# What is a TimeCard?

A summary of the last few P3335 Plenary and System Architecture discussions

This may form the basis for an Introductory sub-clause to the Architecture section

1. A TimeCard is an element of a larger system ("Host System")
   1. It is not required to be an add-in card, in spite of the name
   2. It may be an IP block embedded in a larger system
   3. Add-in cards provide one example of a subsystem
2. A TimeCard must have better timekeeping ability than its host
   1. We need a good definition of "timekeeping"
   2. Must take time from at least one external source (ideally multiple sources)
      1. These will likely be signals that the Host cannot manage on its own
   3. Must have an oscillator with defined performance characteristics
      1. The oscillator is not required to be "better" than the Host, but simply having defined performance will result in better timekeeping
   4. It may transmit time directly to other sources via hardware signals that could not be controlled precisely enough form the Host alone.
3. A TimeCard is controlled by its host system through a control interface
   1. Having a standard control interface will encourage interoperability
   2. Time may also be transmitted through the control interface but Timing interfaces and Control interfaces should be logically separate.