Problemas con los PIC24
Posted by waretronics - 2008/11/26 03:29

Hola, estoy intentando programar los siguientes PICs:

PIC24HJ64GP206
PIC24FJ128GA106

usando el esquema http://www.winpic800.com//descargas/REV2/dsPIC33F_PIC24F_PIC24H_ICSP.pdf

y no hay manera de hacerlo, al leer la DEV-ID da 0xFFFF

He probado alimentándolo desde el programador y desde una fuente de alimentación externa (entre la alimentación y el pic hay un regulador de 3,3V).

He probado en los puertos 1 y 2 de programación (RB0:RB1, RB6:RB7) y nada tampoco.

¿Es el esquema correcto?

¿Hace falta una circuitería extra?

La versión de Firmware es 3.63b y la del programa 3.63c

Saludos

Mensaje editado por: waretronics, el: 2008/11/26 03:30

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Re:Problemas con los PIC24
Posted by sispic - 2008/11/26 04:09

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fijate que hay dos paginas

dsPIC33 / PIC24H ICSP Connection of example
PIC24F ICSP Connection of example

No descuides el condensador VddCore
si haces este esquema con 3v3 externos no deveria de haver problema

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Re:Problemas con los PIC24
Posted by waretronics - 2008/11/27 00:28

Sí, ya he visto las dos hojas, la única diferencia es la resistencia pull-up de la línea de datos.

He tenido en cuenta el condensador de Vcore y la alimentación del pic y del resto de componentes proviene de un regulador de 3V3.

URL de la imagen: http://img155.imageshack.us/img155/3263/esquemapcbyfotocircuitoaj0.png

Mensaje editado por: waretronics, el: 2008/11/27 00:32

Mensaje editado por: waretronics, el: 2008/11/27 00:43

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Re:Problemas con los PIC24
Posted by sispic - 2008/11/27 13:59

Pero es que no lo detecta y no lo programa ?

Es posible que no lo detecte pero programe

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Re:Problemas con los PIC24
Posted by Maps - 2009/06/11 01:37

Buenas.

Nos pasa lo mismo. En nuestro caso, tenemos una placa ya hecha por un tercero en la que hay un conector por donde pasamos MCLR, Clock y Datos. La alimentación es externa con un regulador de 3.3V. Usamos el circuito de la segunda página. Sin el pull-up de 200 ohm's programamos sin problemas el PIC18F66J50. En cambio, el PIC24FJ64GA004 no lo detecta (con el pull-up).
Hablas del condensador del VddCore. En la placa que tenemos, el VddCore está fijo a 2,5V y el DISVREG a 3.3V (Regulador externo)
La alimentación a 3.3V es buena, con regulador.

¿Alguna sugerencia?

Gracias por adelantado y un saludo

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Re:Problemas con los PIC24
Posted by sispic - 2009/06/11 04:18

Una pregunta , el diodo en serie con MCLR es Schottky ??

Si no es asi quizas no baje correctamente al cero .
Yo verificaria las tensiones con los check de hardware .

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Re:Problemas con los PIC24
Posted by Maps - 2009/06/11 15:34

Si, es Schotky. Precisamente lo cambiamos por el problema de grabación del 18F66J50. Ya digo, sin el pullup de 200 graba este otro chip perfectamente.

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Re:Problemas con los PIC24
Posted by sispic - 2009/06/12 03:15

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y VddCore está fijo a 2,5V ... que significa , que hay otro regulador de 2,5v ?

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Re:Problemas con los PIC24
Posted by Maps - 2009/06/12 17:22

Si, es una placa comercial con el el PIC24 y un chip de radio. La placa tiene unos pins a través de los cuales se programa el PIC. En él hay un MCP1700-2502 conectado al VddCore, que lo mantiene a 2.5V

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Re:Problemas con los PIC24
Posted by sispic - 2009/06/13 14:50

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y no se puede provar con el regulador interno "Regulator Enabled (DISVREG tied to VSS):" , osea con un condensador a VDDCORE/VCAP.

http://ww1.microchip.com/downloads/en/DeviceDoc/39768d.pdf

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Re:Problemas con los PIC24

Posted by Maps - 2009/06/16 22:56

Buenas.

Hemos estado revisando todo y lo que hemos detectado es lo siguiente:

Según el propio documento

http://ww1.microchip.com/downloads/en/DeviceDoc/39768d.pdf

en la página 49, donde salen los timings, el parámetro P19 correspondiente al TKEY1, retraso entre la bajada del último clock de la secuencia de clave y la subida del MCLR, es de 1 milisegundo mínimo. Con el osciloscopio vemos que ese retraso es de unos 40 microsegundos. Pensamos que el problema podría venir por allí.

Quedamos a la espera de noticias tuyas.

Saludos y gracias por adelantado

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Re:Problemas con los PIC24

Posted by sispic - 2009/06/17 14:11

P18 TKEY1 es de 40 ns min.
P19 TKEY2 es de 1 ms , pero es para otro modo de programacion .
PROGRAMMING EXECUTIVE – PROGRAMMER COMMUNICATION PROTOCOL
cargando previamente un codigo bootloader , en la ayuda lo explica .

yo provaria lo del regulador si es posible .

Tambien puedes enviarme la placa con el programador y lo reviso .

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Re:Problemas con los PIC24

Posted by rs485 - 2011/06/28 03:13

Did someone find any solution to this?

I have same problem as the messagethread starter. 33FJ256GP506 is recognized fine but 24FJ256GB106 is unknown device in the same circuit board.
ENVREG is +3,3V VDDCore capasitors are 10uF tant and parallel 0.1uF cer. Voltage is 2,49. All VDD and VSS pins are connected also analog.
I have tried to pullup dataline with 200ohm ->No effect (33FJ256GP506 is unknown with it)
I tested MCLR series with two MC4093 Schmitt trigger ports (perfect voltage levels 3,3/0) -> No effect (33FJ256GP506 works without dataline pullup)
With reading, Clock- and Dataline pulses looks fine with oscilloscope.

Programmer is GTP-USB Plus with v.3.64f

Edited: Wrong chiptype

Post edited by: rs485, at: 2011/06/28 07:14

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Re:Problemas con los PIC24

Posted by sispic - 2011/06/28 05:23

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the 33FJ256GB106 exists in microchip ?

Mensaje editado por: sispic, el: 2011/06/28 05:34

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Re:Problemas con los PIC24

Posted by rs485 - 2011/06/28 06:48

Sorry, GP506 :blush:

Post edited by: rs485, at: 2011/06/28 06:51

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Re:Problemas con los PIC24

Posted by sispic - 2011/06/28 19:24

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see plis
http://ww1.microchip.com/downloads/en/DeviceDoc/70152H.pdf
http://www.winpic800.com//descargas/REV2/dsPIC33F_PIC24F_PIC24H_ICSP.pdf

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Re:Problemas con los PIC24

Posted by rs485 - 2011/06/28 23:29

The first PDF document is for 33F/24h chips. No problem with 33F chips. Problems Only with 24FJ.
The second PDF is connection diagram. Yes, i have tested pullup resistors 200ohm to 5kohm and MCLR pullup 2k2 to 10k (different values).
Diode is Schotky. Cable length from programmer to board is less than 10 cm.
Vdd and Vss are ok (3v3/0) and core voltage is 2,49V over capasitors.

I have read also this document." PIC24FJXXXGA1/GB1 Families Flash Programming Specification"
http://ww1.microchip.com/downloads/en/DeviceDoc/39907b.pdf

Post edited by: rs485, at: 2011/06/28 23:36

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Re:Problemas con los PIC24

Posted by sispic - 2011/06/29 19:03

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hi rs485
excuse my English is very bad :unsure:
can you prove from the removing the pullup resistor of 200ohm ??
the problem is not reached zero te output "DATA"
umm..resistance of 100 ohm security in the gtp-usb + prevent it.
you can prove .and if it does not look for more solutions
greeting

Mensaje editado por: sispic, el: 2011/06/29 19:08

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Re:Problemas con los PIC24

Posted by rs485 - 2011/06/29 20:24

"excuse my English is very bad "
My too, I use google translator ;)

I used the "Read All" button.

a. with 200ohm pullup in dataline
All data were FFFFFF

b. No pullup
Second line in program code is
0x000010 FFFFFF FFFFFF FFFFFF FFFFFF 00FFFF FF0000 FFFFFF FFFFFF
all others FFFFFF
If I use "Erase All" -> No effect

C. with 1kohm pullDOWN resistor in dataline
All 000000

d. with 12kohm pullDOWN resistor in dataline
Same as point b.

There is one point in pullDOWN resistor value where i can get random data but it is not real.

e. pullup 600ohm
Same as point b.

d. pullup 400ohm
All FFFFFF

Post edited by: rs485, at: 2011/06/29 21:12

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Re:Problemas con los PIC24

Posted by sispic - 2011/06/30 00:04

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you have something connected to data ??

can short-circuit data resistror 100 ohm.

http://imageshack.us/photo/my-images/546/gtpusb.jpg/

either way if you connect the output "ZIF socket" IDC-10 has to work with pullup 200
conect to vpp2.

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Re:Problemas con los PIC24

Posted by rs485 - 2011/06/30 00:32

"you have something connected to data ??"
No, only the programmer and pullup. I have also tested another programpins pair but it has no effect.

I tested this short circuit with 200ohm dataline pullup

http://imageshack.us/photo/my-images/546/gtpusb.jpg/

Result is that the second line in program code is again
0x000010 FFFFFF FFFFFF FFFFFF FFFFFF 00FFFF FF0000 FFFFFF FFFFFF
same as without pullup

Strange why that second row data is always same and in same place if it is a level problem.

Post edited by: rs485, at: 2011/06/30 00:37

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Re:Problemas con los PIC24
Posted by sispic - 2011/06/30 16:43

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if you connect the output "ZIF socket" IDC-10 has to work with pullup 200
use vpp2
so it has to work

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Re:Problemas con los PIC24
Posted by rs485 - 2011/06/30 17:46

If I connect zip connector pin10(vpp2) to dataline with 200ohm resistor I get pulldown effect too because vpp2 is not there all the time so i used diode series. No effect.
I tested also pullup(200ohm) dataline to testboards +5V. No effect

Post edited by: rs485, at: 2011/06/30 17:46

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Re:Problemas con los PIC24
Posted by sispic - 2011/06/30 18:47

I mean to connect all lines, data, clock, VPP2 etc. in "ZIF socket" IDC-10

http://i56.tinypic.com/2cbla1.jpg

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Re:Problemas con los PIC24
Posted by rs485 - 2011/06/30 19:28

Tested 24FJ from ZIF socket. No luck, UNKNOWN device

Tested 33FJ with same circuit -> Detected 33FJ256GP506

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Re:Problemas con los PIC24
Posted by sispic - 2011/06/30 21:56

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pullup 200??
 I have it tested and works on all forms that indicated. the problem will be in your circuit, maybe welding or pic broken.

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Re:Problemas con los PIC24
Posted by rs485 - 2011/07/01 01:20

OK, if you have tested it with 24FJ chip.

History:
I bought two boards, here is the link:
http://cgi.ebay.com/PIC24F-Starter-Kit-Learn-PIC24F-16-bit-MCU-Programable-/350470021061?pt=LH_DefaultDomain_0&hash=item5199a41fc5

In the board there are two controllers with programmer connection. There is no problem at all with PIC18F67J50(under the display) I can read it and i can program it. But PIC24FJ256GB106 is always unknown device. I have done a lot of modifications to get programmer work with it but no luck.
Then I made that testboard with chipsocked where I can test 33FJ anf 24FJ chips. 33FJ works 24FJ don't.
Because I can't figure out whats wrong I ordered two different programmers if they work and i can use the boards. It is possible to program 24FJ trought the 18F67 but i dont use it.

I like GTP-USB programmer and it has served very well with many differend PIC controllers. I can't understand why the 24FJ is so difficult. But thank's your help anyway.

Post edited by: rs485, at: 2011/07/01 01:23

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Re:Problemas con los PIC24
Posted by sispic - 2011/07/01 04:53

I do not think it is difficult .
I can verify what the problem is. pic24fj is a bit critical on-line "DATA" I do not fabricate pics.
I can assure you it works. 'll try a picture tomorrow, but I am ashamed ... it is very sloppy :sick:
If you send me your card I revised it for free. and if a software or hardware bug me I will take care of expenses. but I believe I can do.
you seem well prepared. I have never left anyone without stand.
we are in contact.

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Re:Problemas con los PIC24
Posted by rs485 - 2011/07/02 00:28

I have been clearly missed one thing, but I do not know what it is. In many cases, the solution is very simple when you know what is wrong.
For example PIC18 B5-pin :laugh: There is no hurry with this problem because I start the project in autumn. I might send you a card later, if no solution is found.

And thank you again for your help and quick responses

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Re:Problemas con los PIC24
Posted by sispic - 2011/07/02 18:45

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umm .. I have revised my working pic24fj tensions

VDD = 3.90 v.
Data and Clock = 0 - 4.55 v. no pullup resistor
Mclr = 0.9 - 3.85 v.

I think you can gain a little vdd . 3.5 +-

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