

TE0720 System Controller

Revision Changes

Revision 5

The changes are all compatible to Revision 4, there is added functionality that is disabled by default at normal startup.

New functions: LED1, LED2, NOSEQ pin

LED1 function multiplexer has new functions: LED1 can additionally be controlled by FPGA pin, MIO14 or MIO14+MIO15 (PS UART Activity monitoring)

LED2 function multiplexer has new functions: LED2 can additionally be controlled by FPGA pin, MIO15 or MIO14+MIO15 (PS UART Activity monitoring)

NOSEQ (when used as output) has new functions: connection to FPGA pin, serialized status monitoring. Serial monitor signals include MIO7, MIO14, MIO15, PHY_LED0, PHY_LED1, PHY_LED2, RTC Interrupt, and 3 pins from FPGA logic.

New functions: SC to FPGA pin mapping

MIO14 and MIO15 can be routed to FPGA, also the serialized monitoring data.

New function: hard reset from PS Software

PS can force hard reset of itself (pulse on POR_B). This function is protected by enable signature that has to be written first. By default this functions is disabled.

New function: Hardware Watchdog.

This function is protected by enable signature that has to be written first. By default this functions is disabled. When watchdog is enabled then PS has to hit it periodically to prevent the Watchdog to generate a full hard reset (POR_B pulse).