Formalization and Analysis of a Solution to the PCI 2.1 Bus Transaction Ordering Problem: PVS Files

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The following PVS files are being put on our technical reports server and are available through anonymous FTP. Look for file "pci_pvs_files.tar.gz" in the TR directory.

The list of PVS source files

- `=acycgraph` and `=fs` are directories containing the graph theory infrastructure and the theory of finite sets that is needed in the graph theory.
- `pcinetwork.pvs`: The theory containing the well-formedness conditions and other simple properties.
- `pciconfig.pvs`: The theory containing the description of all three configurations and other lemmas.
- `channels.pvs`: The theory containing the operations on channels and some properties.
- `pci_state.pvs`: The theory containing the definition of the "pci" state structure and some simple properties.
- `pci.pvs`: The theory containing the definition of the various transitions.
- `more_defs.pvs`: The theory containing the definitions of some more predicates.
- `number_stuff.pvs`: The theory containing some simple number theory properties.
- `pci_invariants.pvs`: The theory containing the a list of invariants about the pci protocol.

- `pci_basics*.pvs`: The theories containing the proofs of these invariants.
- `no_steal_prop.pvs`: The theory containing the proof of "No stealing" property.
- `ordering_prop.pvs`: The theory containing the (part of the) proof of "Ordering" property.
- `pushing_inv.pvs`: The theory containing the formulation of some "Pushing" invariants.
- `delayed_trans_inv.pvs`: The theory containing some properties about delayed transactions.