

PCI HOST BRIDGE MULTI-PRIORITY FAIRNESS ARBITER**ABSTRACT**

A method and system for allowing one or more attached devices (102, 104, 106, 108, 110) to access a computer bus (100). The objects of the method and system are achieved as is now described. At some particular instant in time, prioritized queues are loaded with one or more requests for access (REQ) from one or more devices whose assigned priority levels correspond to the priority of the queue into which the requests for access are loaded. Requests for access, which are resident within a current queue, are preferentially granted (GNT) in a sequential fashion (112) until the current queue is emptied (316), after which at least one request for access from a lower in priority queue relative to the current queue is granted before responding to other requests for access, such that at least one request for access is periodically granted from a lower in priority queue relative to the current queue.

Fig. 1