



### KAL - Large IP Cores:

#### VIP cores:

- PCIe, USB, AMBA
- SD/SDIO, eMMC
- UniPro, I3C, Soundwire
- DDR 2/3/4, LPDDR, ONFI, SATA
- HDMI
- CAN, CANFDm, FLexRay
- SPI, I2C, SMBus

#### Military/Aerospace

- 1553

#### Multimedia

- H.264
- JPEG

#### Memory Controllers:

- SD/SDIO Controller
- SDRAM Controller
- DDR / SDRAM Controller
- NAND Flash Controller
- Flash/EEPROM/SRAM Controller
- PCMCIA/CompactFlash Host Adapter
- PCMCIA/CompactFlash Slave Controller

#### CPU Cores:

- **32 bit - NEW**
- **8 bit - 8051**
- 8 bit - HC68HC11
- 8 bit - PIC Processor
- 8 bit - Z80
- 16 bit - D6800

Today we would like to share with you an article by Kai-hui Chang from our partner Avery Design Systems. Avery is a leading provider of Verification IP cores (VIP) as well as X-Verification tool for gate level.

Many engineers under the impression that if they run X-verification on RTL level it's does not make sense to run X-verification on gate level.

Let's elaborate more with this article:

## VCS Xprop and SimXACT are Complementary, Not Mutually Exclusive!

By Kai-hui Chang

### Abstract

Both VCS Xprop and SimXACT deal with X-issues. However, the issues they address are orthogonal and the tools are complementary instead of mutually exclusive: the former eliminates X-optimism in RTL simulation, allowing real Xs to propagate in RTL simulation at the expense of possible false alarms.

The latter eliminates X-pessimism in gate-level simulation so that X propagation becomes hardware accurate and no unreal, false Xs can propagate. In this paper we compare how they are different and explain why a complete verification methodology and its outcomes can benefit from employing both methods.

[Read the full article](#)

Clock Synchronization:

- IEEE 1588 Slave
- IEEE 1588 Master
- IEEE 1588 Master/Slave
- IEEE 1588 PTP Stack
- IEEE 1588 L2/L3 Solution

[http://kaltech.co.il/pdf/xprop\\_vs\\_simxact.pdf](http://kaltech.co.il/pdf/xprop_vs_simxact.pdf)

**KAL is representing Avery Design Systems Inc in Israel.**

[www.KALtech.co.il](http://www.KALtech.co.il)

Peripherals:

- HDLC/SDLC
- Smart Card Reader Unit
- EEPROM SPI Ctrl
- LCD Ctrl
- Floating Point Unit
- I2C Master/Slave
- SPI Master/Slave
- CAN/CAN FD bus
- LIN bus
- Programmable Peripheral Interface
- UART, UART with FIFO
- PWM
- Timer 8254
- Programmable Timer
- Interrupt Controller
- Ethernet Controller 10/100/1000 BaseT
- DMA Controller
- USB 1.0/2.0 Host/Slave
- On Chip Bus Analyzer

We are looking forward to hear from you.  
Contact us for more information.

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Until the next eNews,

Thanks you for your attention.

KAL

PCI Bus Controllers and Peripherals:

- PCI Express
- PCI-X Host Bridge Master/Target
- PCI Host Bridge Master/Target
- PCI-PCI Bridge
- PCI-ISA Bridge
- PCI Bus Arbiter

Modulation:

- ADPSM

AHB/APB Peripherals:

- AHB Bus Master/Slave
- APB Bus Master/Slave
- AHB/AXI DMA

**Controller**

- **AXI Bus Master/Slave**

**Analog IP Cores:**

- **Analog IP cores (ADC, DAC, PLL,) are available – Please contact us.**
- **We are expert in custom analog IP**

**[Contact us for data sheet](#)**