



Two VIM-2 modules may be attached to VIM-compatible processor boards.



Features

- VIM-2 module for VIM-compatible processor boards
- Two identical channels include amplifier, filter and A/D converter
- Up to 65 MHz A/D sampling with 12-bit accuracy
- Programmable-gain input amplifiers
- Anti-aliasing lowpass filters
Filters and programmable-gain amplifiers may be bypassed
- Synchronization across channels and other 6211's
- Expands to four channels with two 6211's

Ordering Information

Model	Description
6211	Dual 12-bit 65 MHz A/D Converter VIM-2 module

General Information

Model 6211 is a VIM-2 module which attaches directly to VIM-compatible processor boards. It forms a 2-channel high-speed data acquisition system for real-time applications.

The Model 6211 digitizes a variety of signals and then delivers them directly to the processor board for further processing.

Two Model 6211's may be attached to a VIM-compatible processor board to form a 4-channel A/D converter which utilizes all four processors while occupying a single VMEbus slot. Alternatively, the Model 6211 may be combined with another VIM-2 module to provide additional I/O functions.

Input Section

Each channel includes a wideband input amplifier followed by a programmable-gain amplifier and a 25 MHz lowpass anti-aliasing filter. The programmable-gain amplifier and lowpass filter may be bypassed for undersampling applications. Analog inputs are accepted through front panel SMA connectors.

A/D Converters

Each channel employs a 12-bit A/D converter capable of operating at up to 65 MHz sampling. The A/D sample clock is derived either from an external reference supplied to a front panel SMA connector or an internal 64 MHz crystal oscillator. The converters are Analog Devices type AD6640.

All A/D converters operate synchronously from the same sampling clock to support multichannel applications, such as in direction finding, where phase between channels must be maintained.

A front panel ribbon cable bus allows multiple 6211's to share a common sample clock. It also synchronizes data collection blocks for simultaneous delivery into the processor BI-FIFOs across multiple VIM-compatible processor boards.

Connection to Processor Board

The 12-bit parallel output samples from each AD6640 A/D may be optionally packed with two samples in a single 32-bit word. This effectively halves the required transfer rate for the BI-FIFOs of the processor nodes.

With the 6211 VIM-2 module, advanced signal processing can now be performed by the processors of VIM-compatible processor boards.

Block Diagram, Model 6211

