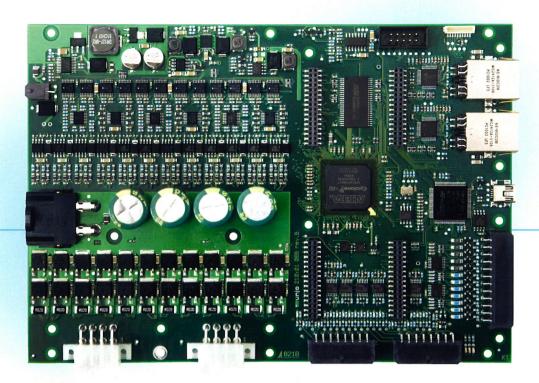


- High-end, semistandard motor control unit for 1–6 axes
- Delivered with customised software
- More than 100 kHz bandwidth in the current control loop
- 450 W nominal motor power, drive and controller in one
- Wide selection of function modules available
- Encoder, ethernet, field-bus and other interface options.

Enjoy all the benefits of full motor control



Unjo®Gepard

Technical specifications

General:

High-end semistandard motor control unit for 12 individually controlled motor phases in PMSM motors, brushless DC motors, 2- or 3-phase step motors or brushed DC motors. Motortypes can be

mixed.

Commutation:

BLDC: • Block, with hall sensors or sensorless

• Sinusoidal.

Step motor: More than 4096 micro steps.

Nominal 12-75 VDC.

Powerstage:

Supply:

Max 10 A continuous current.

Control loop performance: • Speed loop bandwidth 30 kHz

• Position loop bandwidth 30 kHz

• Current/torque loop bandwidth > 100 kHz

• time domain jitter < 10 ns.

Inputs, 24 VDC:

12 digital inputs for 24 VDC systems. Switching level approx. 7 V.

Inputs, encoder/ hall sencors:

18 channels for encoders with index pulse or digital hall sensors for BLDC; 5 or 10 VDC sensor supply.

Communication:

USB 2.0; Ethernet 100 Base-TX.

Parameter memory (non volatile):

Dimensions:

PCB L x W x H = $200 \times 140 \times 30 \text{ mm}$.

Adjustable parameters are arranged

according to customer demands.

Additional features/ daughter boards:

- Analogue hall sensors.
- Analogue differential hall sensors.
- Analogue and digital outputs.
- Analogue inputs.
- Field-bus communication (Real-Time Ethernet, RS 485, CAN)
- · Resolver feedback.
- EnDat sensor interface.
- Relay/opto-coupled outputs.

Software:

A large number of basic modules are available, for example motor control and communication. These are utilised by an overall application software, which is unique for each customer project. The modular design of the basic functions allows the application program to be designed and verified in a very limited period of time. This means that the customer's investment can be kept very low, without increasing the unit cost.

Processor option:

Contains Altera NIOS II embedded processor, available for additional customer programming.



