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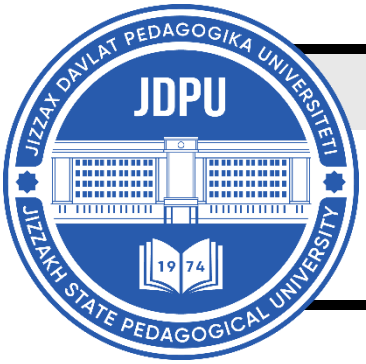

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TO THE STUDENTS ARDUINO PLATE THROUGH DC MOTORS PROGRAM USING TO MANAGE TO TEACH

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ABOUT ARTICLE

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Abstract: This in the article general education in institutions complicated technical and technological issues solution to do capable students preparation in order to study to the process innovative technologies current reach issue viewed Such innovative from technologies one is this study robotics being, him common medium education of schools technology science teaching to the process apply according to collected experiences statement done Both DC motor and Shield L293D driver program using to manage to teach directed.

In the world future of teachers professional and pedagogical to the activity innovative preparation, aesthetic education promotion, lesson the process efficient organize technology science your readers technical thoughts robotics tools based on to improve circle scientific studies take is going Technology science of students technical thinking in improvement creative environment create, teach content integrity improvement demand is being done. That's it point of view from the point of view common medium education in institutions technologist science of students technical thinking development methodology to improvement separately attention is being given.

In our country digital technologies based on, general medium education institutions study process the system improvement, in particular, training in the process r o bototechnik from tools to use wide current reach through technologist in science of students technical takakkurini more improvement to the issue last in years separately attention is being directed.

" Education and the field of science development in order to continuously education system further improvement".

" In society done being increased reforms requirements full answer giver, producer release in the field surface came to competition durable, sharp to changes adapt recipient, as well as labor in the market specialists qualification being placed requirements level efficient activity driver person formation current the problem is considered In this regard Uzbekistan Republic common education State education standards technology science to his students to be placed new, more high requirements with one in line of students technical thinking of formation pedagogical conditions, mechanism, methods and technologies work exit is also separate attention is paid" [2]

this regard technology science students technical thinking more in formation roboticist from tools using, special competencies development through thinking of activity efficiency increase current important have is considered Robotics technician tools based on automated technical systems create and use important importance occupation is enough Ush this in the article in the streets cars movement of supply DC motors work principle seeing we go out

From our article intended results:

--- DC motors according to skill get

--- Shield L293D driver with get to know and application

--- construction library in the program to call

--- DC motors program using manage

DC motor - constant vine based on working structures below in the picture presented (Fig. 1).

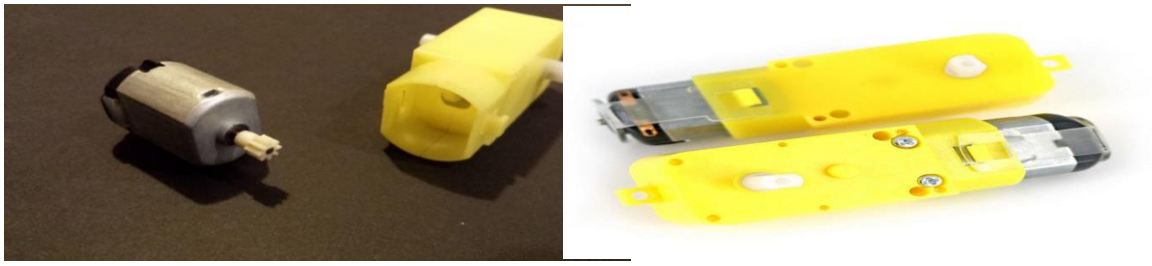

Figure 1. DC motors appearance

of DC motor internal structure below in the picture presented (Fig. 2).

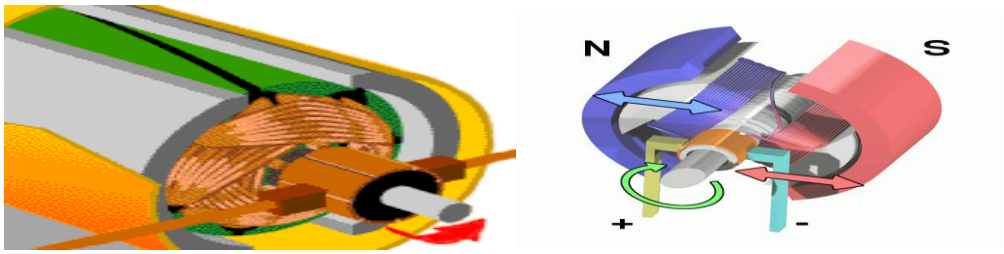

Figure 2. DC motor internal structure

Motors with together addition from the structures is used. The reason this devices our engine saved from burning.

Driver this is arduino and between the motor signals stable arrived to go provide, necessary vine get for service who does construction is considered

Shield L293D driver audio with together connected to the DC motor program using to action to bring for service does From this except Shield L293D driver again many to opportunities have to this the next in our articles in more detail we will stop.

Shield L293D driver appearance below in the picture presented (Fig. 3).

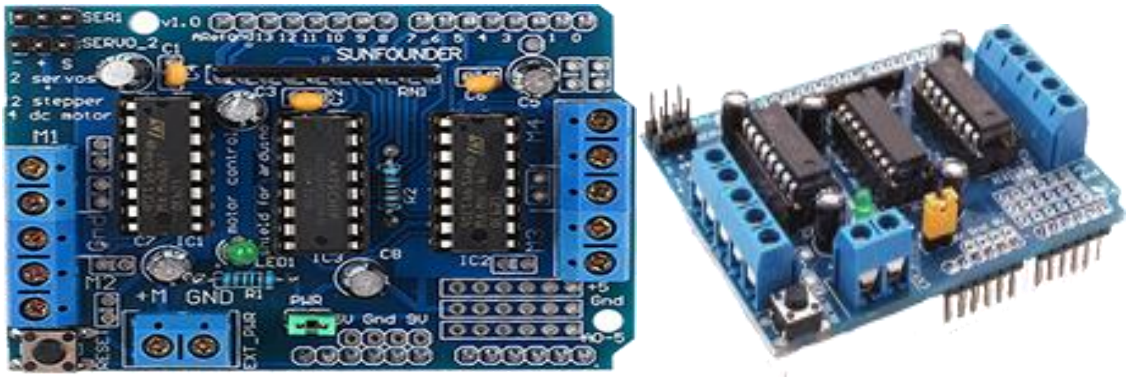

Figure 3. Shield L293D driver

1. Number "1" on board under the shield provider microcircuits there is. Two extreme chips are called L293D, they each one channel for up to 600 mA has been consumption flow with less flowing motors to manage possibility gives In the center manage pins the number reducing chip is located.

2. Second number under servos connect for responsible pins located Power contacts on board shown, therefore servo drive for connect difficult it's not.

3. Number 3 you motors connect wanted the terminal means Names under there are 4 terminals: M1, M2, M3, M4. That's why for, aboard only 4 elec motor connection can

4. This is the terminal on the ground is located through it you the shield power up because you can motors performance for Arduino to voltage than more tension need will be LCD3D Motor Shield another from the source turn on for important one thing I want to emphasize, number 5 under is located transition device take to throw need

5. Five number under, of the shield electricity supply for responsible has been transition place there is.

Now consider the DC motor to the Shield L293D driver how to connect seeing let's go Above as said 4 connectors of the drive parts M1, M2, M3, M4 are available and that's it parts of the motor wires let 's connect It is below in the picture presented (Fig. 4).

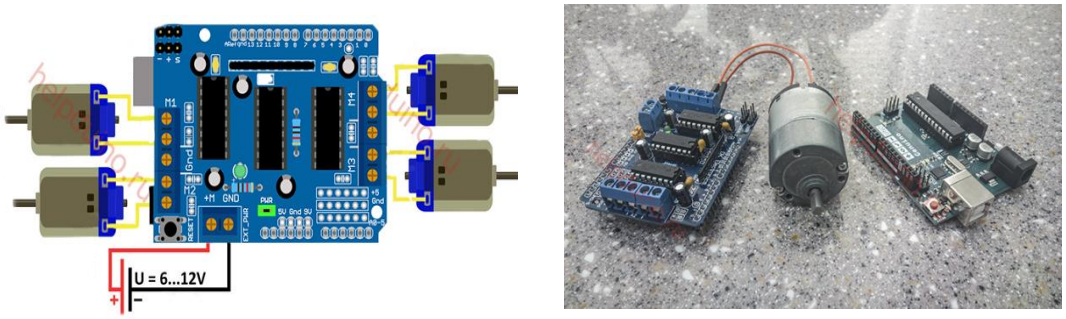

Figure 4. Shield L293D DC motor drive tie up

Connected motor program using to move demand will be done. Of this for initially simple ie one motor program using to move program to compose after learning the rest motors to excite program if we learn to the learner difficulty does not give birth. Below in the picture one motor ie (motor1). three sec forward and then stop and program constructed (Fig. 5).

Figure 5: Gold the rule

Library to call *- Get C – Podklyuchit library – Adafruit motor shield library.*

FORWARD – motor forward to move provides.

BACKWARD – motor backwards to move provides

RELEASE – engine stopped to stand provides

Summary instead of that's it emphasize maybe to the students small motors program using to manage teach in the future big to power have has been motors program using to manage the ground creates And this again new to the peaks to achieve, humanity life for very important has been invention and of discoveries to the creation take will come That's it because of to the students arduino from the board and in it together used from parts Shield L293D driver and DC – from motos to use to teach important is considered

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