

**A VIDEO DISTRIBUTION & ANALOG MONITORING SYSTEM
BASED ON THE ANALOG DEVICES AD8116EVB16 X 16
CROSSPOINT SWITCH**

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The Jefferson Lab IRFEL has used the 200MHz, 16 x 16 buffered crosspoint switch, AD8116 to implement video and analog distribution. These switches are configured as 64 input x 16 output packaged in a 9 inch high rack mount chassis. Two of these chassis are "wired-or" together to form a 128 x 16 crosspoint switch. Identical chassis are used for both the video and analog systems. Both systems are controlled through EPICS. The AD8116 was designed as a 75* back-terminated, nonblocking high speed crosspoint switch for routing of video signals and for use on communication satellites. The internal switches & buffer amps are capable of driving 150* loads with flat (0.1dB) response to 60 MHz. Each AD8116 requires an 80 bit serial word to setup the switch matrix and enable the output buffer amp. The video switch is fed to a 16 channel 1:4 video distribution amplifier and to a "video-to-fiber" transmitter. All 16 channels are available locally in the FEL building and remotely at the CEBAF main control center. The analog system uses a front end buffer to convert the signals to 75* and a receiver after the switch to distribute the signals to two TEK digital scopes and to a VME digitizer.