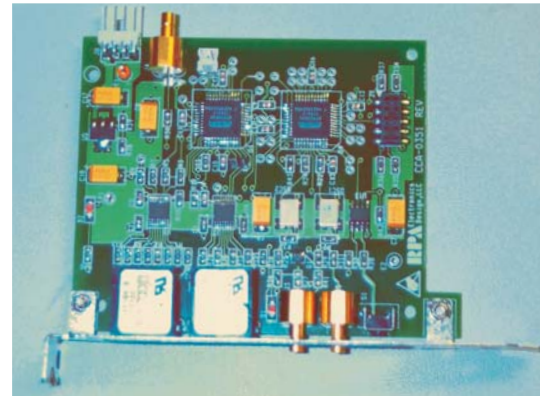


GenLock Kit for nVidia™ FX Series Graphics Cards

- Genlock solution for commercial graphics cards
Adaptable to virtually any vendor's video card
- Locks video vertical intervals from master to slaves
One master - any number of slaves
Locks slaves to within approximately 10 uSec of master
Uses clock replacement techniques to ensure jitter free lock condition
- Kit form
Installed by RPA on customer provided cards
Involves modification of the graphics card (removal / connection to PCB oscillator connections)
- Kit consists of :
GenLock board (fits in any PC slot)
Master / Sync Cable
VSYNC adapter (VGA adapter with cable tap)
Reference Clock / DVI Sync Cable Assembly (to be attached to graphics card)



Applications

- Visual Simulation Systems
- Side by Side Display Systems
- Image Processing Systems

Description

The RPA GenLock kit provides a generic solution for image generating applications that require multiple channels of imagery to be synchronized to one another.

With all video channels operating on the same video frame - all the time - the task of process scheduling of data which controls the image generators can be greatly simplified as intervals become deterministic.

RPA's solution involves modifying the video card, by removing the reference oscillator for the graphics chip, replacing it with a cable, which drives a new reference clock to the chip from our Genlock controller board. As such, as long as there is access to the reference oscillator, the kit can be installed on virtually any vendor's nVidia FX series video card.

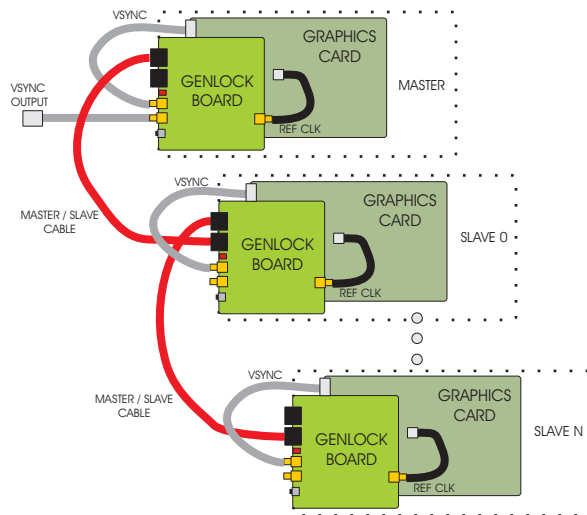
The Genlock controller then determines how to drive the reference clock according to its mode of operation. In its default, master mode (no master cable connected to the slave input), the controller sends a fixed reference signal, identical to that of the original graphics card.

To put the controller in a slave configuration, the user simply connects the slave input to a master output of another Genlock board. The slave controller will then vary the video reference frequency to bring the card into 'lock' with the master. Once locked, a direct copy of the master reference clock becomes the slave reference, guaranteeing jitter free slave operation.

Using reference clock copying as such, requires a common count of reference frequency clocks per video frame (generally requiring all channels to operate on the same video format). As such, the RPA Genlock kit is display format independent, as long as all channels meet the common reference count per frame requirement.

The RPA Genlock kit is a simple, cost effective solution to many multi-channel image generation synchronization problems.

Typical System Configuration



Ordering Information

Part Number

KIT-2001

Video Genlock Kit (FX)