

CLAIMS

1. A computer program product for facilitating processing within a computing environment, the computer program product comprising:

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

obtaining an instruction to move data, the instruction being a single architected instruction; and

executing the instruction, the executing comprising:

moving data of a set of data to provide an insertion point in the set of data to add other data, the moving data comprising moving a specified length of the data from a source location within the set of data to a destination location in a right-to-left direction to provide a predictable result, wherein the moving data comprises moving one or more units of data of a defined size from the source location to the destination location in a right-to-left sequence beginning with a rightmost unit of data of the defined size in the source location, and wherein a portion of the destination location is contained within the source location from which the data is being moved.

2. The computer program product of claim 1, wherein the source location is one size in bytes and the destination location is another size in bytes, and wherein the portion of the destination location includes one or more bytes of the destination location that overlap one or more bytes of the source location.

3. The computer program product of claim 2, wherein the one or more bytes of the destination location includes a leftmost byte of the destination location.

4. The computer program product of claim 2, wherein a leftmost byte of the source location is outside the destination location.

5. The computer program product of claim 2, wherein the one size in bytes and the another size in bytes is a same size.

6. The computer program product of claim 1, wherein the specified length of data to be moved is specified by a location associated with the instruction.

~~7. The computer program product of claim 1, wherein the moving data comprises moving one or more units of data of a defined size from the source location to the destination location in a right-to-left sequence beginning with a rightmost unit of data of the defined size in the source location.~~

78. The computer program product of claim 1, wherein the source location is specified using one or more fields of the instruction, and the destination location is specified using one or more other fields of the instruction.

89. The computer program product of claim 1, wherein the executing is performed by a processor of the computing environment, and wherein a sequence of accesses of the source location and the destination location to move the data, as observed by the processor, is in thea right-to-left direction, but the sequence of accesses as observed by one or more other processors is undefined.

940. The computer program product of claim 1, wherein the executing is performed by a processor of the computing environment, and wherein the moving data comprises: copying the data from the source location to an internal buffer; and moving the data from the internal buffer to the destination location, wherein the data appears, as observed by the processor, to be moved in thea right-to-left direction, and as observed by one or more other processors, in an undetermined direction.

104. A computer system for facilitating processing within a computing environment, the 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:

obtaining an instruction to move data, the instruction being a single architected instruction; and
executing the instruction, the executing comprising:

moving data of a set of data to provide an insertion point in the set of data to add other data, the moving data comprising moving a specified length of the data from a source location within the set of data to a destination location in a right-to-left direction to provide a predictable result, wherein the moving data comprises moving one or more units of data of a defined size from the source location to the destination location in a right-to-left sequence beginning with a rightmost unit of data of the defined size in the source location, and wherein a portion of the destination location is contained within the source location from which the data is being moved.

112. The computer system of claim 104, wherein the source location is one size in bytes and the destination location is another size in bytes, and wherein the portion of the destination location includes one or more bytes of the destination location that overlap one or more bytes of the source location.

123. The computer system of claim 112, wherein the one or more bytes of the destination location includes a leftmost byte of the destination location.

134. The computer system of claim 104, wherein the executing is performed by the processor of the computing environment, and wherein a sequence of accesses of the source location and the destination location to move the data, as observed by the processor, is in thea right-to-left direction, but the sequence of accesses as observed by one or more other processors is undefined.

145. The computer system of claim 104, wherein the executing is performed by the processor of the computing environment, and wherein the moving data comprises: copying the data from the source location to an internal buffer; and moving the data from the internal buffer to the destination location, wherein the data appears, as observed by the processor, to be moved in thea right-to-left direction, and as observed by one or more other processors, in an undetermined direction.

156. A computer-implemented method of facilitating processing within a computing environment, the computer-implemented method comprising:

obtaining an instruction to move data, the instruction being a single architected instruction; and

executing the instruction, the executing comprising: moving data of a set of data to provide an insertion point in the set of data to add other data, the moving data comprising moving a specified length of the data from a source location within the set of data to a destination location in a right-to-left direction to provide a predictable result, wherein the moving data comprises moving one or more units of data of a defined size from the source location to the destination location in a right-to-left sequence beginning with a rightmost unit of data of the defined size in the source location, and wherein a portion of the destination location is contained within the source location from which the data is being moved.

167. The computer-implemented method of claim 156, wherein the source location is one size in bytes and the destination location is another size in bytes, and wherein the portion of the destination location includes one or more bytes of the destination location that overlap one or more bytes of the source location.

178. The computer-implemented method of claim 167, wherein the one or more bytes of the destination location includes a leftmost byte of the destination location.

189. The computer-implemented method of claim 156, wherein the executing is performed by a processor of the computing environment, and wherein a sequence of accesses of the source location and the destination location to move the data, as observed by the processor, is in thea right-to-left direction, but the sequence of accesses as observed by one or more other processors is undefined.

1920. The computer-implemented method of claim 156, wherein the executing is performed by a processor of the computing environment, and wherein the moving data comprises: copying the data from the source location to an internal buffer; and moving the data from the internal buffer to the destination location, wherein the data

appears, as observed by the processor, to be moved in ~~the~~a right-to-left direction, and as observed by one or more other processors, in an undetermined direction.