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[MPC5xxx] The external bus interface (EBI) fails when the debugger is connected

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The cause of this problem is that there are two signals which are multiplexed between debugger and EBI usage: EVTI and EVTO.

For the MPC5510 series, the function of these signals is controlled by the EVT_EN bit in the NPC_PCR register, which again is controlled by the debugger. The debugger will per default set the pin function to EVTI/EVTO. In order to use the signals for EBI (R/!W and !TA), use the EVTEN setting in the TrOnchip window:

 $\label{thm:continuous} TrOnchip.EVTEN\ ON\ ;\ signals\ have\ EVTI/EVTO\ function.\ EBI\ functions\ disabled\ (default)\ TrOnchip.EVTEN\ OFF\ ;\ signals\ free\ for\ use\ by\ EBI\ or\ GPIO$

IMPORTANT NOTES:

- If the NEXUS adapter LA-7610 is used, EVTI must be physically disconnected from the debug/trace connector, because the LA-7610 will permanently drive EVTI.
- If the NEXUS adapter LA-7630 is used, the EVTI pin will be tristated if TrOnchip.EVTEN is set to OFF. It is recommended to disconnect EVTI/EVTO from the debug connector anyway (see below).
- If the signals are used for EBI, it is strongly recommended disconnecting EVTI/EVTO from the debug connector. Unterminated signals can cause EBI problems, especially if the debugger is not connected.
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