VCC + LED	3.3v	1	2	5v	
I2C SDA	GPIO 2/SDA	2	4	5v	
I2C SCL	GPIO 3/SCL	5	6	GND	
	GPIO 4 (GPCLK0)	7	8	GPIO 14 (TX)	UV LED BED
	GND	9	10	GPIO 15 (RX)	
cs	GPIO 17	11	12	GPIO 18 (PCM_CLK)	
RESET	GPIO27	13	14	GND	
DC	GPIO 22	15	16	GPIO 23	
	3.3v	17	18	GPIO 24	
MOSI + T_DIN	GPIO 10 (MOSI)	19	20	GND	
MISO + T_DO	GPIO 9 (MISO)	21	22	GPIO 25	
SCK + T_CLK	GPIO 11 (SCLK)	23	24	GPIO 8 (CE0)	
	GND	25	26	GPIO 7 (CE1)	
	GPIO 0 (ID_SD)	27	28	GPIO 1 (ID_SC)	
T_CS	GPIO 5	29	30	GND	
T_IRQ	GPIO 6	31	32	GPIO 12 (PWM0)	
	GPIO 13 (PWM1)	33	34	GND	
CNC ZProbe	GPIO 19 (PCM_FS)	35	36	GPIO 16	BUZZER
CNC LASER PTR	GPIO 26	37	38	GPIO 20 (PCM_DIN)	
GND	GND	39	40	GPIO 21 (PCM_DOUT)	

Pi Hat to TFT wiring

16 Ribbon wire color	Multi/Shared 40 Pin	GPIO num	40 Pin Num	40 pin Col 1 row num	IDC 16P pin number	TFT connection	Make Longer
Brown	*	3v3	1	1	1	VCC	
Red	*	3v3	1	1	2	LED	**
Orange		GND	9	5	3	GND	
Yellow		GPIO17	11	6	4	cs	
Green		Unused			5		
Blue		GPIO27	13	7	6	DC	
Purple		Unused			7		
Grey		GPIO22	15	8	8	RESET	
White	*	MOSI/GPIO10	19	10	9	T_DIN	**
Black	*	MOSI/GPIO10	19	10	10	SDI(MOSI)	
Brown	*	MISO/GPIO9	21	11	11	SDO(MISO)	
Red	*	MISO/GPIO9	21	11	12	T_DO	
Orange	*	SLCK/GPIO11	23	12	13	SCK	
Yellow	*	SLCK/GPIO11	23	12	14	T_CLK	
Green		GPIO6	31	16	15	T_CS	
Blue		GPIO5	29	15	16	T_IRQ	