	PoKeys57U	PoKeys57E	PoKeys57CNC
Number of pins on the board	55	55	see pinout diagram
Digital inputs	55	55	see pinout diagram
Digital outputs	55	55	see pinout diagram
Analog inputs	7x 12-bit	7x 12-bit	5x 12-bit
Number of encoders (normal)	up to 25	up to 25	up to 14
Number of fast encoders	3	3	3
Number of ultra fast encoders	1	1	1
Number of PWM outputs	6 (25 MHz clock)	6 (25 MHz clock)	4 (25 MHz clock)
Number of digital counters	24	24	22
Pulse capture inputs	3	3	3
LCD support	Alphanumeric up to 4x20	Alphanumeric up to 4x20	Alphanumeric up to 4x20
Matrix keyboard support	Up to 16x8	Up to 16x8	Up to 16x8
Matrix LED	Two 8x8	Two 8x8	No
Keyboard emulation	Yes	No	Yes
Joystick emulation	Yes	No	Yes
Pulse engine v2 (step/dir motion controller)	Yes (3 axes integrated)	Yes (3 axes integrated)	Yes (dedicated connections for 8 axes)
Connectivity	USB	Ethernet (IPv4 + DHCP)	Ethernet (IPv4 + DHCP) and USB
Modbus TCP support	No	Yes	Yes
I2C sensors	Yes	Yes	Yes
1-wire sensors	Yes	Yes	Yes
EasySensors	Yes (up to 100 sensors)	Yes (up to 100 sensors)	Yes (up to 100 sensors)
PoExtBus support	up to 10 devices	up to 10 devices	up to 10 devices
PoNET bus support	up to 16 devices	up to 16 devices	up to 16 devices
Power supply	powered from USB	external 5V power supply	USB for testing, external 6-26V power supply for full functionality
Number of devices per computer	practically unlimited	practically unlimited	practically unlimited
Automatic device discovery	Yes	Yes (in local network)	Yes (in local network)
Free configuration application	Yes	Yes	Yes
Free firmware upgrades	Yes	Yes	Yes
Communication DLL support	Yes	Yes	Yes