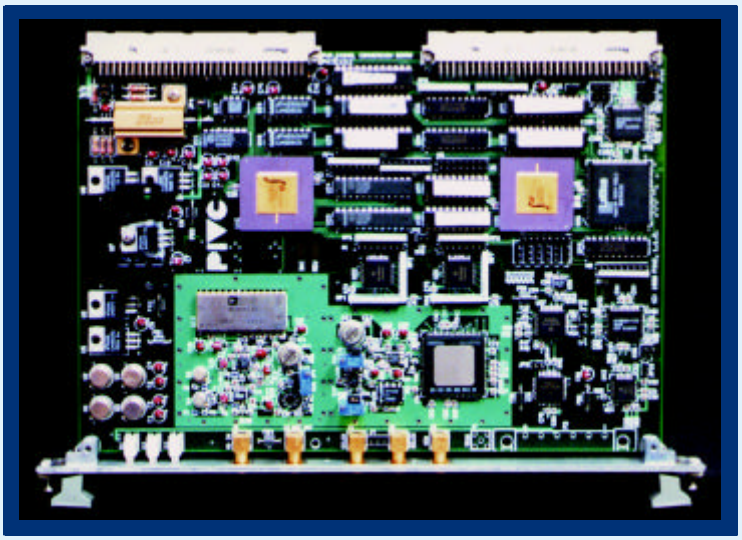
PIVC, L.L.C.

A/D-D/A Conversion Board — SC1212

Features

- 41 MHz Operation
- 12 Bit Resolution
- 75 dB Spurious Performance
- 65 dB Harmonic Distortion
- Buffered I/O for Faster Processing
- Self Test Capabilities
- Single Slot 6U VME Card
- 60 MB/s Data Transfers
- 3 Clock Options (ECL, AC, TTL)
- Data Format Options



Description

Model SC1212

The SC1212 is a high performance signal conversion board ideal for most signal processing applications. The 6U x 160 mm VME card features a 12 bit A/D and D/A both capable of 41 MHz conversion rates. The A/D conversion is very clean at 75 dB of spurious free dynamic range. The SC1212 is equipped with 8K (16K optional) of internal FIFO memory. Both the A/D and D/A paths contain this buffering capability. Since the memory is FIFO based, the conversion and data transfer rates can be independent. Data and control signal are routed to VME P2 for easy access.

The SC1212 is designed to work in concert with other PIVC processing hardware. A/D data from the SC1212 is usually buffered due to the high frequency sampling rate. The DB1200 was designed to perform this function. The data can be read off the DB1200 using the VME interface or sent off the card to be further processed.

Applications for the SC1212 are numerous, however the design of the board is most suited for the communications and radar industry. Where extensive signal processing is required, using the board, a signal can be sampled with a large bandwidth, processed using any number of PIVC or other COTS hardware, and then converted back to an analog form for translation to a carrier frequency or as a direct video signal.

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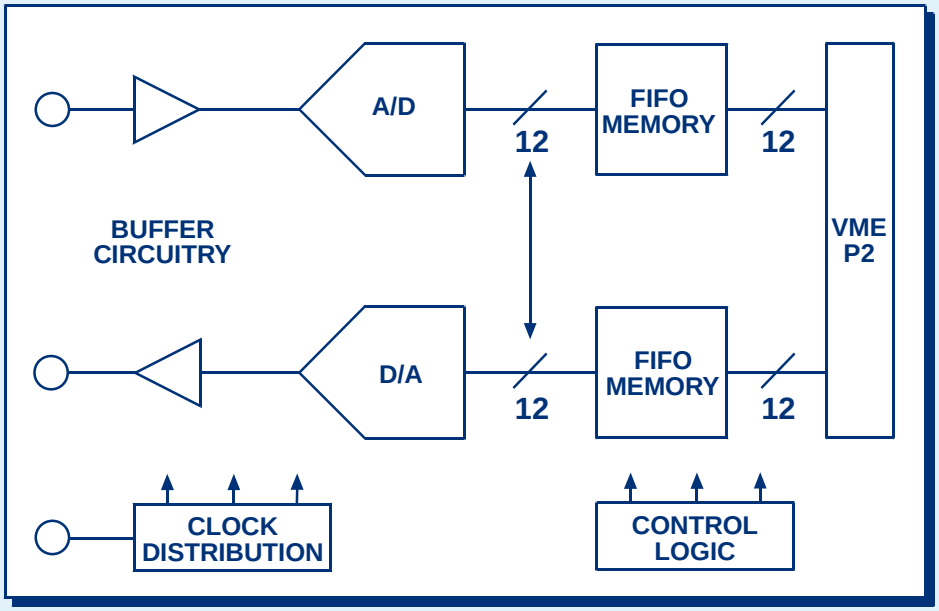

SC1212 Block Diagram

A/D SPECIFICATIONS	
A/D Conversion Rates	41 MHz
Resolution	12 Bits
Full-Scale Input Voltage	0.8 Volts
Bandwidth	41 MHz
Input Impedance	50 Ohms
VSWR (max)	1.5:1
Spurious Performance	75 dB
Harmonic Distortion	65 dB

D/A SPECIFICATIONS	
D/A Conversion Rate	41 MHz
Resolution	12 Bits
Full-Scale Output Voltage	1.5 Volts
Bandwidth	41 MHz
Output Impedance	50 Ohms
VSWR (max)	1.5:1
Spurious Performance	63 dB
Harmonic Distortion	63 dB