UTMC Errata Sheet

UT69151 SμMMIT Auto Initialization

UTMC has identified the following deviation from intended operation for all versions of the UT69151 SμMMIT Enhanced family, SμMMIT RTE (MM022A), SμMMIT E (JA01A and JA01B), SμMMIT DXE (MM016A), SμMMIT LXE (MM017A and MM018A), SμMMIT XTE (MM019A, MM020A and MM021A). The deviation does not affect the old UT69151 SμMMIT family, SμMMIT E (SJ02C and TJ02C), SμMMIT DXE (MM010A), SμMMIT LXE(MM011A and MM012A), SμMMIT XTE (MM013A, MM014A and MM015A).

Background:

The UT69151 SμMMIT auto-initialization feature allows autonomous operation in the bus controller, remote terminal, and monitor modes. The SμMMIT automatically configures itself for operation from external non-volatile memory (PROM, ROM, EPROM, E^2PROM, etc.). The configuration sequence begins after the negation of input pin $\overline{\text{MRST}}$, if $\overline{\text{AUTOEN}}$ is enabled.

An external auto-initialization bus allows configuration of the SμMMIT through external memory. To enable the auto-initialization function, assert the $\overline{\text{AUTOEN}}$ pin prior to the rising edge of $\overline{\text{MRST}}$. The negation of $\overline{\text{MRST}}$ starts the auto-initialization sequence. The SμMMIT enables the boot memory by asserting control signals (e.g., $\overline{\text{ECS}}$ or $\overline{\text{ROMEN}}$). For more detail on SμMMIT auto-initialization, please reference the SμMMIT Product Handbook, Section 7.0.

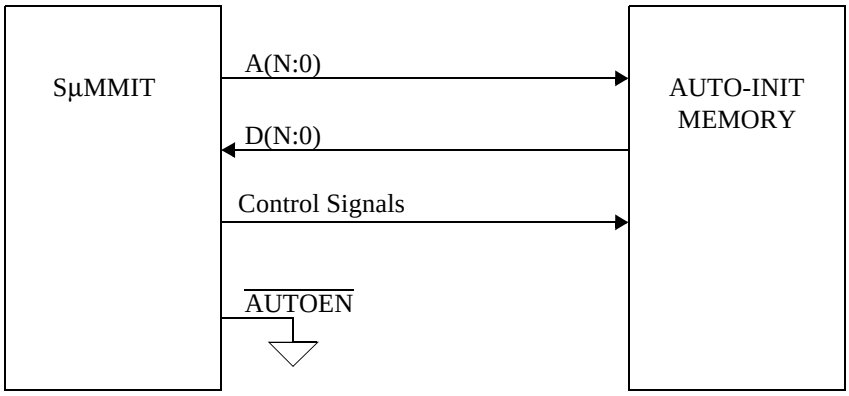

Figure 1. Auto-Initialization System Configuration

Problem:

Evaluation has determined that all UT69151 SμMMIT Enhanced products do not interrogate register 1 (Operational Status Register) to determine what operating mode the part is in (RT mode, MT mode, or BC mode). Instead, the contents of location 0001 hex of the auto-initialization PROM is used to determine operation. Therefore, even if you externally lock the mode the part will initialize based on what is located in memory location 0001 hex.

Work-Around:
To ensure what mode auto-initialization will operate in, you must have the appropriate data loaded into PROM location 0001 hex.

Example of prom memory location 0001 hex:

Mode=RT
Remote terminal address=1
Parity=0

Contents of prom memory location 1 = 09xx hex