New!

Model 6891

System Synchronizer and Distribution Board - VME

Features

- Synchronizes up to eight separate I/O modules
- Up to eight 6891's can be linked together to synchronize up to 64 I/O modules
- Synchronizes sampling and data acquisition for multichannel systems
- Synchronizes gating and triggering functions
- Clock rates up to 500 MHz
- Front panel SMA connectors for input signals
- Front panel 26-pin Sync Bus connectors compatible with a wide range of Pentek I/O modules
- Single-slot 6U VME board configuration

Ordering Information

Model	Description
6891	System Synchronizer and Distribution Board - VME

Accessories

2891-xxx	Set of Input and Output Cables

General Information

Model 6891 System Synchronizer and Distribution Board synchronizes multiple Pentek I/O modules within a system. It enables synchronous sampling and timing for a wide range of multichannel high-speed data acquisition, DSP and software radio applications.

Up to eight modules can be synchronized using the 6891, each receiving a common clock up to 500 MHz along with timing signals that can be used for synchronizing, triggering and gating functions.

For larger systems, up to eight 6891's can be linked together to provide synchronization for up to 64 I/O modules producing systems with up to 256 channels.

Input Signals

Model 6891 provides three front panel SMA connectors to accept TTL input signals from external sources: one for clock, one for gate or trigger and one for a synchronization signal. Two additional SMA connectors are provided for separate gate and sync enable signals.

Clock signals can be applied from an external source such as a high performance sine-wave generator. Gate/trigger and sync signals can come from an external system source. Alternately, a front panel 26-pin Sync Bus connector accepts LVPECL inputs from any compatible Pentek products to drive the clock, sync and gate/trigger signals.

Output Signals

The 6891 provides eight front panel Sync Bus output connectors, compatible with a wide range of Pentek I/O modules. The Sync Bus is distributed through ribbon cables, simplifying system design.

Clock Signals

The 6891 accepts clock input at +4 dBm to +14 dBm with a frequency range from 1 kHz to 800 MHz. This clock is used to register all sync and gate/trigger signals as well as providing a sample clock to all connected I/O modules.

Gate and Synchronization Signals

The 6891 features separate inputs for gate/trigger and sync signals. Each of these inputs can be TTL or LVPECL. Separate Gate Enable and Sync Enable SMA inputs allow the user to enable or disable these circuits using an external signal.

A programmable delay allows the user to make timing adjustments on the gate and sync signals before they are sent to an LVPECL buffer for output through the Sync Bus connectors.

Cables

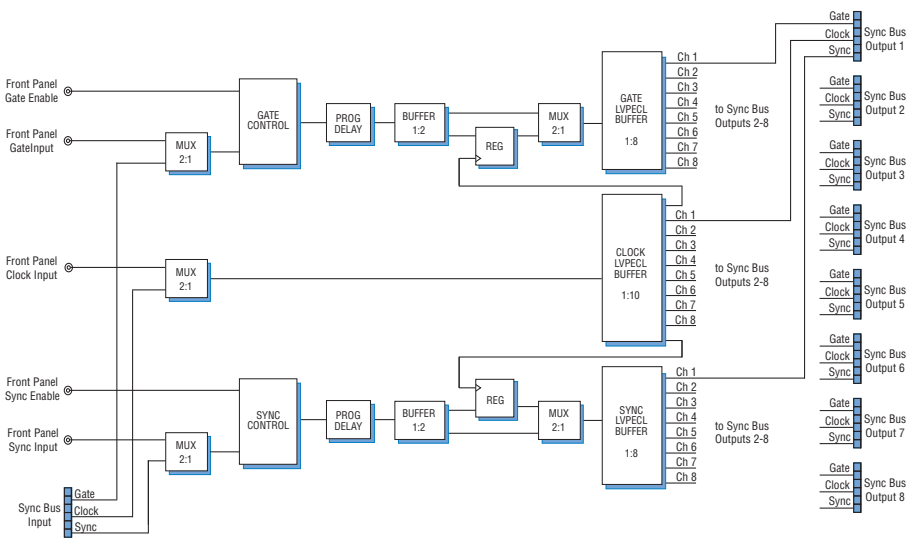
Model 2891 provides various cable kits to support the 6891. Options are available for a range of cable lengths and synchronization of two to eight modules. Options for individual cables are also available under Model 2890.

Supported Products

The 6891 currently supports all models in the 715x family. Contact the factory for an up-to-date list of supported modules.

Physical Characteristics

Model 6890 is a standard 6U VMEbus board occupying a single VMEbus slot.



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