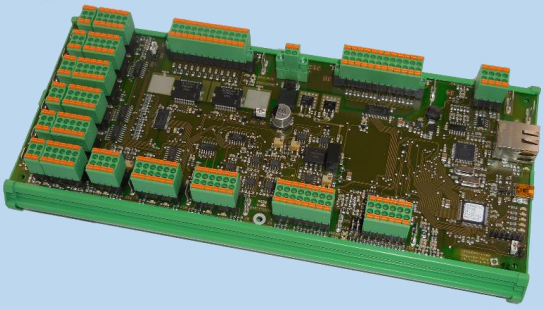
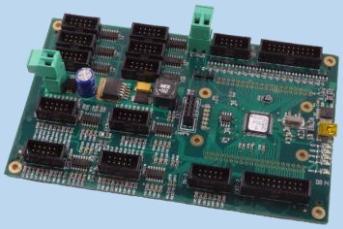
iCNC600 Comparison with CPU5B	iCNC600	CPU5B
		
Designed for Industrial usage (EMC/Safety), protected with transient voltage protection diodes, galvanic isolated where needed.	Fully	Limited
IO short-circuit proof	yes	no
Drive error input	yes	no
Drive alarm input	yes	no
temperature PT100 sensor inputs (2)	Yes	no
Isolated analog input for Plasma THC	yes	no
System ready output for Safety relay connection	yes	no
Watchdog pulse signal	no	yes
System safe input (ESTOP), following the Machine safety guidelines this should be connected to a safety relay, like PNOZ S3. The i600 is designed for this, that is why the i600 has a system ready output.	1, 24V	2, 5V TTL
Connectors, i600 can be directly connected to the system drives etc., no break-out board needed. This saves installation costs.		
STEP output (125 KHz) /DIR/AMP enable outputs	6 Open collector 5 and 24V, Poly fuse protection	6 TTL 5V, not protected
# home inputs	6	6
# Touch probe inputs	2, 24 V with supply for sensor for PNP and NPN sensors	1, 5V input, external power for sensor required, only NPN sensors
#analog inputs	5, 0-10V input, of which 1 galvanic isolated, of which 2 are prepared for PT100 temperature sensors.	3, 3.3V input max.
#general purpose inputs	8 24V/0.5 Amp Short-circuit proof, Galvanic isolated.	6 Open collector, 0.1 Amp, not short circuit proof, not galvanic isolated
#general purpose outputs	8 Galvanic isolated	9, not galvanic isolated
#PWM outputs	3, Open collector 0.5 Amp, Polyfuse protected.	3, Open collector 0.1 Amp, not protected.
flood coolant output	yes, 24V/0.5 Amp, short-circuit proof, galvanic isolated	yes, open collector, 0.1A, not protected
mist coolant	yes, 24V/0.5 Amp, short-circuit proof, galvanic isolated	yes, open collector, 0.1A, not protected
Spindle direction output	yes, 24V/0.5A short circuit proof, galvanic isolated	yes, open collector 0.1A not short circuit proof
Spindle PWM output for Speed control	yes, Open collector/0.5A polypus fuse protected.	yes, open collector 0.1A not short circuit proof
Spindle 0-10V analog output for speed control	yes	no
Spindle ON/Speed output guarded by watchdog.	yes	no
2nd analog output, e.g. for vacuum bed control	yes	no
Sync input for speed measurement and synchronization for thread-cutting	yes, 24V	yes, 5V TTL
Pendant, handwheel, start and pause input, 2 analog inputs for axis / multiplation factor selection.	Yes, handwheel with differential inputs for noise free operation with long distances. Filtered and protected against transients.	Yes, standard TTL filtered inputs for all inputs
Interface for additional I/O	yes, RS485, MODBUS compatible, distance with CPU 20 meters	yes, I2C, distance between CPU max 0.3 meter
LEDS on all digital inputs and outputs	yes	no
General CPU Status LEDS	4	4
Connection with PC	Ethernet Only, USB is used only for firmware upgrade.	USB and Ethernet by option board
Size	270x125mm	160x100mm
Din rail mount	yes	no