TECHNICAL INFORMATION

Range	Model	T.I. Nr
SLIF	**7xxx range**	**06_2012**
Serial Number	Subject	Complaint Nr
14911292	**NEW_EXPANSION_BOARD**	**N/A**

BOARD INVOLVED

Boards involved in this change are:

W7x00 CPU 6732028 02 (ex 47127400) used only on SLIF FB machines

W7x00 CPU 6732029 02 (ex 47128900) used on all range excluded FB SLIF

(see 2011-07-01 Difference in expansion board on Wittenborg CPU 47127400 and 47128900.pdf for differences in the two boards)

CHANGE HISTORY AND REASON

In April 2011 the two CPU board was updated from rev 00 to rev 01 since the expansion board using 3V3 Flash memory was recognized to have an address bus delay problem causing data corruption in some temperature-components combinations.

The change was to add temporary a delay capacitor on the ALE signal and finally to correct the circuit topology later.

This correspond to the revision 03 of the expansion board 6735495, previously rev 02 when it was modified for 3V3 flash.

Recently the capacitor modification was recognized to be not 100% effective and in the mean time the 5V Flash, three years ago declared obsolete, are still live and available.

Thus to solve the problem in an effective way it was re-introduced the previous 5V expansion board (rev 01) moving the revision code to 6735495 04 and the corresponding CPU boards to 673202802 and 673202902 on Wk 35/11. In real production it was introduced in December /11.

In the mean time e new future version of expansion board able to use both 3V3 and 5V Flash are under development to cover any 5V Flash shortage or EOL.

Functionally, since the 5V Flash are only one brand (AMD 29F160) and they work will all FW version, there is no reason to have different code, so the 673202802 and 02902 are perfectly equal.

OPTICAL DIFFERENCE DESCRIPTION.

The difference between 01 and 02 CPU board revisions can be detected of course by the label with the CPU revision code.

Can be also optically recognized looking to the expansion board.

There could be three possibility:

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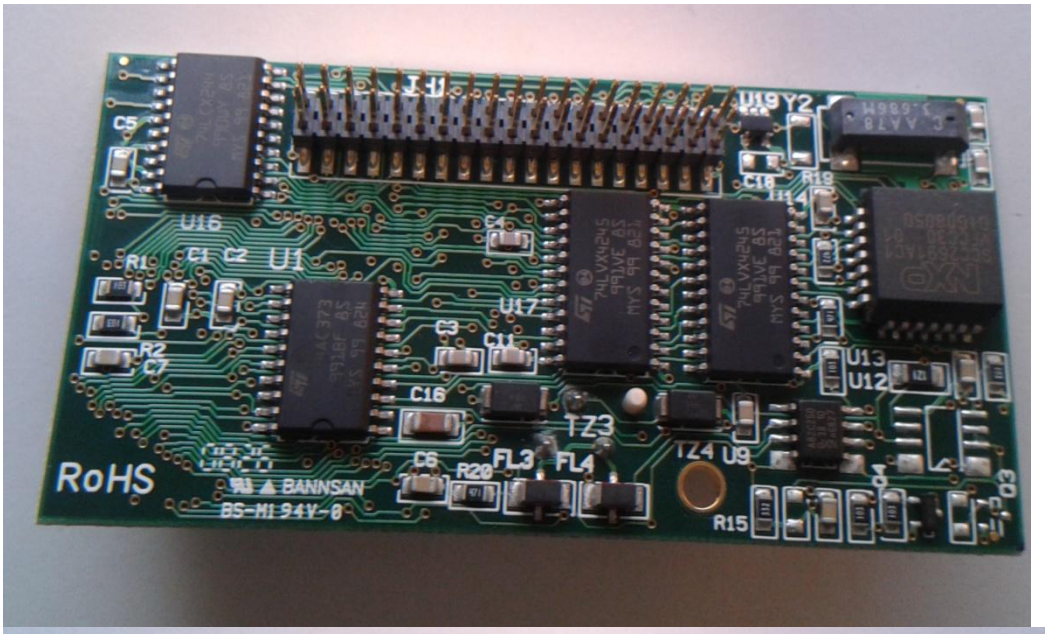
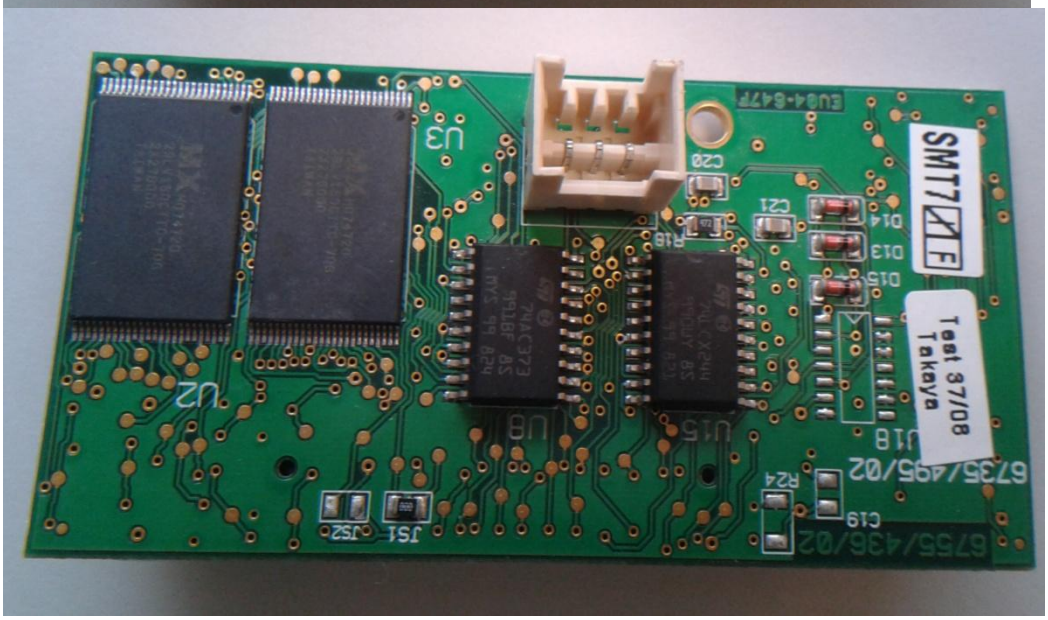
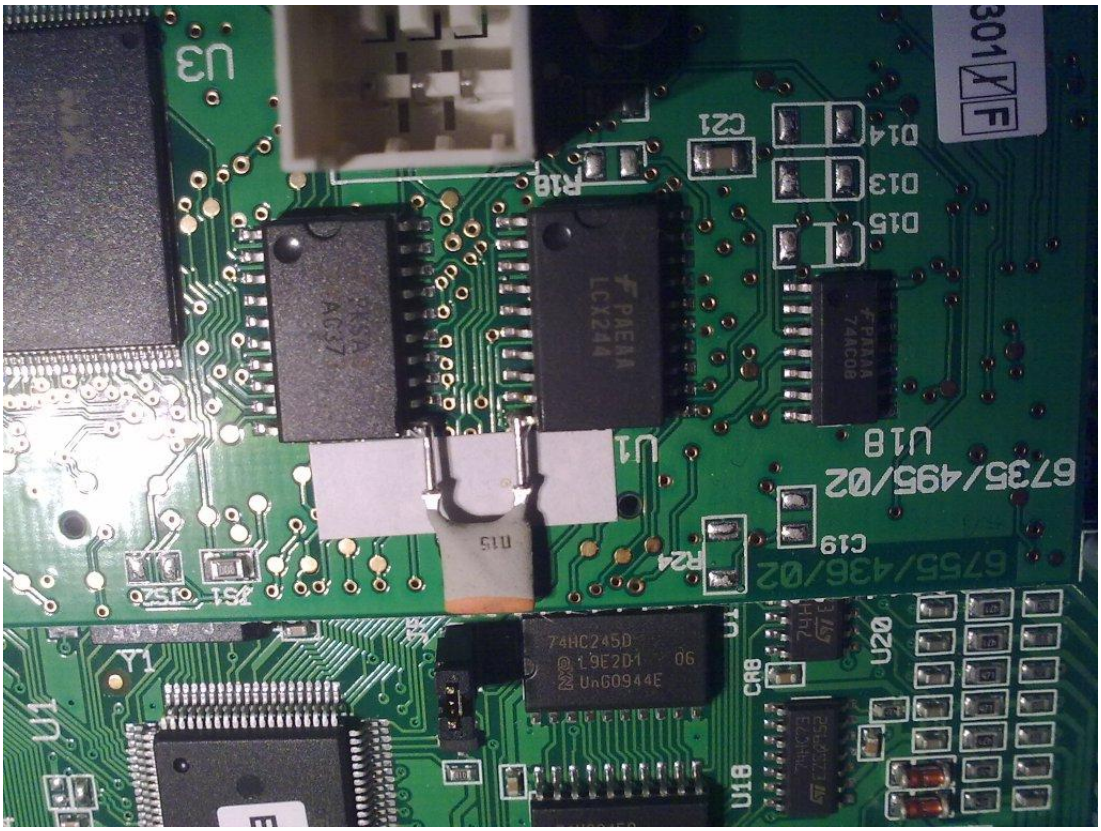
1) 6735495 02 (3V3 witout any modification); CPU 673202800, 673202900





Various level shifter ICs on the back and rev 02 on the top silk screen can be used to recognize this expansion board version.

2) 6735495 03 (3V3 with added capacitor); CPU 673202801, 673202901



An added capacitor is visible between U8 and U15 of expansion board.

TECHNICAL INFORMATION

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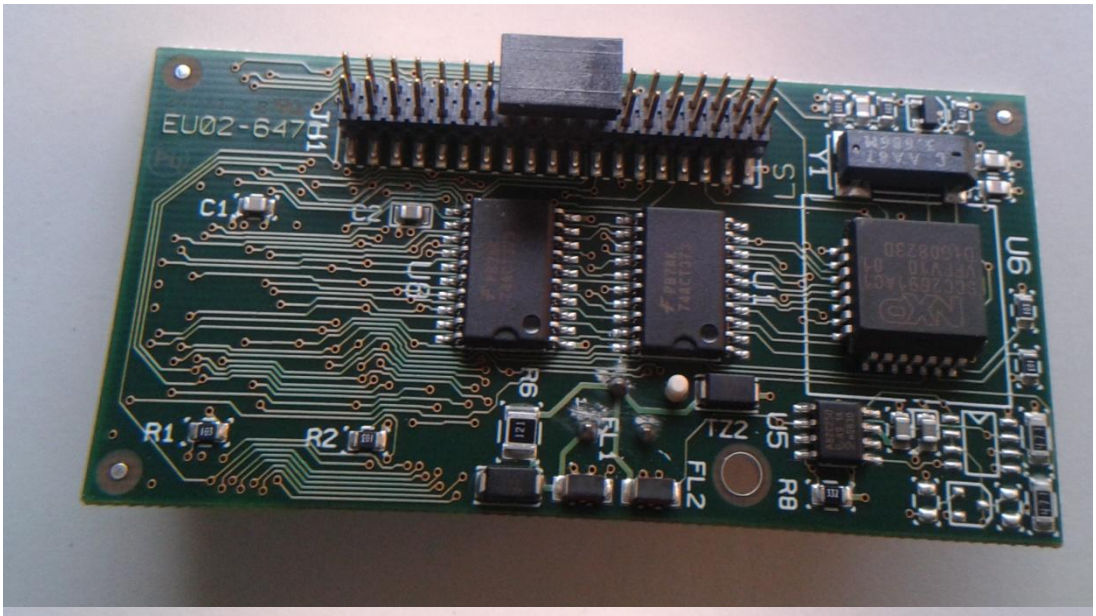
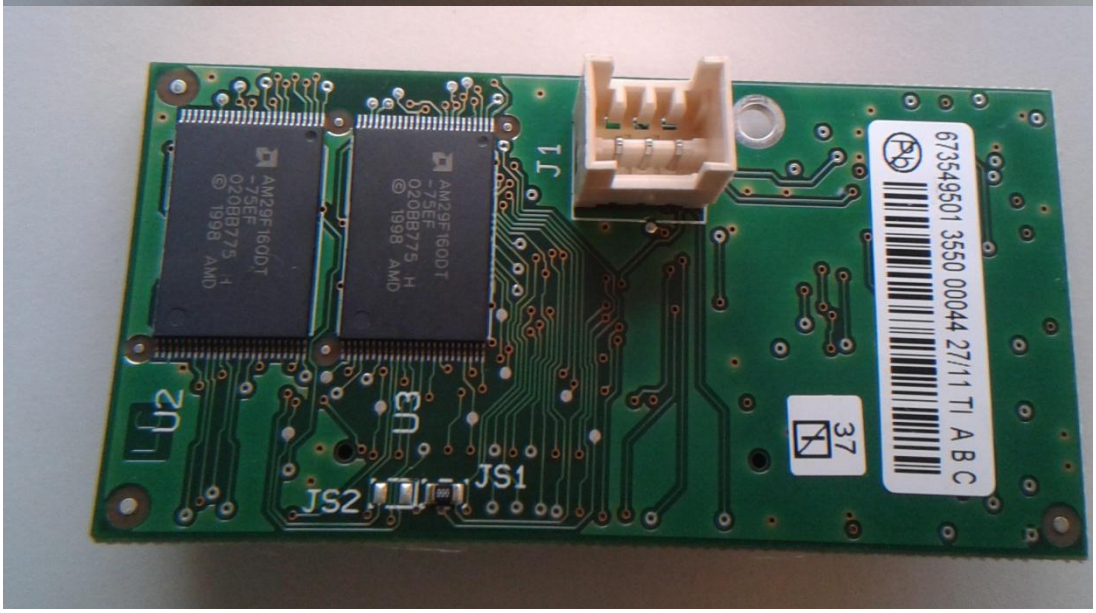
NEW EXPANSION BOARD (SPARE **F00172**)

3) 673549504 (5VFlash restored) CPU 673202802, 673202902





No level shifter ICVs and rev 01 (or 04) on the expansion board label cen be used to distinguish new 5V version.

TECHNICAL INFORMATION

Range **SLIF**	Model **7xxx range**	T.I. Nr **06_2012**
Serial Number **14911292**	Subject **NEW EXPANSION BOARD**	Complaint Nr **N/A**

BOARDS AND SW VERSIONS

Expansion board code	CPU board code	Date	SW versions*
6735495 02	673202800	-	6.8
	673202900		
6735495 03	673202801	Apr'11	7.4 or 6.8
	673202901		
6735495 04	673202802	Jan'12	7.5
	673202902		

*SW version for general Vending machines (not all the SLIF versions could have same SW version);

**The new expansion board run with all the previous SW version installed in the machine

PREFACE

The Wittenborg 7x00 CPU board is currently produced in two versions:

1. 47127400
2. 47128900

Previously only one version was used, 47125600, replaced by the two current versions.

All of them are using the expansion board coded 6735495 02, recently replaced by the version 03 with the added on capacitor for the known bus delay problem.

Soon it will be replaced by the 5V flash version in rev. 04.

The difference of the two versions is only in the allowed expansion flash memory brand and type.

The 47128900 allows the following alternative memories:

Macronix MX29LV160CTTC-70G

ST M29V160ET70N6E

AMD AM29LV160DT-70EC (nominally obsolete)

The 47127400 does not Accept ST.

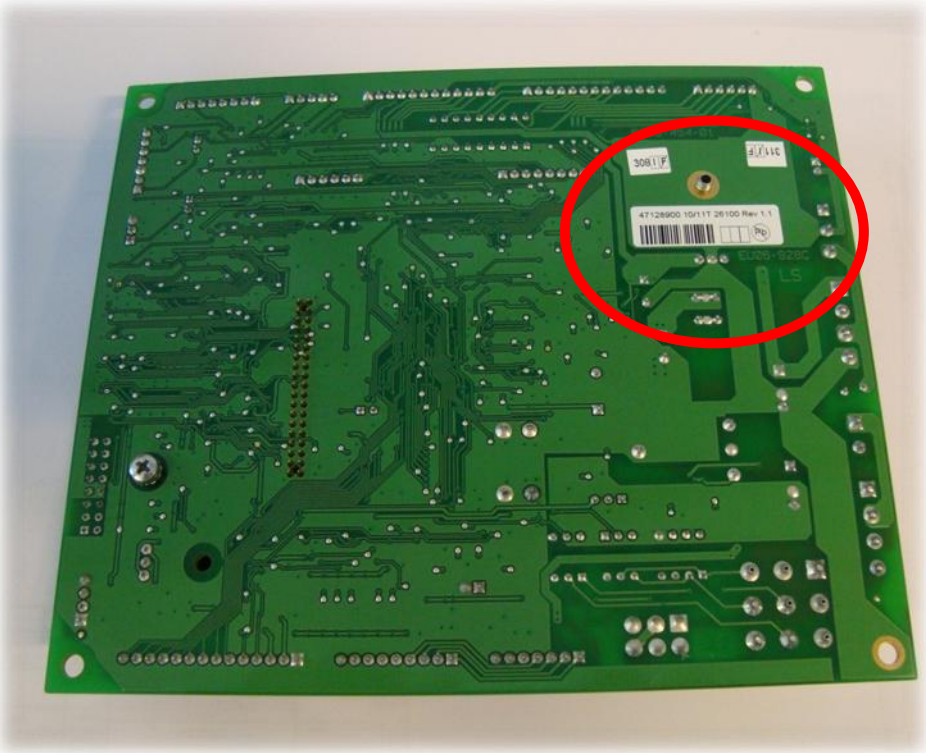
The reason to have the 47127400 is to allow the usage of an old FW version not compatible with the ST flash instruction set according to the TI 2009_16 of the 13.05.2009.

TECHNICAL INFORMATION

Range **SLIF**	Model **7xxx range**	T.I. Nr **06_2012**
Serial Number **14911292**	Subject **NEW_EXPANSION_BOARD**	Complaint Nr **N/A**

VISIBLE BOARD IDENTIFICATION

The CPU board is labeled on the back.



On the label there is printed the board code

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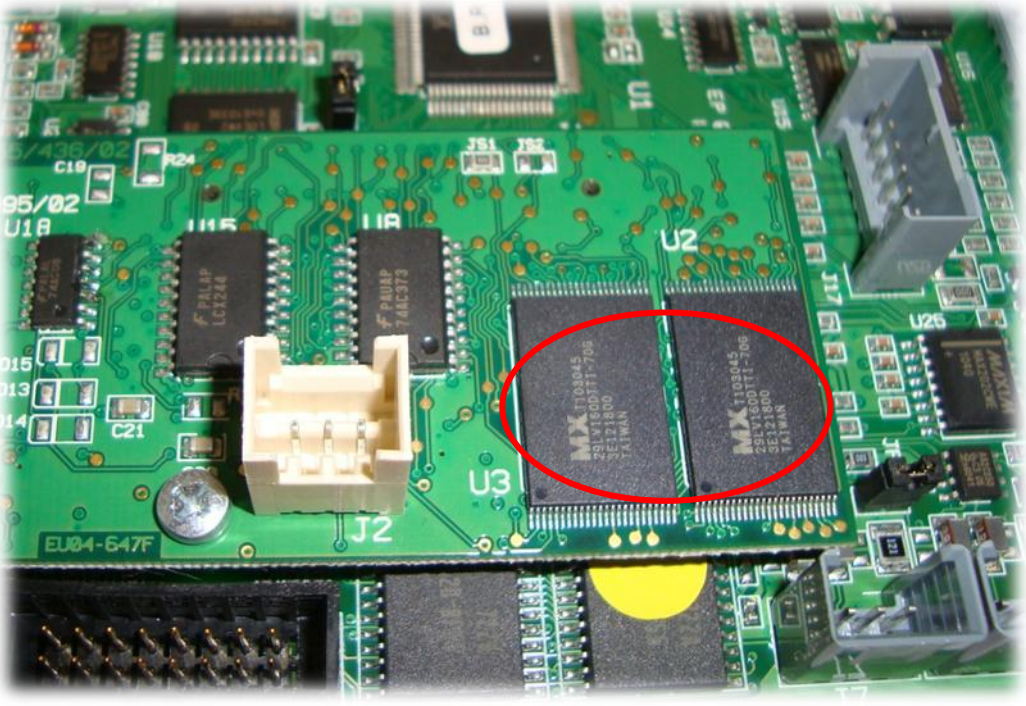
14911292	**NEW EXPANSION BOARD**	**N/A**

There is no label on the expansion board so, if for any reason, the expansion boards have been swapped among different CPU boards and there are doubts about mismatching, the way to distinguish whether the expansion board is correct or not is to look at the Flash chips brand at U2 and U3 position.



For instance, in this picture the Flashes are Macronix ones.

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Range	Model	T.I. Nr
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