CLAIMS

1. A computer program product for facilitating processing in a computing environment, said computer program product comprising:

a computer readable storage medium readable by a processing circuit and storing instructions for performing a method comprising:

detecting an abort of a transaction based on a guarded storage event; and

processing the guarded storage event, based on detecting the abort of the transaction based on the guarded storage event.

2. The computer program product of claim 1, wherein the processing the guarded storage event comprises determining a return address to return to processing the transaction.

3. The computer program product of claim 2, wherein the determining the return address comprises determining a type of transaction and providing the return address based on the type of transaction.

4. The computer program product of claim 3, wherein the determining the type of transaction determines that the transaction is a nonconstrained transaction, and the providing the return address provides an address of an instruction following a transaction begin instruction.

5. The computer program product of claim 3, wherein the determining the type of transaction determines that the transaction is a constrained transaction, and the providing the return address provides an address of a transaction begin constrained instruction.

6. The computer program product of claim 1, wherein the processing the guarded storage event includes placing data relating to the guarded storage event in a parameter list.

7. The computer program product of claim 6, wherein the data includes one or more items selected from a group consisting of: an operand address formed during transactional execution; an immediate result formed from contents of a storage location designated by said operand

address subsequent to aborting the transaction; an indication of whether in transactional execution mode when the guarded storage event was recognized; an indication of whether in constrained transactional execution mode when the guarded storage event was recognized; and an indication of an instruction of the transaction causing the guarded storage event.

8. The computer program product of claim 1, wherein the processing the guarded storage event includes:

determining whether the guarded storage event still exists; and

continuing with processing of the guarded storage event based on determining the guarded storage event still exists.

9. The computer program product of claim 8, wherein the determining whether the guarded storage event still exists comprises:

refetching a selected operand of an instruction causing the guarded storage event; and

using the selected operand to determine whether the guarded storage event still exists.

10. The computer program product of claim 8, wherein the processing the guarded storage event comprises loading a transaction abort control register in lieu of continuing with processing of the guarded storage event, based on determining the guarded storage event no longer exists.

11. A computer system for facilitating processing in a computing environment, said computer system comprising:

a memory; and

a processor in communication with the memory, wherein the computer system is configured to perform a method, said method comprising:

detecting an abort of a transaction based on a guarded storage event; and

processing the guarded storage event, based on detecting the abort of the transaction based on the guarded storage event.

12. The computer system of claim 11, wherein the processing the guarded storage event comprises determining a return address to return to processing the transaction, wherein the

determining the return address comprises determining a type of transaction and providing the return address based on the type of transaction.

13. The computer system of claim 11, wherein the processing the guarded storage event includes placing data relating to the guarded storage event in a parameter list.

14. The computer system of claim 13, wherein the data includes one or more items selected from a group consisting of: an operand address formed during transactional execution; an immediate result formed from contents of a storage location designated by the operand address subsequent to aborting the transaction; an indication of whether in transactional execution mode when the guarded storage event was recognized; an indication of whether in constrained transactional execution mode when the guarded storage event was recognized; and an indication of an instruction of the transaction causing the guarded storage event.

15. The computer system of claim 11, wherein the processing the guarded storage event includes:

determining whether the guarded storage event still exists; and

continuing with processing of the guarded storage event based on determining the guarded storage event still exists.

16. A computer-implemented method of facilitating processing in a computing environment, said computer-implemented method comprising:

detecting an abort of a transaction based on a guarded storage event; and

processing, by at least one processor, the guarded storage event, based on detecting the abort of the transaction based on the guarded storage event.

17. The computer-implemented method of claim 16, wherein the processing the guarded storage event comprises determining a return address to return to processing the transaction, wherein the determining the return address comprises determining a type of transaction and providing the return address based on the type of transaction.

18. The computer-implemented method of claim 16, wherein the processing the guarded

storage event includes placing data relating to the guarded storage event in a parameter list.

19. The computer-implemented method of claim 18, wherein the data includes one or more items selected from a group consisting of: an operand address formed during transactional execution; an immediate result formed from contents of a storage location designated by the operand address subsequent to aborting the transaction; an indication of whether in transactional execution mode when the guarded storage event was recognized; an indication of whether in constrained transactional execution mode when the guarded storage event was recognized; and an indication of an instruction of the transaction causing the guarded storage event.

20. The computer-implemented method of claim 16, wherein the processing the guarded storage event includes:

determining whether the guarded storage event still exists; and

continuing with processing of the guarded storage event based on determining the guarded storage event still exists.