Small device.
Big impact.

rotabench EPS
test bench control
for rotating test benches

bepat

RoHS

CE

rotabench®

One PCB ...

to control your rotating test bench:

- control the drive train
- integrated torque sensor communication
- measure torque, speed and position
- and connect it to your software via Ethernet or CAN bus

Connect a standard industrial drive

with 1:1 cabling (analog IO + 24V digtal IO)

2 x ±10 Volt analog IO

7 x 24 Volt digital IO

5V 2mA Safety Circuit (2x)
(24 Volt tolerant)

Connect a Kistler 4503B Torque Sensor

with 1:1 cabling
(power, torque signal, RS232 and digital IO)

photo of 4503B
torque sensor
© Kistler
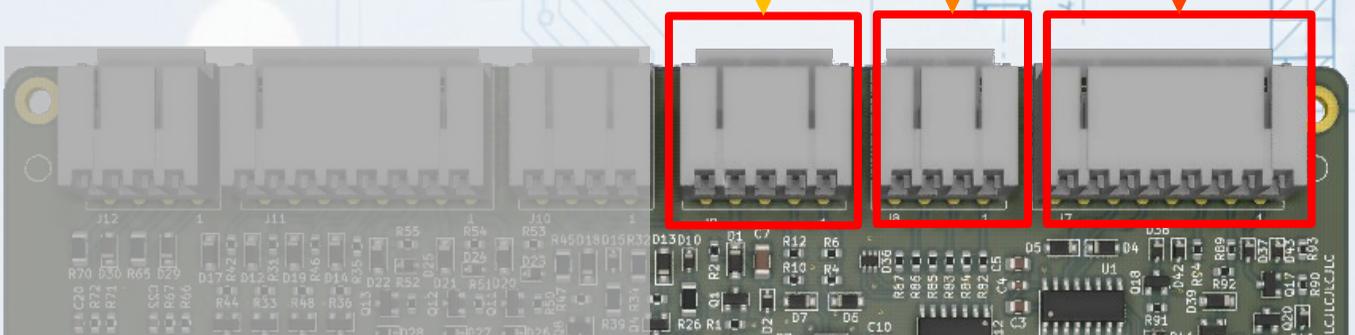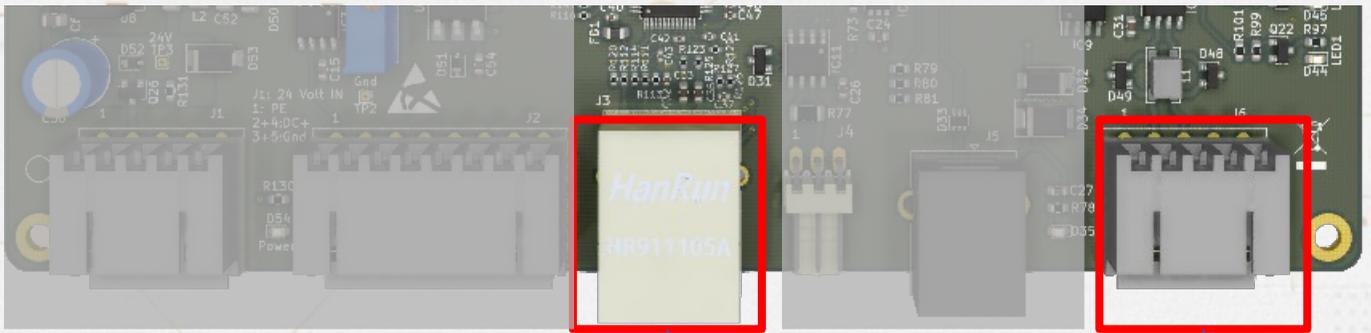
RS232 and digital IO (24V)

5 Volt TTL Encoder (A,B,Z)

Torque signal and power

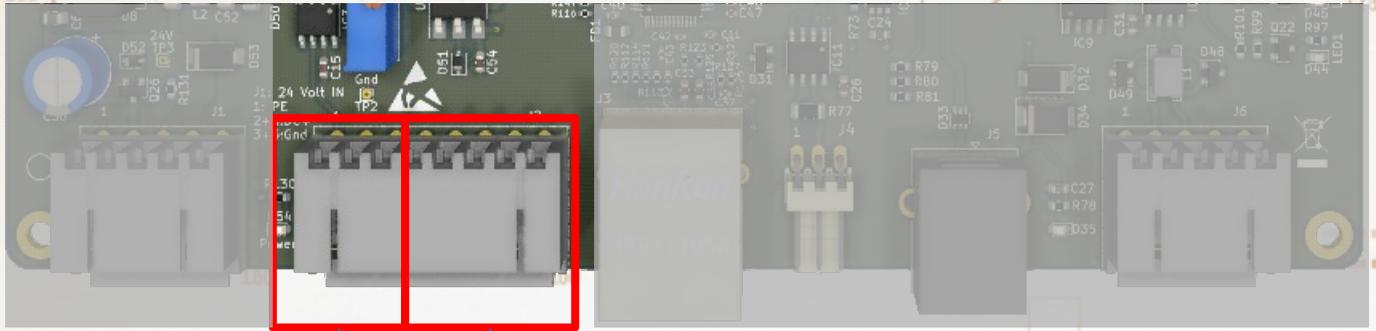# Use TCP/IP or CAN for the communication with our or your own test bench software

↕ 10/100 MBit Ethernet   ↕ CAN bus

Handsteuerung

Freigabe Antrieb: 🟢   [Antrieb EIN]   [Antrieb AUS]

Drehzahl Soll: 1000,0 U/min   [setzen]   [n*-1]   Messbereichsumschaltung
dt: 1,0   s   [stop]   [letzter Drehz.]   [Messbereich 1]

Drehzahl IST: 998,5   U/min   Moment IST: -598,9u Nm   nSoll Vorgabe: -1,6 V
Moment Min.:   -4,7m   Nm   Mittelwert Moment: 4,5m Nm   Moment Max.:   8,2m Nm

[Drehzahl] [Moment]
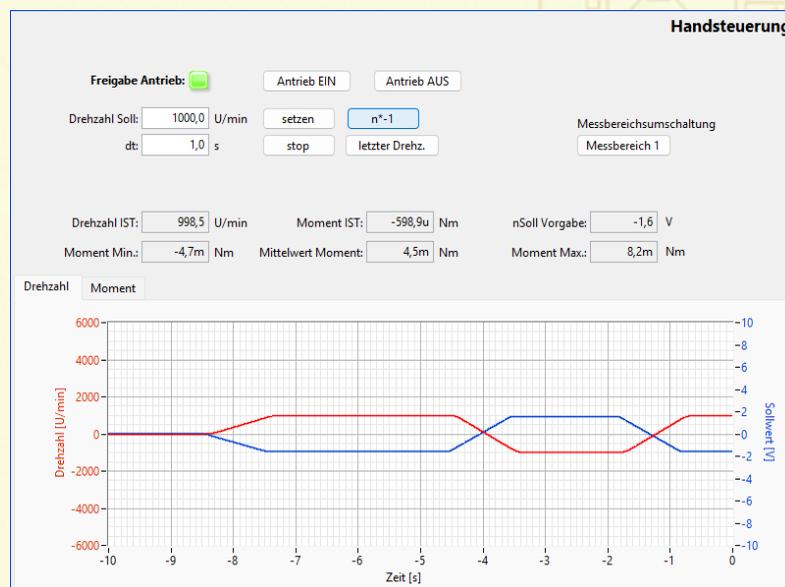
Use the integrated signal conditioning

Encoder Signals 5V TTL (A,B,Z)

±10V analog Torque Signal

… and connect the signals to a power analyzer, eg. a Yokogawa WT5000, together with current and voltage signals ...

photo of WT5000 © Yokogawa

It won't get much easier ...

... to set up a dyno test bench for electric motors!

We've already solved the complex low level integration tasks for you. With rotabench EPS, you start measuring while others are still wiring.