

Controller DMX (by ASK Engineering Ltd.)

AIO & DIO Data Multiplexing Controller (DMX)

Simple to use. Robust in operation

Application:

- vehicle control system (ROV, RC boat, AUV, drone)
- operator console (joysticks console)
- data acquisition subsystem

Working modes:

Computer - DMX

DMX - DMX (no PC required)

DMX – Computer – DMX

Input voltage: 24 VDC \pm 10%,

Power: 240 mA @ 24 VDC

Power In indication: green LED

Serial comm indication: red LED

Data refresh rate: 20 Hz on any port

Opto-isolated analog, digital and serial buses

Independent ground lines for Digital, Analog, Data and Power

Digital Input: 30 channels (TTL)

Digital Output: 30 channels (TTL)

Input voltage: Logic 0: 0V min, 0.8V max

Logic 1: 1.8V min, 3.3V max

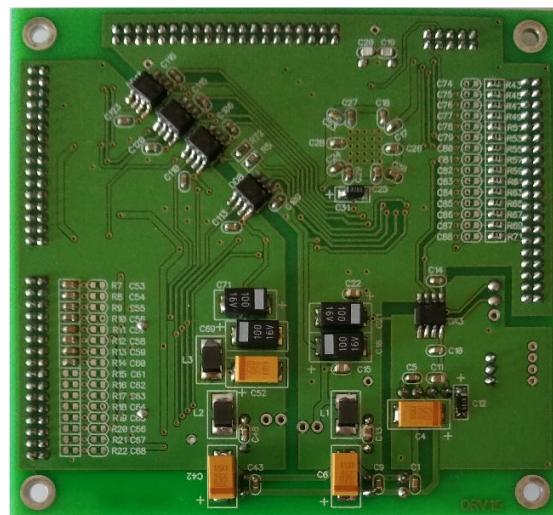
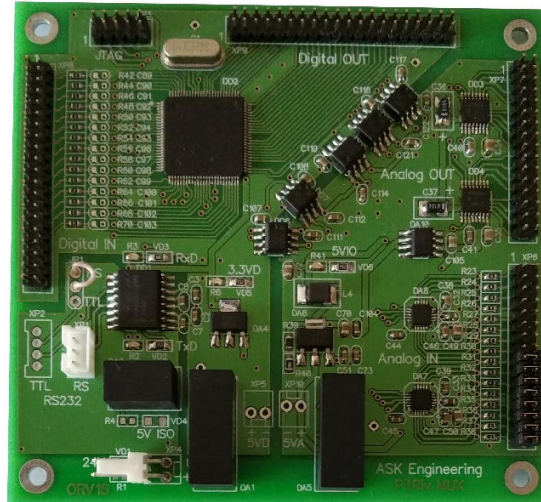
Input current 1 μ A at 3.3V, -5 μ A at 0V

Output voltage: Logic 0: 0.0V min, 0.15V max

Logic 1: 3.3V max

Output current: Logic 0: 10mA max at 0.55V

Logic 1: 10mA max at 3.3V



AP subsea Inc.

Email: sales@apsubsea.com

support@apsubsea.com

Web: <http://www.apsubsea.com>

Phone: +1 604 363 38 62

Office address:

302-11295, Pazarena Place, Maple Ridge, BC,
Canada V2X 4K9

A/D resolution: 16 bit
Analog Input (0-5V) single-ended: 16 channels
Analog Output (0-5V) single-ended: 16 channels
Input impedance: 5 G Ω
Output current: 2.5mA max per channel
Relative accuracy: ± 8 LSB typical
Nonlinearity: ± 1.5 LSB, monotonic

Serial interface settings, RS-232: 38400/8/n/1
Serial (TTL): by request

Power In connector type: **Molex 0022053021**,
pin 1 (V+), cable header **Molex 0022013027**
Serial port connector type: **B3B-PH-K-S**,
cable header **PHR-3**

- pin 1 – Gnd
- pin 2 – Tx
- pin 3 – Rx

Digital In/Out connector type: 2x raw, 40 contacts, 2 mm pitch, 2 mm raw spacing
Analog In/Out connector type: 2x raw, 32 contacts, 2 mm pitch, 2 mm raw spacing

DMX board dimensions (W x L x H) PC-104 format, mm:
90 x 96 x 12 (other form-factor by request)
Operating temperature: -45 \div +75 $^{\circ}$ C
Mounting: 4x M3 screws

