

Dwarf Boards

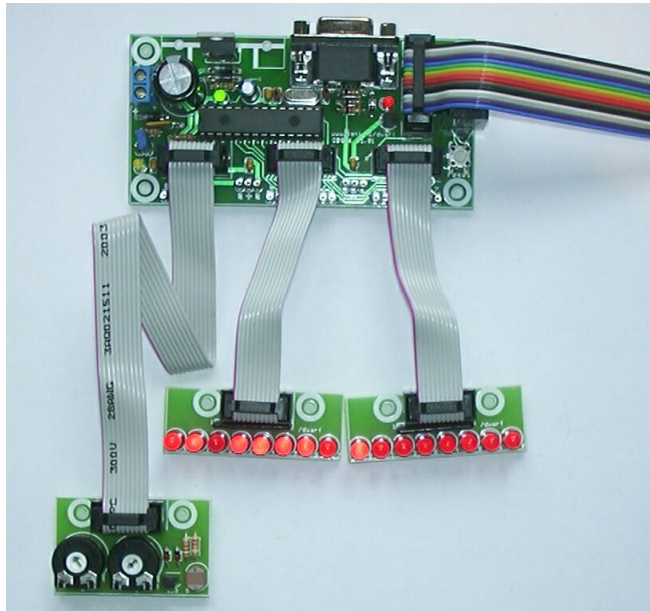
DN006 : simple analog input in Jal on DB016

(c) Van Ooijen Technische Informatica
version 1.0

PICmicro, In-Circuit Serial Programming and ICSP are registered trademarks of Microchip Technology Inc.

Introduction

This note shows how to read an analog input and show the result on BUS_B and BUS_C.



Code

```
-- DN006 : read bus_a_pin_0 as analog 8 bit, show on BUS_C
-- hardware: DB016 with DB011 on BUS_A, DB010 on BUS_B and BUS_C

include DB016_18F252_PLL40

adc_configure( adc_5_ana_0_ref )
bus_b_digital
bus_c_digital

bus_a_direction = all_input
bus_b_direction = all_output
bus_c_direction = all_output

forever loop
  var byte result_1, result_0
  adc_read_10( adc_bus_a_pin_0, result_1, result_0 )
```

```
bus_c = ! ( 0b_11 & result_1 )
bus_b = ! result_0
end loop
```

The first include is specific for the board, microcontroller and frequency used, it establishes among other things the I/O declarations that are used.

Next the A/D is configured (all available analog pins are configured as such). The other two busses are set to digital mode. BUS_A (which contains all analog pins) is made input, BUS_B and BUS_C are made as output.

The main loop just reads bus_a_pin_0 and shows the result on BUS_B and BUS_C. Note that the leftmost LED (bus_b_pin_0) is the least significant bit.

Change notes

the latest version of this document can be downloaded from <http://www.voti.nl/dwarf>

version	date	notes
1.0	2003-11-04	first version