

Busy Waiting example using z64 processor

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1 Project

1.1 Requirements

A peripheral **VOLTAGE** allows you to acquire information on the electrical voltage of a meter. The device produces data word size as input to the z64 processor. Write the code a subroutine (according to *System V ABI calling conventions*) that the number of data (one word) to be read from is accepted as parameters peripheral **VOLTAGE** and the memory address from which the z64 processor will have to start writing the data thus acquired by the peripheral.

Also write the program that invokes the requested function acquire 100 words from the **VOLTAGE** device and store them in a vector placed starting from address 0x1200. The maximum size of the vector is 400 words.

1.2 Implementation

1.2.1 Hardware

The **VOLTAGE** peripheral is represented as a classic input device:

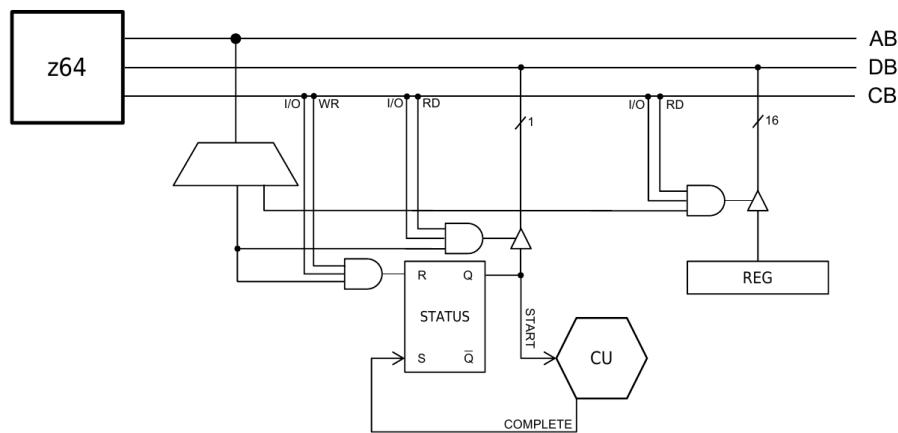


Figure 1. The VOLTAGE peripheral

1.2.2 Firmware

So, a possible *firmware implementation* can be found [here](#).