Optically Isolated LPT Breakout Board for CNC & Routers

Optically isolated parallel port break out board designed for Hobby CNC, Routers and Motion controller, This Board is an easy solution to drive stepper Motor driver through PC parallel port, The Board is compatible with various CNC software specially made for LPT port data output. The board has been tested with MACH3 CNC software. All outputs are optically isolated and inverse, all inputs are optical isolated and can be used as emergency switch, limit switch, home switch and feedbacks. The Opt coupler and inverter require power supply at both PC side and output side. USB connector and CN5 Screw terminal provided for PC side power supply input and CN4 for output side power supply 7 to 36V DC.

The board has 12 output pins that can control various devices such as stepping motor drivers, Plasma Torch, Pump for coolant, spindle, 5 Input pins are provided for limit or home switches, feedbacks, Emergency switch. All inputs has 470E for TTL Voltage input required driving the inputs.

Note: Change the value of R10, R12, R13, R15, and R16 to 2K2 Ohms for 24V signal input.

Features

- Supply 7V to 36V DC output side of opt-coupler
- 5V DC for PC side
- 25 D SUB Male Connecter for PC LPT Port Interface
- High Speed Opto-coupler's 6N137 on all outputs
- PC817 Opto-coupler for Inputs and Output Controls
- On Board USB Connector for Supply from PC or other source
- All Outputs are buffered and optically isolated
- All inputs are optically isolated
- Screw Terminals for all outputs and inputs
- On Board L317 Regulator for 5V DC
- Heat sink for regulator

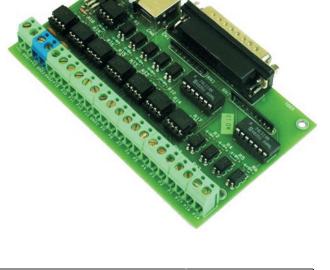
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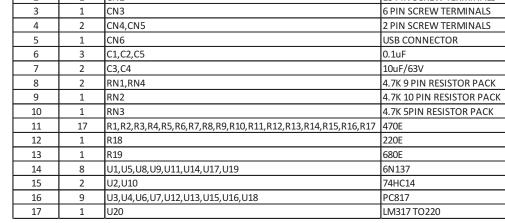
CN5, CN6: 5V DC Supply input for PC side of isolation CN4: 7 to 36V DC Input for output side of opto-coupler

CN2: Optically isolated Outputs

CN3: Inputs

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SR	QNTY.	REF.	DESC.	
1	1	CN1	DB-25 MALE	
2	1	CN2	13 PIN SCREW TERMINALS	
3	1	CN3	6 PIN SCREW TERMINALS	
4	2	CN4,CN5	2 PIN SCREW TERMINALS	
5	1	CN6	USB CONNECTOR	
6	3	C1,C2,C5	0.1uF	
7	2	C3,C4	10uF/63V	
8	2	RN1,RN4	4.7K 9 PIN RESISTOR PACK	
9	1	RN2	4.7K 10 PIN RESISTOR PACK	
10	1	RN3	4.7K 5PIN RESISTOR PACK	
11	17	R1,R2,R3,R4,R5,R6,R7,R8,R9,R10,R11,R12,R13,R14,R15,R16,R17	470E	
12	1	R18	220E	
13	1	R19	680E	
14	8	U1,U5,U8,U9,U11,U14,U17,U19	6N137	
15	2	U2,U10	74HC14	
16	9	U3,U4,U6,U7,U12,U13,U15,U16,U18	PC817	
17	1	1120	LM317 TO 220	









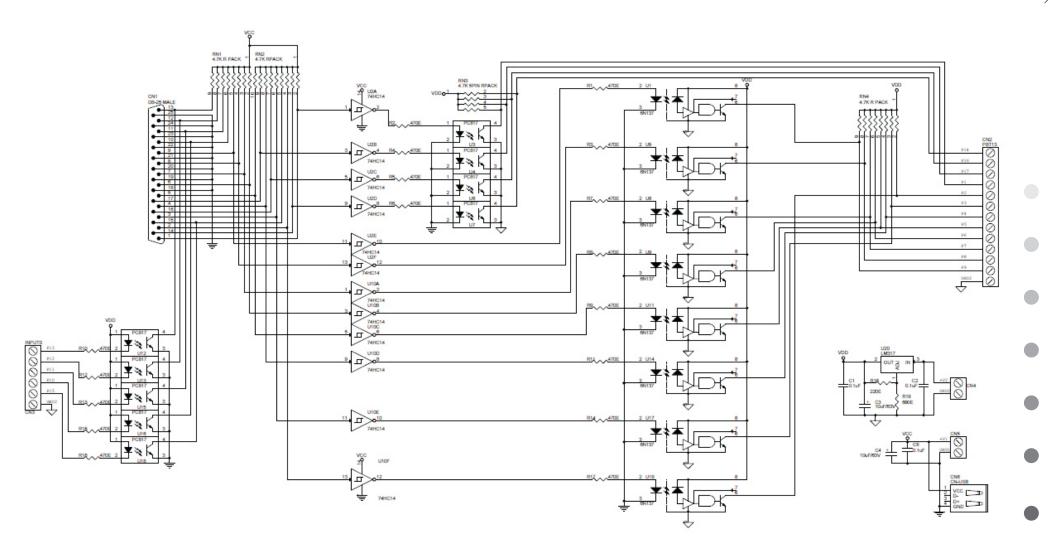






Optically Isolated Parallel Port Breakout Board for CNC, Routers



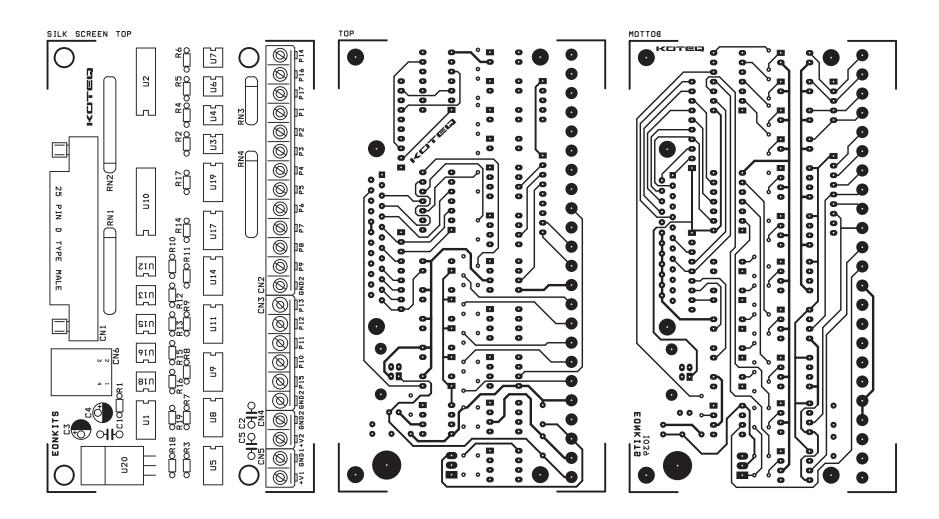




















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