Tang Nano 9k – Schematics

Pinout

	TF_CS	IOB31B	38		
	TF_MOSI	IOB31A	37		
GCLKC_4	TF_SCLK	IOB29B	36		
	TF_MISO	IOB33A	39		
		IOB8A	25		
		IOB8B	26		
		IOB11A	27		
		IOB11B	28		
		IOB13A	29		
		IOB13B	30		
	RGB_DE	IOB23A	33		
	RGB_VS	IOB23B	34		
	RGB_HS	IOB33B	40		
GCLKT_4	RGB_CK	IOB29A	35		
	RGB_B7	IOB41A	41		
	RGB_B6	IOB41B	42		
GCLKC_3	RGB_B5	IOR17B	51		
	RGB_B4	IOR15B	53		
	RGB_B3	IOR15A	54		
	RGB_G7	IOR14B	55		
	RGB_G6	IOR14A	56		
	RGB_G5	IOR13A	57		
HDMI_CKN	RGB_G4	IOT42B	68		
HDMI_CKP	RGB_G3	IOT42A	69		

63	IOR5A	RGB_INIT		
86	IOT8A	RGB_BL		
85	IOT8B			
84	IOT10A			
83	IOT10B			
82	IOT11A			
81	IOT11B			
80	IOT12A			
79	IOT12B			
77	IOT37A	SPILCD_MO		
76	IOT37B	SPILCD_CK		
75	IOT38A	RGB_R3	HDMI_D2P	
74	IOT38B	RGB_R4	HDMI_D2N	
73	IOT39A	RGB_R5	HDMI_D1P	
72	IOT39B	RGB_R6	HDMI_D1N	
71	IOT41A	RGB_R7	HDMI_D0P	
70	IOT41B	RGB_G2	HDMI_D0N	
	5V			
48	IOR24B	SPILCD_CS		
49	IOR24A	SPILCD_RS		
31	IOB15A	RGB_INIT		
32	IOB15B	RGB_INIT		
	GND			
	3V3			

Special pin | Onboard component

Onboard component | Special pin

■ Power	■ GND	■ IC Pin number	■ BANK1, V$_{IO}$=3.3V	■ BANK2, V$_{IO}$=3.3V	☐ BANK3, V$_{IO}$=1.8V

Peripheral Connections
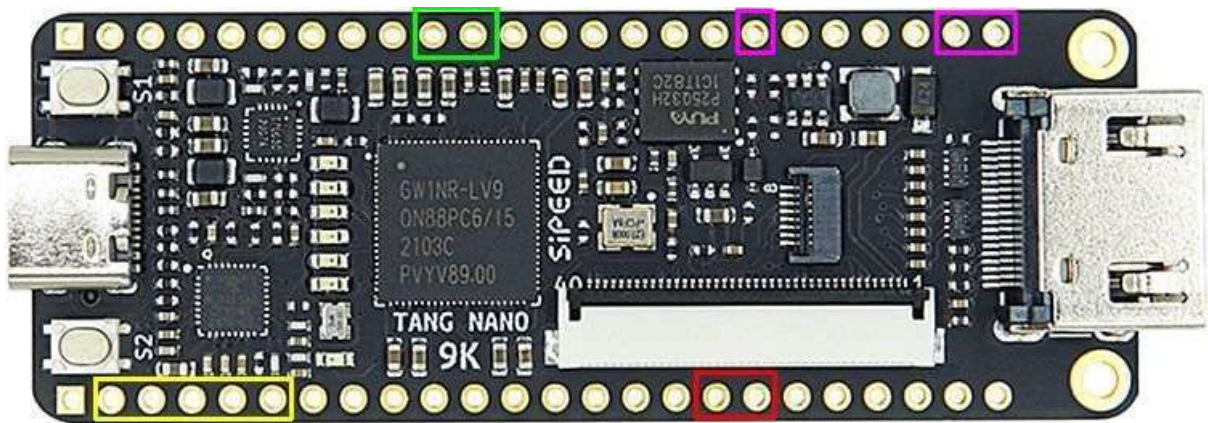
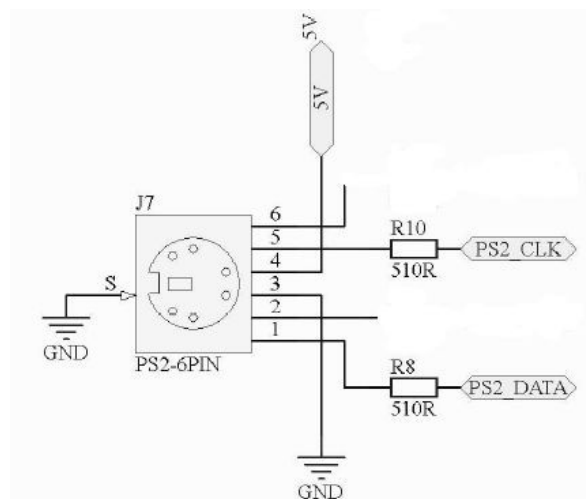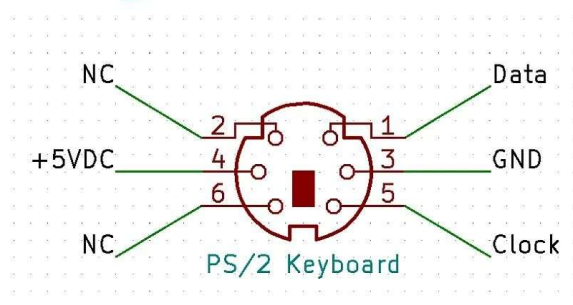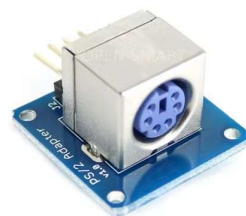Magenta = Supply and Ground

Green = Keyboard

Yellow = VGA

Red = Audio

Peripheral Schematics

Keyboard

ps2_clk to pin 76
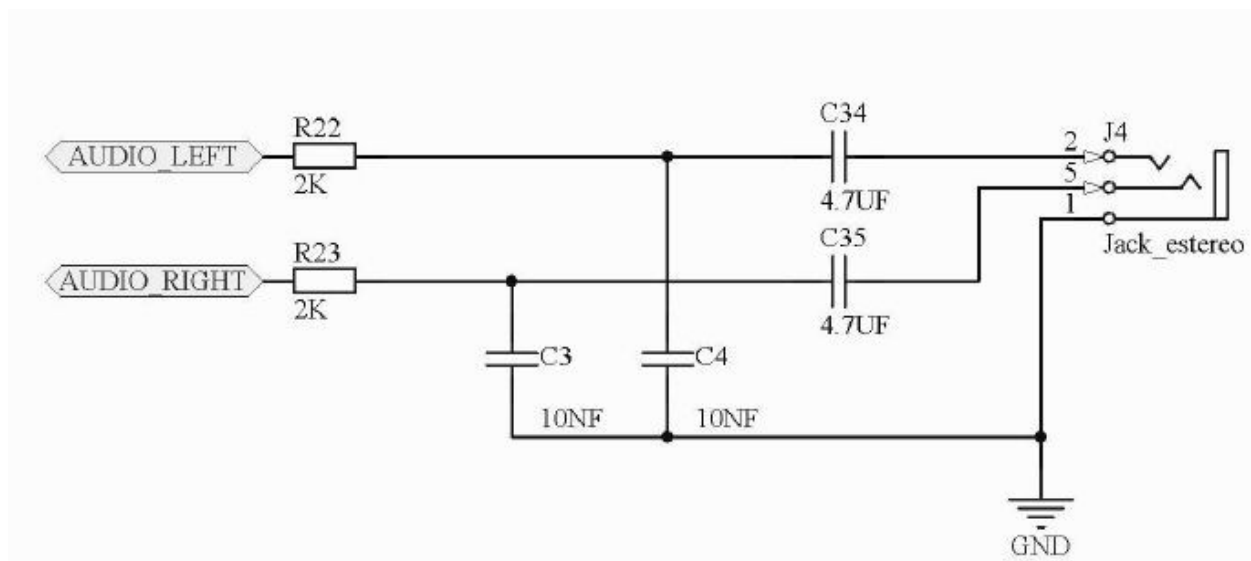
ps2_dat to pin 77

==Audio_l to pin 51==

==Audio_r to pin 53==

Vga_r to pin 39

Vga_g to pin 26

Vga_b to pin 25

Vga_vs to pin 36

Vga_hs to pin 37