

Re: 89C51ED2

Source: <http://sci.tech-archive.net/Archive/sci.electronics.design/2008-09/msg01654.html>

- *From:* Eeyore <rabbitsfriendsandrelations@xxxxxxxxxxx>
 - *Date:* Thu, 11 Sep 2008 19:55:00 +0100
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MooseFET wrote:

Eeyore wrote:

MooseFET wrote:

krw <k...@xxxxxxxxxxxxxxxxxxx> wrote:

rabbitsfriendsandrelati...@xxxxxxxxxxx
says...

krw wrote:

rabbitsfriendsandrelati...@xxxxxxxxxxx
says...

krw
wrote:

You
don't
do
subroutines
or
interrupts?

```
declare
procedure
XYZ
interrupt(1)
using
1;
```

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(register
bank
1)
MAIN
>
>
>
>

defaults to register bank zero.

code

end;

For
example.
The
interrupt
number
defines
the
int
source.

Return
address?
USING
only
declares the
register
bank, it
doesn't
set it.

Uh ? Bloody well does
unless you have a different
understanding of 'does' to
me.

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Not when I was using Intel's software.
USING was only a directive
to get the compiler to point R0-7 to the right
place. It didn't
actually load the pointers selecting the bank.

You remember wrong. USING tells the compiler what to
assume is in the
PSW.4, PSW.3 bits. In PLM it most likely also results in a
move into
the PSW.

In the ASM51, you could run with no declared bank by not
putting a
USING into the code. This is handy when you want to make
code that is
bank independent.

My 32 bit math library is bank independent so it can be used
in
interrupts etc.

But you only used ASM51 not PL/M51 ?

I have used PLM51 just enough to be able to say I've used it. I used
PLM-80 and PLM-86 a great deal in the past. The language is almost
exactly the same among them.

Absolutely. That was the whole point of it. And the associated OS was CP/M.

In 8051 land, the only project I have seen that used PLM51 was
abandoned. It did not result in a product. This was a fault of
things other than the choice of the language.

Yes, well I've seen some shocking ASM51 too. With comments like "this seems to work". How some
people manage to migrate from company to company leaving a trail of disasters behind them never
fails to amaze me.

I can happily say I fixed TWO runaways. Both became serious commercial successes after my

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intervention. One was primarily an analog fix, the other code (and coding method – a change to finite state machine from a flow chart that resembled Medusa's locks).

Graham

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