



## Features

- ♦ 8 or 12 independent 12bit DAC outputs
- ♦ Multiple PC 66C Cards can be used in one computer
- ♦ Parallel trigger available on all DACs
- ♦ Mono / Bipolar Voltage Outputs present
- ♦ Voltage Outputs selectable
- ♦ Remote Sensing function available to eliminate long lead resistance
- ♦ Optically isolated external trigger line

## Description

The PC -66C is a high accuracy / low noise 12bit (D/A convertor card). Aiming to replace the existing PC 66A/B Card, it contains 8 / 12 DACs capable of driving  $\pm 10\text{mA}$ . Parallel trigger facility on all 12 DACs [8 and 4] are useful especially in 3 phase applications where phase errors are critical. This facility allows all 12 DACs [8 and 4] to be updated simultaneously by updating two 8bit Control words. This is also an enhancement to the PC 66A/B which only offers parallel trigger facility on 8 DACs. Another enhancement is that all the PC66C DACs support unipolar or bipolar modes of operation. Wait-state circuitry is incorporated to enable users to run the PC 66C on computers with fast bus speeds.

## Ordering Information

### Supplied with EDR Software

PC-66C-8	8 Channel D/A Board
PC-66C-12	12 Channel D/A Board

## Specifications

### ANALOG OUTPUTS

No of Channels:	8 / 12
Resolution:	12bit (0.02%)
Relative Accuracy:	$\pm 1$ LSB
Differential non-linearity:	$\pm 0.9$ LSB
Quantization uncertainty:	$\pm 0.9$ LSB
DC Output Impedance:	0.01 Ohm
Settling Time:	10mS
Voltage output Ranges:	$\pm 10\text{V}$ , $\pm 5\text{V}$ , 0 to 5V, 0 to 10V
Offset Error:	
Unipolar:	0 to 5V, 0 to 10V
Bipolar:	$\pm 10\text{V}$ , $\pm 5\text{V}$
Ref Voltage:	Variable from 4.5V to 10.5V
Max current output:	$\pm 10\text{mA}$
External Trigger IRQ:	1RQ2 - 1RQ7

### GENERAL

Monotonicity:	0 to 70°C
Base address:	Dip Switch ( 30H-1FFFH )
Power requirements:	+5V 100mA $\pm 12\text{V}$ : 200mA

### DB-37F

AGND	37	19	EXT TRIG RET
AGND	36	18	EXT TRIG
BI DAC8 O/P	35	17	AGND
BI DAC10 O/P	34	16	BI DAC9 O/P
BI DAC11 O/P	33	15	BI DAC12 O/P
REMOTE SENS DAC11 I/P	32	14	REMOTE SENS DAC12 I/P
REMOTE SENS DAC9 I/P	31	13	REMOTE SENS DAC10 I/P
REMOTE SENS DAC7 I/P	30	12	REMOTE SENS DAC8 I/P
REMOTE SENS DAC6 I/P	29	11	BI DAC7 O/P
REMOTE SENS DAC5 I/P	28	10	BI DAC6 O/P
REMOTE SENS DAC4 I/P	27	9	BI DAC5 O/P
REMOTE SENS DAC3 I/P	26	8	BI DAC4 O/P
REMOTE SENS DAC2 I/P	25	7	BI DAC3 O/P
REMOTE SENS DAC1 I/P	24	6	BI DAC2 O/P
MONO DAC6 O/P	23	5	BI DAC1 O/P
MONO DAC8 O/P	22	4	MONO DAC7 O/P
MONO DAC4 O/P	21	3	MONO DAC5 O/P
MONO DAC2 O/P	20	2	MONO DAC3 O/P
	1	1	MONO DAC1 O/P

## Optional Accessories

ADPT-3740	IDC20 (M) to 21way Screw Terminal
DB37M/F	37way Screened Cable DB37 (M) to (F)

## System Diagram



DB37M/F Cable  
Analog (O/P)



ADPT-3740  
DB37 (M) & IDC40 (M) to 41way  
Screw Terminal Adaptor