lpcCNC Screw Terminal Mapping

Lable	CPU Pin	Description
+VIN	N/A	External Power Supply input
GND	GND	System Ground
+5V	N/A	+5V Power Supply Output
+3V3	N/A	+3V3 Power Supply Output
GND	GND	System Ground
SGND	N/A	Isolated Ground for Analog Spindle
SOUT	N/A	0-> 10V Output for Analog Spindle
SIN	N/A	10V supply in for Analog Spindle
RSB	N/A	- RS485 for Spindle
RSA	N/A	+RS485 for Spindle
GND	GND	System Ground
DIN8	2.13	Digital Input
DIN7	1.31	Digital Input
DIN6	1.29	Digital Input
DIN5	1.28	Digital Input
DIN4	1.26	Digital Input
DIN3	1.25	Digital Input
DIN2	1.24	Digital Input
DIN1	1.23	Digital Input
GND	GND	System Ground
AIN4	0.23	Analog Input
AIN3	0.24	Analog Input
AIN2	0.25	Analog Input
AIN1	0.26	Analog Input
GND	GND	System Ground

Lable	CPU Pin	Description
+VIN	N/A	External Power Supply input
GND	GND	System Ground
+5V	N/A	+5V Power Supply Output
+3V3	N/A	+3V3 Power Supply Output
GND	GND	System Ground
GND	GND	System Ground
DO1	0.4	Digital Output
DO2	0.5	Digital Output
DO3	0.10	Digital Output
DO4	0.11	Digital Output
DO5	2.0	Digital Output
DO6	2.1	Digital Output
DO7	2.2	Digital Output
COMA	N/A	Protection Diode for DO1 to DO7
GND	GND	System Ground
GND	GND	System Ground
DO8	2.3	Digital Output
DO9	2.4	Digital Output
DO10	2.11	Digital Output
DO11	2.8	Digital Output
DO12	2.7	Digital Output
DO13	2.6	Digital Output
COMB	N/A	Protection Diode for DO8 to DO13
GND	GND	System Ground
GND	GND	System Ground

lpcCNC CPU Pin Usage

Pin	Usage
0.0	RS485 RX for Spindle
0.1	RS485 TX for Spindle
0.2	UART TX to LCD Panel and ISP AUX3 Pin 2
0.3	UART RX to LCD Panel and ISP AUX3 Pin 1
0.4	DO1 Digital Output
0.5	DO2 Digital Output
0.6	SSEL for Internal SD Card
0.7	SCK for internal SD Card
0.8	MISO for Internal SD Card
0.9	MOSI for Internal SD Card
0.10	DO3 Digital Output
0.11	DO4 Digital Output
0.15	SCK for LCD Panel AUX3 Pin 7
0.16	SSEL for LCD Panel SD Card AUX3 Pin 8
0.17	MOSI for LCD Panel AUX3 Pin6
0.18	MISO for LCD Panel AUX3 Pin 5
0.19	SDA Internal EEPROM
0.20	SCL Internal EEPROM
0.21	RS485 Direction for Spindle
0.22	RED Diagnostic LED
0.23	AN4 Analog Input
0.24	AN3 Analog Input
0.25	AN2 Analog Input
0.26	AN1 Analog Input
0.27	Not Used
0.28	Not Used
0.29	USB – Micro USB Connector
0.30	USB + Micro USB Connector

Pin	Usage
1.0	Ethernet
1.1	Ethernet
1.4	Ethernet
1.8	Ethernet
1.9	Ethernet
1.10	Ethernet
1.14	Ethernet
1.15	Ethernet
1.16	Ethernet
1.17	Ethernet
1.18	LED 2
1.19	LED 3
1.20	LED 4
1.21	LED 5
1.22	SSEL for LCD Panel LCD AUX2 Pin 3
1.23	DIN1 Digital Input
1.24	DIN2 Digital Input
1.25	DIN3 Digital Input
1.26	DIN4 Digital Input
1.27	Encoder B for LC D Panel AUX 2 Pin 6
1.28	DIN5 Digital Input
1.29	DIN6 Digital Input
1.30	Buzzer for LCD Panel AUX 2 Pin 2
1.31	DIN7 Digital Input

Pin	Usage
2.0	DO5 Digital Output
2.1	DO6 Digital Output
2.2	DO7 Digital Output
2.3	DO8 Digital Output
2.4	DO9 Digital Output
2.5	PWM for Analog Spindle
2.6	DO13 Digital Output
2.7	DO12 Digital Output
2.8	DO11 Digital Output
2.9	USB Connect Internal
2.10	ISP Enable Internal
2.11	DO10 Digital Output
2.12	A0 for LCD Panel AUX2 Pin 5
2.13	DIN8 Digital Input

Pin	Usage
3.25	BLUE Diagnostic LED
3.26	GREEN Diagnostic LED

Pin	Usage
4.28	Encoder Click for LCD Panel AUX2 Pin 1
4.29	Encoder A for LCD Panel AUX2 Pin 8

Pin	Usage
Reset	Reset from LCD Panel AUX2 Pin 4