

Dwarf Boards

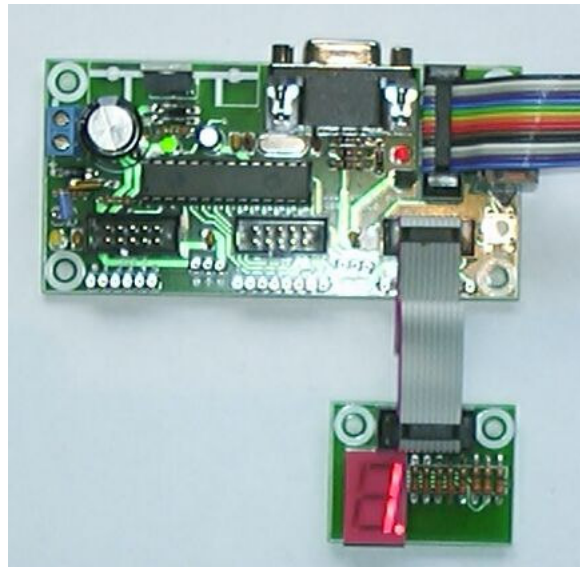
DN007 : count on a seven segment display in Jal on DB016

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version 1.0

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Introduction

This note shows how to count on a seven segment display.



Code

```
-- DN007 : count seven-segment on BUS_C
-- hardware: DB016 + DB013 on BUS_C

include DB016_18F252_PLL_40
include jdelay
include jseven

bus_c_digital
bus_c_direction = all_output

var byte n = 0

forever loop
  bus_c = ! seven_from_digit( n )
  delay_10ms( 50 )
```

```
bus_c = ! ( seven_from_digit( n ) + seven_segment_dp )
delay_10ms( 50 )
n = n + 1
if n > 9 then
  n = 0
end if
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. The next two includes establish the delays calls and tyhe seven_from_digit call.

Next BUS_C is configured for digital I/O and output.

The main loop counts from 0 to 9 in variable n. The seven_from_digit call converts a value to the pattern of segments that must be on or off for that value. The result of this call is active high (a 1 means a segment that must be one), so the value is inverted (! operator) before it is assigned to BUS_C. The decimal point is blinking at 1 Hz simply by assigning the seven_from_digit_value, waiting half a second, assigning the same value but with the decimal moint set, and waiting half a second again.

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