ABSTRACT

Sensor is an electronic device to detect an objek. Sensor detect an objek by giving some parameter. One of sensor is a visual sensor.

The research aim to build an objek detection system with camera as a visual sensor. An image processing method is used to detect an objek that will tracked by a laser pointer which controlled by a microcontroller. Camera is use to capture an objek on the plant. The image which resulted by capturing will processes by image processing application based on Delphi programming to produce coordinate point which show the object on the plant.

The coordinat point will send to microcontroller to move laser pointer with motor stepper. The appropriate tracking of laser pointer to the object is shown by coordinate point yield by image processing.

Key words: *Image Processing, Microkontroller, Communication Serial, Borland Delphi, Stepper Motor.*