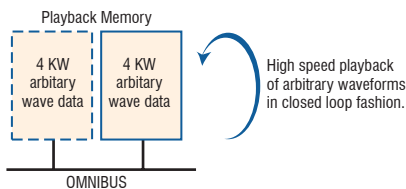


DAC40 - High-Speed Analog Output Module

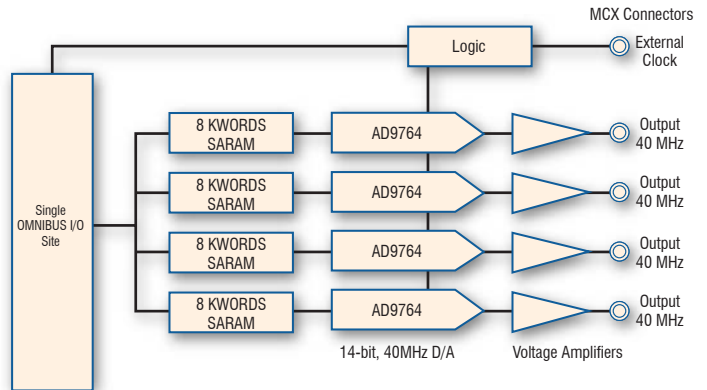
The DAC40 is a four-channel analog output module for high speed arbitrary waveform generation for telephony, communications and control applications. Each channel is independent and capable of 40MHz waveform generation with Analog Devices' AD9764 14-bit converters. The output is $\pm 1V$ into a 50 Ohm load, is DC accurate and factory calibrated.

Special dual 4K ring buffer memories (SARAM) on the DAC40 allow the loading of waveform tables into memory for uninterrupted repeated playback independent of the host card. This relieves the host from servicing the D/A at the high rates generally required for waveform generation. Simply load a playback table into RAM and it is played back continuously at up to 40MHz. The host may update the contents of one section of the SARAM while playback is occurring from the other section.

Software examples demonstrating module operation and communication are included in the Zuma/Armada Toolsets. A full calibration report ships with every module.



Interface	Compatible with all OMNIBUS host products; Consumes one interrupt to host
Physicals	OMNIBUS mezzanine card 2.000" X 4.600"
D/A Converters	4 Analog Devices AD9764 converters
Resolution	14-bit
Output Range	$\pm 1 V$, DC accurate
Dynamic Range	75 dB
Offset Error	Trimmable on each channel, factory calibrated
Gain Error	Trimmable on each channel, factory calibrated
Conversion Trigger	Software, host timer or external trigger
Interface to DSP	High performance ring buffer memory (SARAM) 32-bit number loads, 1pair(2 ch.)
Max Update Rate	40 MHz max.
Settling Time	35nS to 0.1%
Glitch Impulse	5 pV-s
SFDR	73 dB
THD	-72 dB
SNR	64 dB
DNL	-1.0/+1.25 LSB
INL	± 2.5 LSB



Ordering Information

DAC40	80020-14
BNC to MCX Cable	67020

In System Performance

