Figure 7: A speed-independent implementation of the signal  $DReq_{o}$  of the target-send burst-mode cycle of the SCSI data transfer controller.

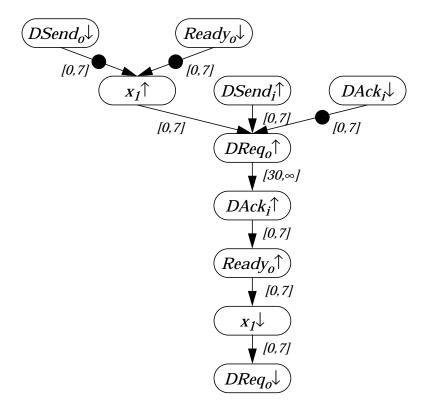


Figure 5: A portion of the cyclic constraint graph for the target-send burst-mode cycle of a SCSI data transfer controller after a successful decomposition.

Figure 6: A timed implementation for the signal  $DReq_o$  of the target-send burst-mode cycle of the SCSI data transfer controller.

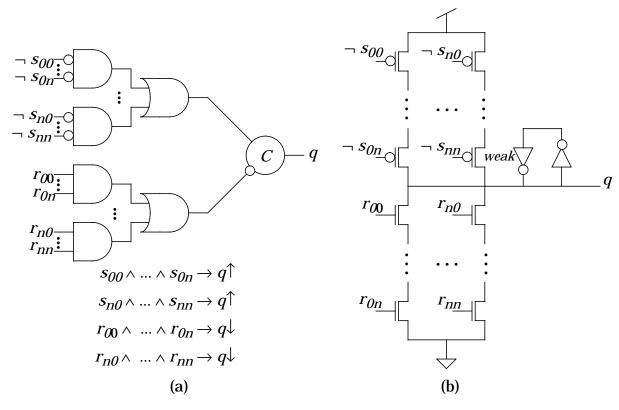


Figure 3: The generalized C-element structure.

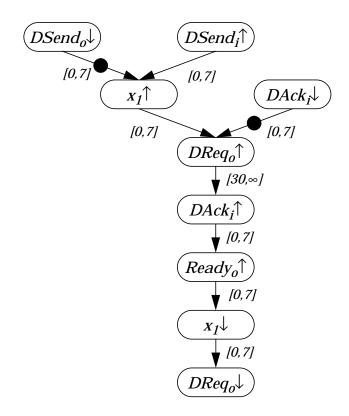
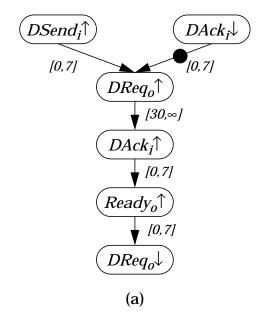


Figure 4: A portion of the cyclic constraint graph for the target-send burst-mode cycle of a SCSI data transfer controller after a decomposition.



$$DSend_{i} \land \neg DAck_{i} \land \neg DSend_{o} \land \neg Ready_{o} \land \neg DRel_{o} \land \neg Req_{o} \land \neg Done_{o} \land \neg Empty_{o} \rightarrow DReq_{o} \uparrow$$

$$Ready_{o} \rightarrow DReq_{o} \downarrow$$

$$(b)$$

Figure 1: (a)A portion of the cyclic constraint graph for the target-send burst-mode cycle of a SCSI data transfer controller, and (b) production rules for the signal  $DReq_o$ .

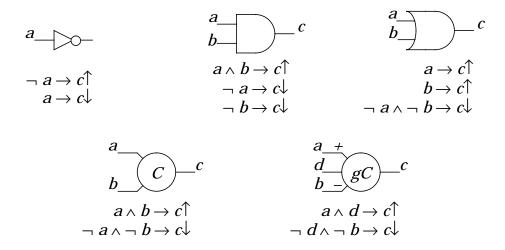


Figure 2: Production rules for several common gates.