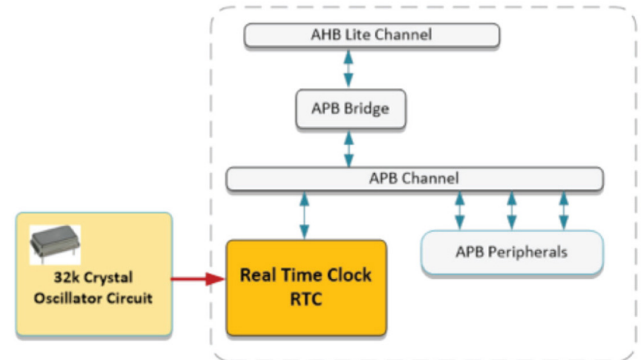# APB Real Time Clock

The Real Time Clock (RTC) is a clock-calendar IP core that keeps track of the "Time of Day". The core is organized as a series of BCD counters that counts Seconds, Minutes, Hours, Days, Months and Years (Time Units).

The RTC seconds counter time base is generated from a clock input that is separate from the system clock. The time-base for the seconds counter is nominally 32.768 kHz. To aid in precision, there is programmable terminal count (divisor) for this clock. Calibration accuracy is controlled by software.

Features

- Clock / Calendar (BCD Format)
- Seconds
- Minutes
- Hours
- Days
- Months
- Years
- Alarm Mode for each "Time Unit".
- Repeat Alarm Mode for each "Time Unit".
- AMBA APB Interface.
- Interrupt control for Alarms

Deliverables

- Verilog Source
- Complete Test Environment
- APB Bus Functional Model

For more information, please contact us at ip@silvaco.com.