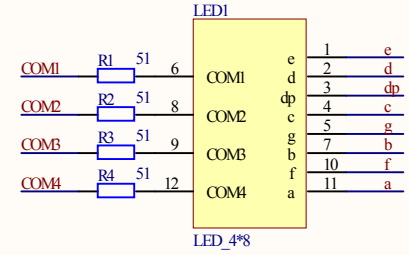
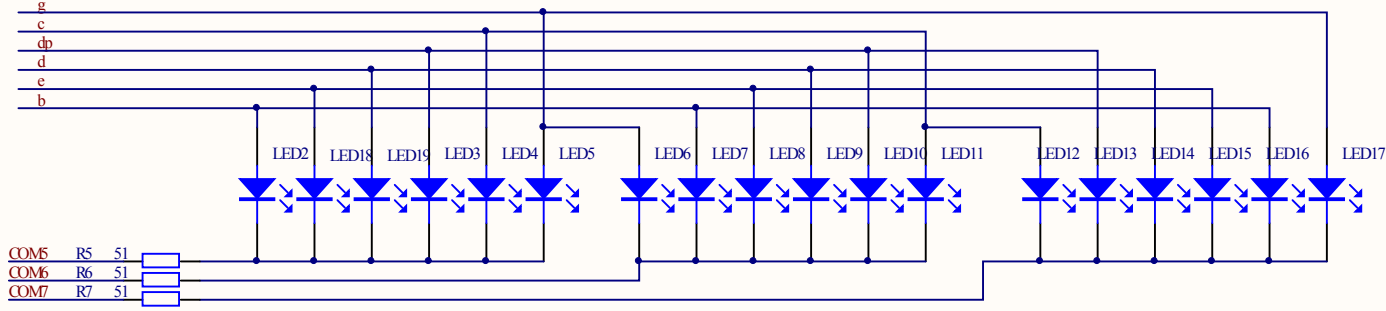
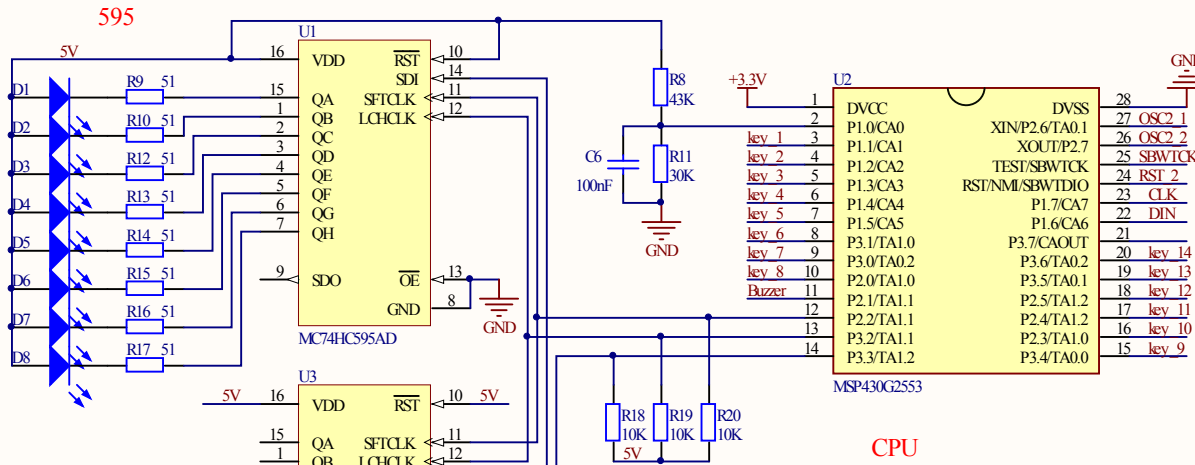


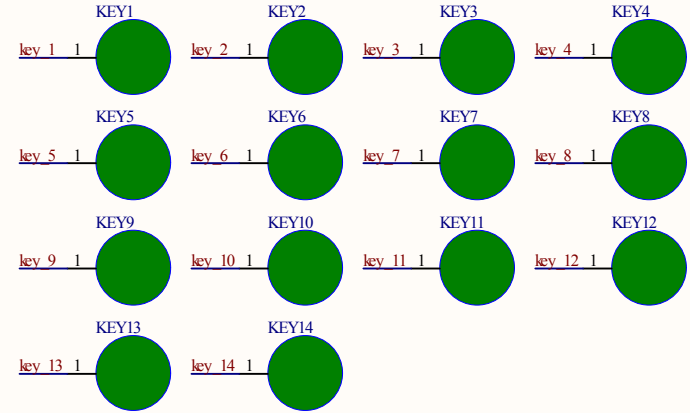
2011. 09. 15



Display

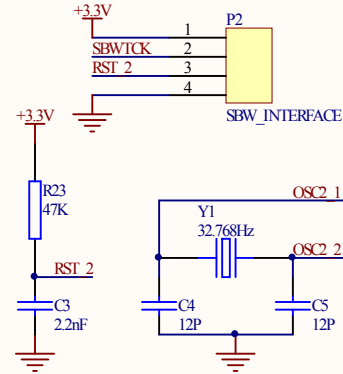


CPU

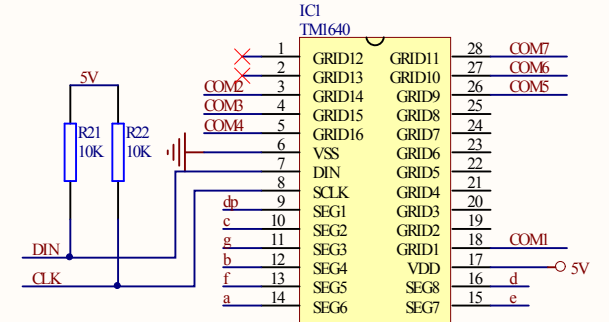


Touch_key

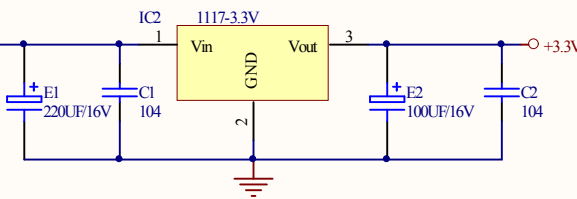
Reset and Clock and Programming



TM1640



Power



Comment	Description	Designator	Footprint	LibRef	Quantity
104	Capacitor	C1, C2		CAP	2
2.2nF	Capacitor	C3		CAP	1
12P	Capacitor	C4, C5		CAP	2
Cap	Capacitor	C6	RAD-0.3	Cap	1
LED1	Typical RED GaAs LED	D1, D2, D3, D4, D5, D6, D7, D8	LED-1	LED1	8
220UF/16V	Electrolytic Capacitor	E1		ELECTRO1	1
100UF/16V	Electrolytic Capacitor	E2		ELECTRO1	1
TM1640		IC1		TM1640	1
1117-3.3V		IC2	TO220H	VOLTREG	1
PAD		KEY1, KEY2, KEY3, KEY4, KEY5, KEY6, KEY7, KEY8, KEY9, KEY10, KEY11, KEY12, KEY13, KEY14		PAD	14
LED_4*8		LED1		LED_4*8	1
		LED2, LED3, LED4, LED5, LED6, LED7, LED8, LED9, LED10, LED11, LED12, LED13, LED14, LED15, LED16, LED17, LED18, LED19		LED	18
CON1	Header, 7-Pin	P1	HDR1X7	Header 7	1
SBW_INTERFACE		P2		JTAG INTERFACE	1
Res2	Resistor	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R24, R25, R26, R27	AXIAL-0.4	Res2	24
10K		R21, R22		RES2	2
47K		R23		RES2	1
MC74HC595AD	8-Bit Serial-Input/Serial or Prallel-Output Shift Register with Latched 3-State Outputs	U1, U3	751B-05_N	MC74HC595AD	2
MSP430G2553		U2		MSP430G2553	1
32.768Hz		Y1		CRYSTAL-1	1