

Subject : Re: re: Fw: Code updated
Date : Wed, 17 Dec 2008 11:41:00 +0000
Linked to : William Pan
From : "williampan" <william.pan@justec.cn>
To : Derek I Lamb <derek@viamed.co.uk>

Dear Derek,

We have improved the screen black problem after swithing on. Before the software change, sometimes, the screen will show nothing but black, and you have to switch it off and on again so that the screen will go correctly. Now, even the black screen will appear sometimes, but it will go to next correct screen automatically, no need of switching off and on again. But we only tested this in several devices, not so many. ;)

As to the E1 error, we try to increase the error range, but as you have said, it is not so often to show E1 error, so it is not so easy to check this. But I have checked the schematic of TEC-OX, I have found one thing which is not so good in design.

You can find the output of the LTC3459 is about 3.09V according to the setting on the picture. This output will provide power source to the TC1072-3.0VCH. The output of this LDO is 3.0V in design. But any LDO will have a dropout voltage, that mean, the input of the LDO should bigger than the output for some voltage. In this cases, the maximum dropout voltage is 120mV with 50mA load. So the input of the LDO should be more than 3.12V at this situation, but the LTC3459 can only provide 3.09V. If there is some error on the value of resistor and capacitor, I believe the LTC3459 can not provide enough voltage to meet the dropout voltage requirment for TC1072-3.0, this will cause a problem that the output of the TC1072 will less than 3.0V. So the E1 error will happen.

So I suggest to increase the output of the LTC3459 to 3.3V, so that there are enough space to provide dropout voltage for TC1072-3.0V. Hope this is the cause of the problem.

Best Regards,

William Pan
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2008-12-17

===== 2008-12-15 14:07:00 ÁüÔÚÀ'ĐÄÖDD'µÆ° =====

Dear William,

Can I ask what you changed in the source code,
So far the E1 Error has been fairly random.

My Coding Exp/ Background has been PHP/Mysql Python/Java but avoided Assembler
I did a few attempts at fixing the E1 Error,

I altered Line 86 and line 88 of adc.asm to give a wider error range, but still got the E1 Error
(this was on a Unit that already showed the E1 in the First Place before I Tried difference Code).

I'm just concerned we havent fully discovered the Problem and you have done what I did.

As for Version Number.

I suggest we move on to Version 5.00
(will need changing in the source code too)
That way I'm leaving all Version 4.x Code as Peter's old code and anything with 5.X is After Peter.

I have unfortunately sent my Programming Board of to a company for a few day so I am unable to test your software until John returns

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