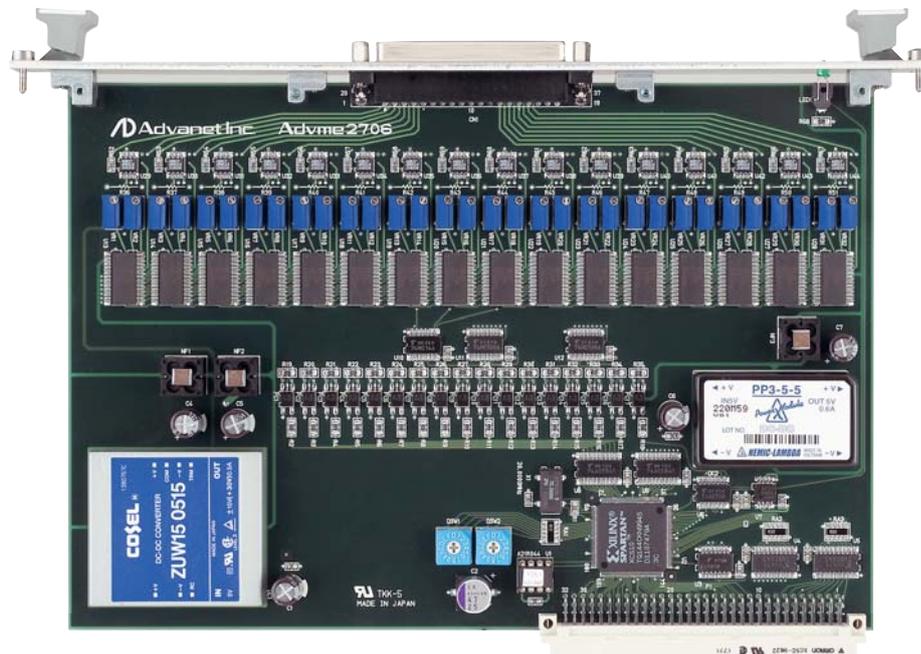


# Advme 2706

## 16-ch 16-bit D/A Board



### Features

- 16-bit resolution, VME bus compliant board with a 16-channel D/A converter
- $\pm 10\text{V}$  output range that can be expanded to  $\pm 12\text{V}$  by installing a resistor for output range expansion
- All channels are equipped with an independent trimmer for gain and offset adjustment, allowing highly accurate adjustment for each channel
- High resolution (16-bit) and multiple channels (16 channels)
- Output channels are isolated from the VME bus
- Equipped with an output short-circuit protection function
- Operates from a single +5V power supply by VME bus
- When the power is turned on and when reset is performed, the output voltage is forced to 0V
- LED lamp indicates bus access
- C-language sample program provided
- Device driver for VxWorks available (option)

### Specifications

#### Analog output

- No. of channels : 16ch (single-ended)
- Output range :  $\pm 10\text{V}$  (can be expanded to  $\pm 12\text{V}$  by installing a resistor)
- Output current : Up to  $\pm 5\text{mA}$
- Output impedance : Typ.  $0.35\Omega$
- Output short-circuit protection : Continuous
- Output current : Up to  $\pm 5\text{mA}$

#### D/A conversion

- Resolution : 16-bit
- Linearity error :  $\pm 1\text{LSB}$  (at  $25^\circ\text{C}$ )  $\pm 2\text{LSB}$  (operating temperature range)
- Differential linearity error :  $\pm 1\text{LSB}$  (at  $25^\circ\text{C}$ )  $\pm 2\text{LSB}$  (operating temperature range)
- Monotonicity : 15-bit (operating temperature range)
- Gain error : Up to  $\pm 0.01\%$  (with adjustment) Typ.  $\pm 0.2\%$  (without adjustment)
- All channels equipped with an independent gain adjustment trimmer
- Offset error : Up to  $\pm 0.5\text{mV}$  (with adjustment) Typ.  $\pm 10\text{mV}$  (without adjustment) All channels equipped with an independent gain adjustment trimmer
- Conversion time Up to  $1\mu\text{s}$  per channel (time to transfer data to DAC)
- Temperature characteristics : Up to  $\pm 25\text{ppm}/^\circ\text{C}$

#### Isolation

- Isolation method : Photo-coupler (between output channels and VME bus)
- Withstanding voltage : Between output and system: AC500V for one minute
- Between output and channels: non-isolated

#### Output connector : 37-pin Dsub female connector

#### Bus interface

- VMEbus : Revision C.3 compliant A16: AM codes 29 and 2D D16: D08 (E0)
- Power requirements :  $5\text{V} \pm 5\%$  2.7A (typ.) (received from VME bus)
- Board size : (excluding protrusions) 262mm x 172mm x 20mm
- Double height/Single slot (excluding protrusions such as connectors)
- Weight : 360g(typ.)



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Note: The following specifications and product appearance are subject to change for enhancement without notice.


**ISO9001**  
 Certification: No.4016-1995-AQ-K0B-Rv4

**ISO14001**  
 Certification: No. EMSC-1426

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