Robot arm controlled by muscle tension based on electromyography and PIC18F4550

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Abstract:
Along with the progress of time, the application of science of robotics is also growing and starting to get the shares in many fields, especially the biomedical field that will be very beneficial to mankind's survival. In this thesis the writer will discuss the design and application of electromyography or more commonly known as gauges muscle tension to move the robot arm with the aid of a microcontroller PIC18F4550, with this final project the writer transforms muscles signals that are usually presented in the form of graphs or audio into physical form of movement using a robot arm.

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I. Preliminary

Today's modern technological development has been growing very rapidly and play an important role in the daily basis on human life, including the mechanics and electro medical s uld help people with disabilities such as who has lost their motoric function and then replaced with electronic motor in the form of robot arm.