

## Chip Errata **DSP56001 Digital Signal Processor**Mask: C68S/C21T

## **ERRATA**

**Applies** to Mask **Errata Description** 1. If the following conditions are met: bit 7 in the OMR is set, the  $\overline{BR}/\overline{WT}$  pin is as-C68S serted (held low) so that the DSP56001 is executing Wait states, and the  $\overline{RESET}$  pin is strobed, the DSP56001 processor will not reset correctly. To prevent this problem from occurring, the  $\overline{RESET}$  pin should not be asserted while the  $\overline{BR}/\overline{WT}$  pin is asserted. 2. The internal flags for the Host interface may not be updated correctly if the Host C68S processor accesses are too long. The problem does not occur if HEN is asserted for less than 9T. 3. The Limit bit (bit #6) of the Status Register is not updated when using non-parallel **C68S** instructions, even if limiting occurred in the ALU. 4. Prior to the DSP56001 entering the STOP processing state, after receiving a STOP **C68S** C21T instruction, all pending interrupts except for trace and stack error should be automatically cleared by the processor so that they will not be processed when the processor exits the STOP processing state. However, all external or peripheral interrupts which are pending prior to STOP processing are, in fact, serviced when the processor leaves the STOP processing state. Interrupts should be disabled prior to executing the STOP instruction to avoid this problem, as shown below: #0,x:\$ffff movep ;clear ipr nop required for pipeline delay; required for pipeline delay; nop stop ;enter stop state C21T 5. AC Electrical Characteristic - External Bus Timing specification number 128 on

page 46 of the Technical Data Sheet, DSP56001/D (Rev. 2), is 0 ns for the minimum specification for Pin Grid Array and Ceramic Quad Flat Pack packaged parts. The 2 ns minimum specification remains for Plastic Quad Flat Pack packaged parts only. The maximum specification remains unchanged for all package types.

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## **NOTES**

1. An over-bar (i.e.  $\overline{xxx}$ ) indicates an active-low signal.

2. The letters seen to the right of the errata tell which DSP56002 mask numbers apply.

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