

Motorola MPC565

Errata Sheet

ES201 Evaluation Board MPC565 V1.0





Errata Sheet

Product: ES201 – Basic Evaluation Board MPC565 V1.0
Date: 08.09.00
Revision: 1.0

Errata Summary

ES201_Databus1	Data4 is swapped with Data5 and Data27 is swapped with Data28

Detailed Errata Description

ES201_Databus1: Data4 is swapped with Data5 and Data27 is swapped with Data28

Description: Bit 4 and Bit 5 as well as Bit 27 and Bit 28 of the data bus are swapped directly at the microcontroller socket. Every value written to / read from the data bus will be affected by this problem. It influences especially (a) the usage of Logic Analyzers to monitor the data bus and (b) the setting of the Hard Reset Configuration Word.

The external SRAM and all other functions of the Microcontroller itself are not affected by the error.

The resulting bit order on the data bus is:

Bit 0	Bit 1	Bit 2	Bit 3	Bit 5	Bit 4	Bit 6	Bit 7	Bit 8	Bit 9	Bit 10	Bit 11	Bit 12	Bit 13	Bit 14	Bit 15
Bit 16	Bit 17	Bit 18	Bit 19	Bit 20	Bit 21	Bit 22	Bit 23	Bit 24	Bit 25	Bit 26	Bit 28	Bit 27	Bit 29	Bit 30	Bit 31

The problem exists on all Boards of Rev. A and Rev. B.

Workaround: There is no hardware change possible since the affected data lines are not accessible on the PCB.

The impact can be minimized by the following methods.

- The position of Data4 and Data5 (also Data27 and Data28) on the probe should be exchanged in the Logic Analyzer settings. If this is not possible, the displayed value for the data bus will be incorrect and the users needs to adapt it manually.
- In order to set the correct Hard Reset Configuration Word the value needs to be adapted by exchanging the affected bits.

