

**Part number:** **DSP-21<sup>®</sup>** 

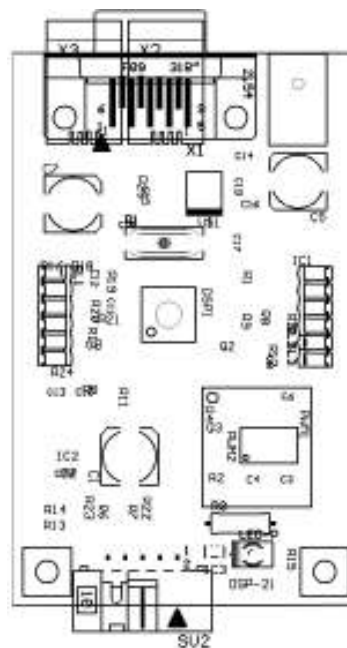
The **DSP-21** controller is intended as a **RoHs** compliant replacement for the **SuprMotrV**.

**DC servo controller:** Single axis miniaturized controller for laboratory and industrial applications.  
**Control loops:** P-term, I-term, D-term  
**Parameters control:** Position, velocity, acceleration, torque. Adjustable “on the fly”.  
**Computer Interface:** Standard RS-232 or USB. Also analog control from DAQ card.  
**Resolution:** Depending on the encoder used.  
**Networkable:** Up to 8 boards can be controlled from one PC with one Power Supply  
**Inputs and Outputs:** Digital and analog inputs and outputs for conversions and data acquisition.  
**Power requirements:** 14V DC at 1A. (Optionally up to 30V and up to 4.5A)  
**Available options:** Up to 8 boards networked, Joystick, Analog drive output, USB interface.  
**Software:** Terminal. LabView Drivers and DEMO software.  
**Recommended actuator:** SuprMike<sup>®</sup>, LDC-25, LDC-50 etc...  
**Dimensions:** OEM size 2"x 3". Also available other board sizes and packages.

**No external amplifier is needed to control motors of any size up to 30V and 1.5Amps.**



Photo (OEM version)



Layout

The pin-out is pin to pin compatible with **Maxon** and **Faulhaber** motors and listed below:

<b>Pin 1</b>	<b>Motor +</b>
<b>Pin 2</b>	+5V to encoder
<b>Pin 3</b>	Encoder Ch. A
<b>Pin 4</b>	Encoder Ch. B
<b>Pin 5</b>	Ground.
<b>Pin 6</b>	<b>Motor -</b>
<b>Pin 7</b>	Reference switch (optional)
<b>Pin 8</b>	Positive limit switch (optional)
<b>Pin 9</b>	Negative limit switch (optional)
<b>Pin 10</b>	Ground.