

## LOG BOOK RECORD: SESSION #6

Date & Time: 4<sup>th</sup> April 2018 13:00

### General Comments:

Activity 1 - Task planning and system design changes – see [TASK\\_PLAN\\_76543\\_QB00700\\_BRANCH\\_Q.pdf](#) .  
Planned work v achieved work during session #5 was as follows

Programming complete! including some tidy-ups.  
Tests complete! but without additional tests.  
#perating instructions not started as programming took longer than planned.

Activity 2 - system assembly and programming  
& added the #'()\*###+(, handling.

The state of development at the end of this session is as follows

Process Name	Description	Progress
*,.task	*,./(-*#0(	*omplete
	*,.%(T.T&0(	*omplete
	*,.*###+&12	*omplete
	*,.,#1(	*omplete
	*,.*A1*(-(,	*omplete
	*,.#'()*###+(,	*omplete

Process Name	Description	Progress
key.task	,e"ounce key presses	*omplete

Process Name	Description	Progress
timer.3.&%)	%system timers	*omplete

Process Name	Description	Progress
main	0A&1./(-*#0(	*omplete
	0A&1.)(A,4	*omplete
	0A&1.*###+&12	*omplete
	0A&1.,#1(	*omplete
	0A&1.*A1*(-(,	*omplete
	0A&1.#'()*###+(,	*omplete

Process Name	Description	Progress
- (, .task	- (, .# ; ;	*omplete
	- (, .*##+&12	*omplete
	- (, ., #1 (	*omplete
	- (, .# ' ( ) *##+ ( ,	*omplete

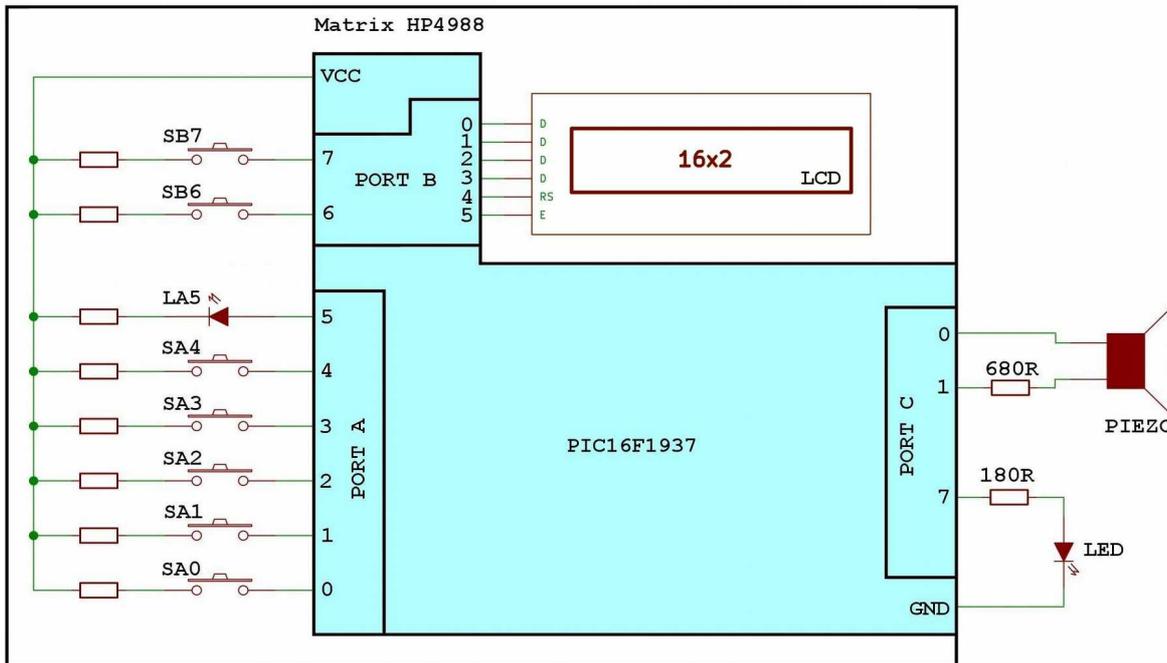
Process Name	Description	Progress
timer.<.&% )	Pie=0 sounder drive	*omplete

& also added a >test mode? that increases the 1 second system clock to 133ms! giving a @13 speed up factor for the egg timing.

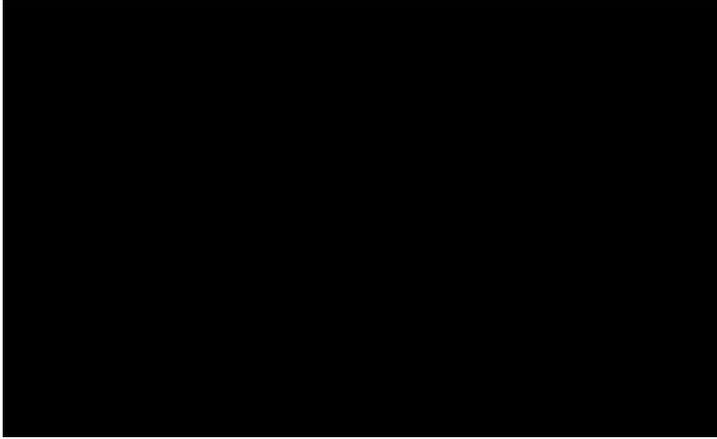
To enter test mode! hold down the >\*ancel? key while powering up the "oard. #n releasing the >\*ancel? key! - (, -A5 illuminates and stays illuminated while operating in test mode.

To cancel test mode! power off the "oard and power up again without touching any keys. - (, -A5 off indicates the device is running in normal mode.

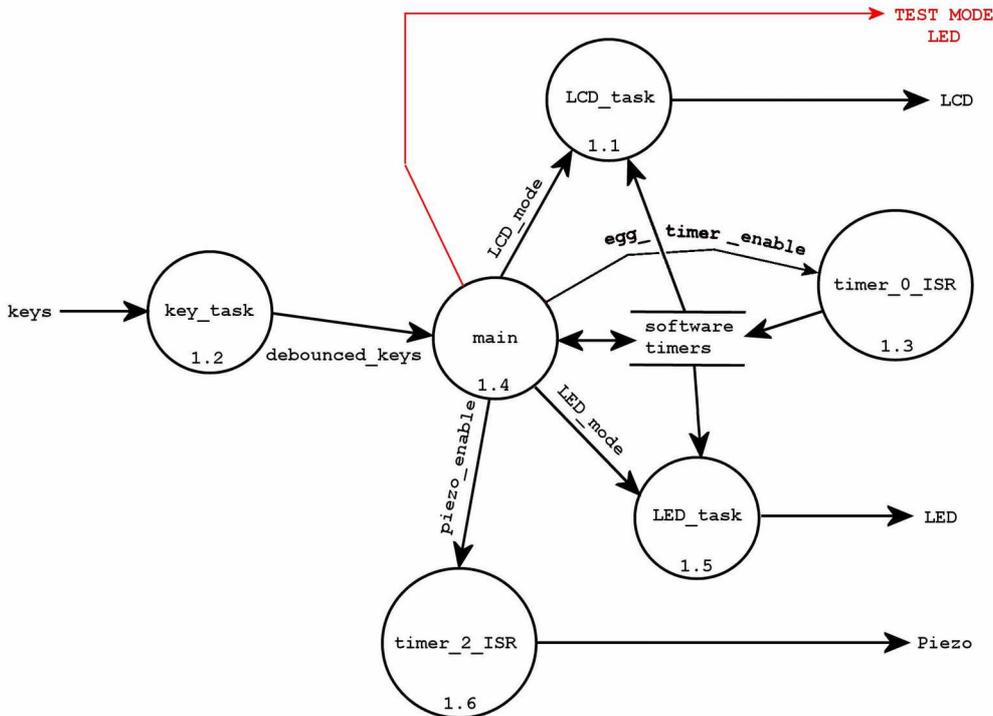
:ardware modifications for test mode Atest - (, on Port A! "it 5B



updated context diagram to include test mode



updated data flow diagram to include test mode



Activity 5 - System testing and result analysis  
 Test of my session #7 work in progress software

Test #	Purpose of test	Test Data	Expected Result	Actual Result	Comments and justification
1	Test >welcome? message	Power on ,evice	>welcome? message displayed	PASS	;inished welcome screen
<	Test one key DstandardE egg function	Press key for a DstandardE 8F minute egg	,evice indicates >*ooking? and starts down counting from 8 83 to 3 33. /hen 3 33 reached! device indicates >,one? until >*ancel? pressed "y user.	PASS	%started a stopwatch at the same time as the egg timer and confirmed the accuracy of the system.
8	Test out of range timings	Try to program a cooking time "elow < minutes and a"ove 7 minutes	The device should not allow cooking times less than < minutes or more than 7 minutes.	PASS	/orks as e@pected
\$	Test the DcanceleE cooking function	%elect < minutes cooking time and press >start?. Press >cancel? after a few seconds	,evice indicates >*ooking? and starts down counting. /hen the >*ancel? key is pressed! the timer stops and displays >*anceled?	PASS	/orks with normal >start? and >Guickstart ? modes.
5	Test invalid key press when running	%elect < minutes cooking time and press >start?. #nce running! press other keys! e@cept >cancel?	,evice indicates >*ooking? and starts down counting. All key presses should "e ignored. /hen the >cancel? key is pressed! the timer stops and displays >*anceled?	PASS	/orks with normal >start? and >Guickstart ? modes.

7	Test fast timing mode	(na"le the fast timing mode on the device	)repeat tests < in fast timing mode. The only difference should "e the cooking time is reduced.	PASS	@13 speed for egg timer timing
6	Test a 7 minute egg in fast timing mode	%elect 7 minutes cooking time and press >start?.	,evice indicates >*ooking? and starts down counting from 7 33 to 3 33. /hen 3 33 reached! device indicates >,one? until >*ancel? pressed "y user.	PASS	@13 speed for egg timer timing

**Issues encountered and solutions with justification:**

- A1B Programming took longer than e@pected! "ut all design features have "een implemented.
- A<B There was no time to add e@tra tests to the test plan or write the operating instructions.

**Action list for the next session:**

- A1B /rite operating instructions.
- A<B Annotate the software where it lacks clarity.
- A8B ,ocument the system in operation.
- A\$B %uggest improvements to enhance user e@perience
- A5B %uggest improvements to handle une@pected events