

PrimeTime web-based report analyzer (PTWRA) tool

ABSTRACT

In modern VLSI designs, timing closure has become a challenging and tedious task for the designers due to the fact that the number of design logic gates led to an exponential increase in the number of timing paths. PrimeTime from Synopsys is used to perform Static Timing Analysis and to generate a timing report in the form of large size text file; hence, data analysis is a complex task for the designer. This work presents a web-based text-mining software tool based on text-mining and web-based reporting techniques. It consists of two parts, the Perl software parser file in the user part, while MySQL and Apache servers in the server part. This tool parses Synopsys PrimeTime timing report and provides analysis services for team collaboration, clock skew and path constraints calculations, paths categorization and paths distribution in well-organized tables, and presents data on website pages.

Keyword: Smart systems; System-on-chip; Static timing analysis; Text-mining; Web-based applications; Timing closure; Design automation tools