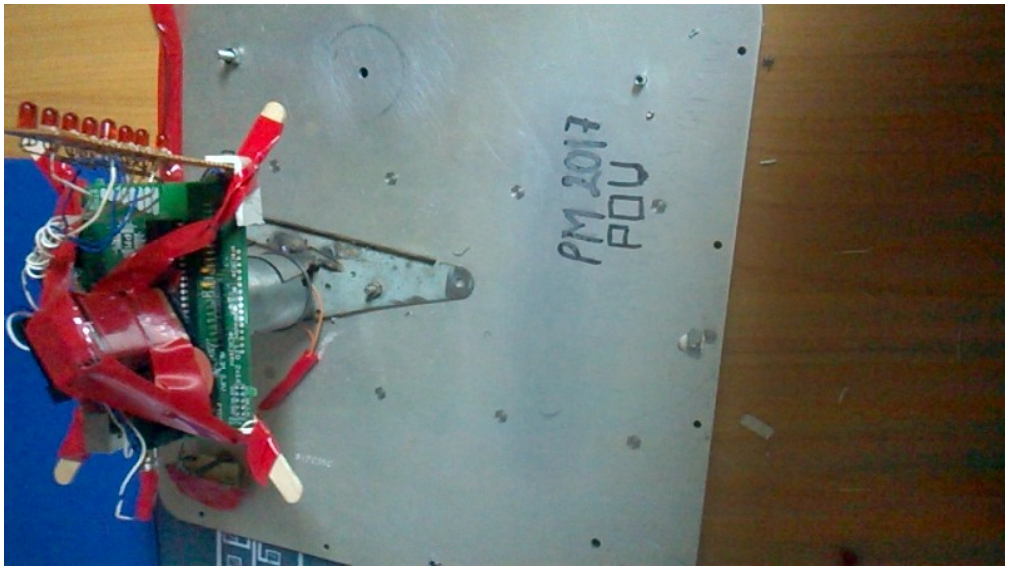
Iar peste placuta de test am lipit niste betisoare de care ulterior am prins placuta de baza cu ajutorul unor fire

Am lipit led-urile si rezistentele pe o placuta

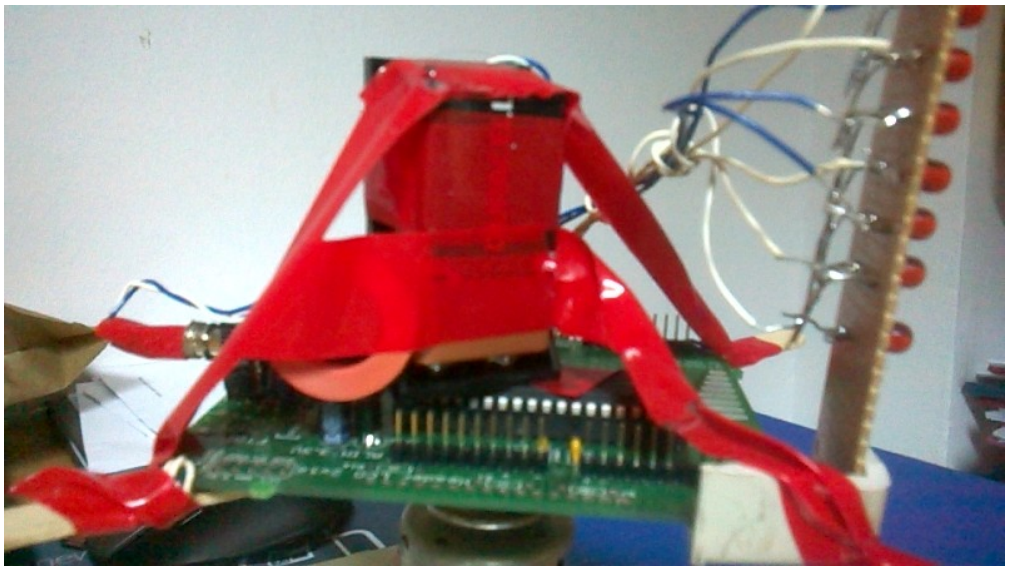


Am renuntat la cooler in favoarea unui motor de imprimanta mult mai puternic

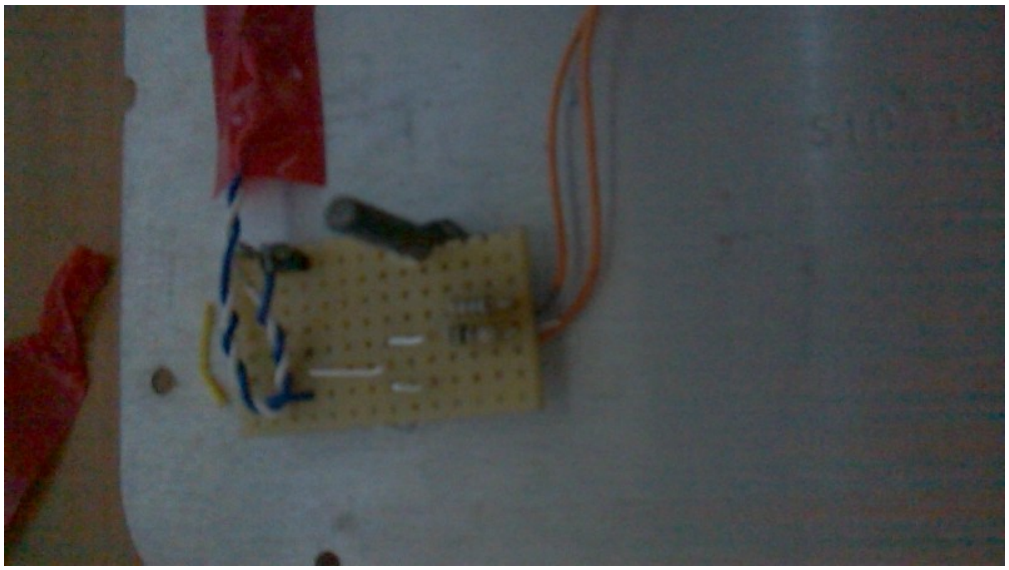
Am mutat tot ansamblul de pe cooler pe motor si am lipit cu superglue



Bateria de 9V am prins-o cu banda izolatoare de capetele betisoarelor



Pentru a diminua puterea motorului am pus doi rezistori de 100ohmi legati in paralel



Bibliografie/Resurse

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http://cs.curs.pub.ro/wiki/pm/

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