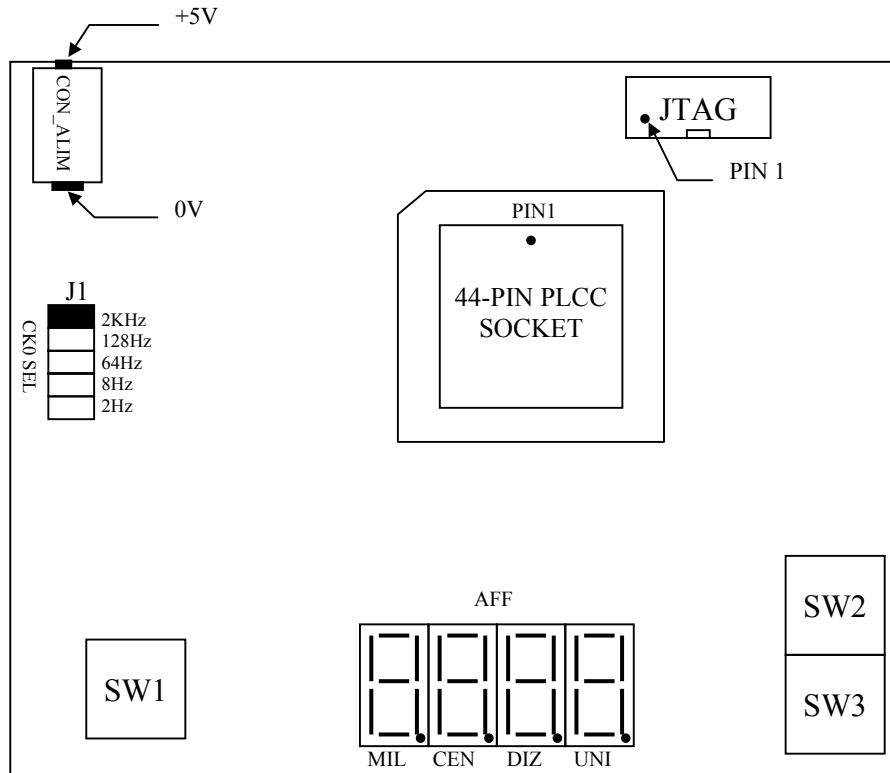


# Kit MACH4\_SK44 de Lattice

## Implantation des principaux composants

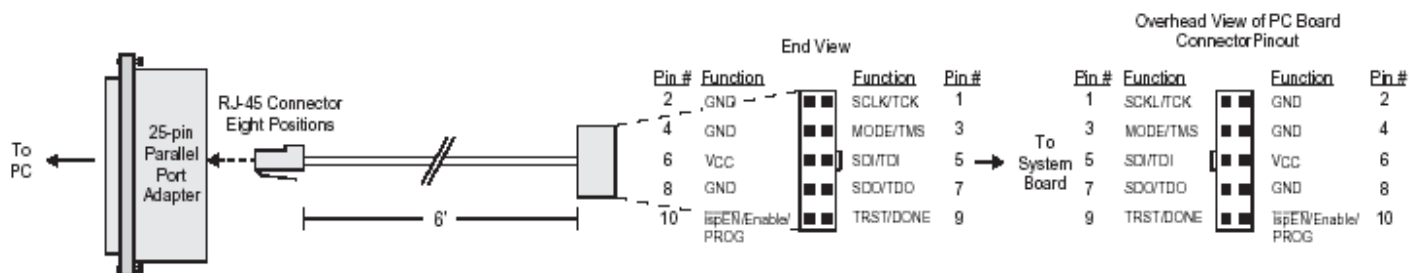


## Socket 44 PLCC

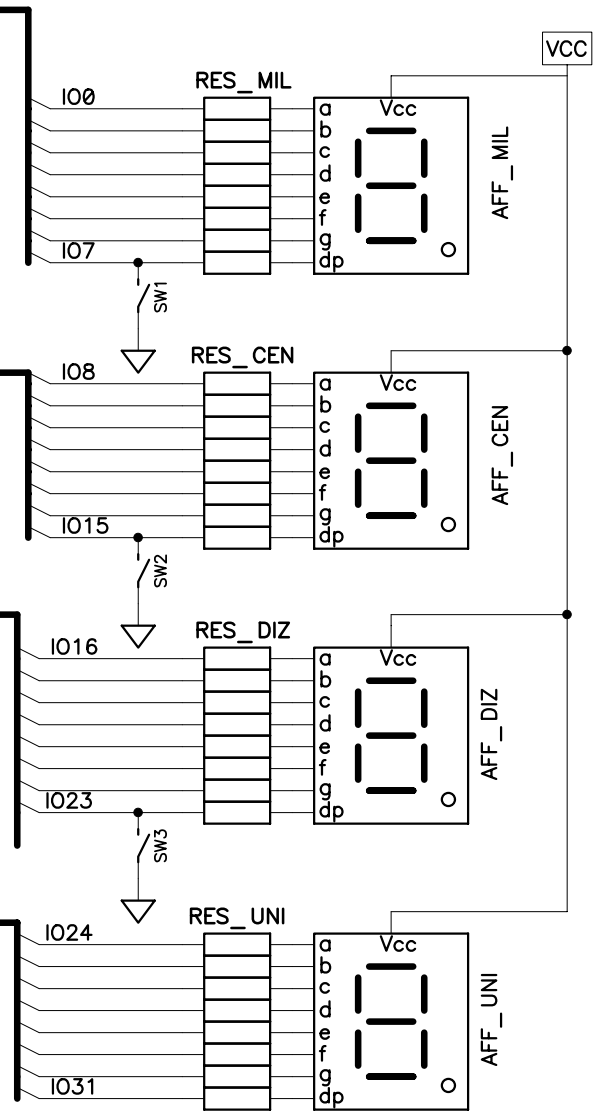
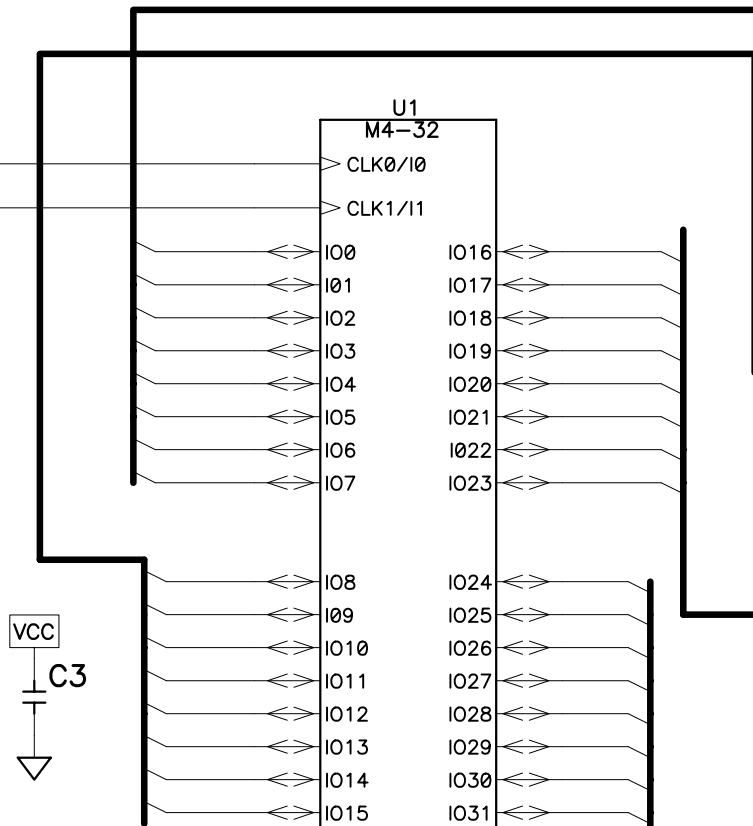
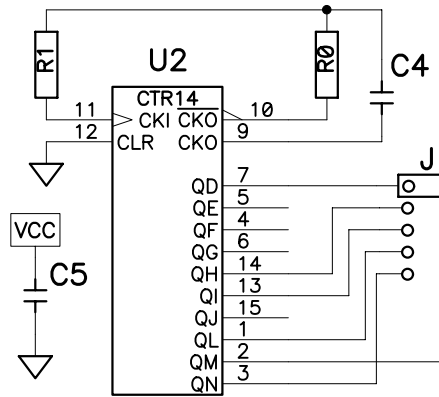
PIN	Definition	Connection Afficheur/Switch	Remarques	PIN	Def	Connection Afficheur/Switch	Remarques
1	GND			23	GND		
2	IO0	AFF MIL A		24	IO16	AFF DIZ A	
3	IO1	AFF MIL B		25	IO17	AFF DIZ B	
4	IO2	AFF MIL C		26	IO18	AFF DIZ C	
5	IO3	AFF MIL D		27	IO19	AFF DIZ D	
6	IO4	AFF MIL E		28	IO20	AFF DIZ E	
7	IO5	AFF MIL F		29	IO21	AFF DIZ F	
8	IO6	AFF MIL G		30	IO22	AFF DIZ G	
9	IO7	AFF MIL DP/SW1	Entrée seule	31	IO23	AFF DIZ DP/SW3	Entrée seule
10	TDI			32	TMS		
11	CLK0/IO		Select par jump	33	CLK1/I1		Clock 4Hz
12	GND			34	GND		
13	TCK			35	TDO		
14	IO8	AFF CEN A		36	IO24	AFF UNI A	
15	IO9	AFF CEN B		37	IO25	AFF UNI B	
16	IO10	AFF CEN C		38	IO26	AFF UNI C	
17	IO11	AFF CEN D		39	IO27	AFF UNI D	
18	IO12	AFF CEN E		40	IO28	AFF UNI E	
19	IO13	AFF CEN F		41	IO29	AFF UNI F	
20	IO14	AFF CEN G		42	IO30	AFF UNI G	
21	IO15	AFF CEN DP/SW2	Entrée seule	43	IO31	AFF UNI DP	
22	VCC			44	VCC		

## Connecteur JTAG/ISP

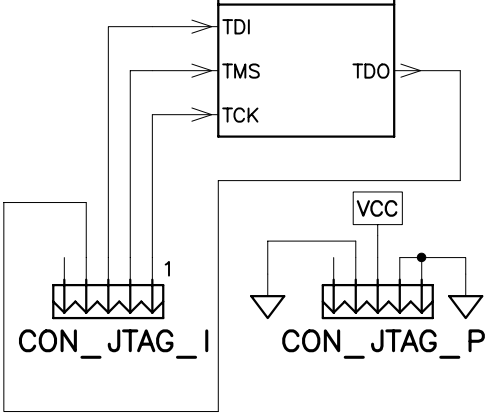
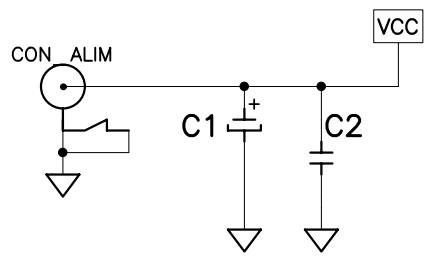
PIN	Nom	Coment	PIN	Nom	Coment
1	SCLK/TCK		2	GND	
3	MODE/TMS		4	GND	
5	SDI/TDI		6	VCC	
7	SDO/TDO		8	GND	
9	TRST/DONE		10	ispEN/Enable/PROG	



## Schéma Structurel



- U1 : MACH4A-64/32
- U2 : 74HC4060
- RES\_MIL : reseau de resistance 270
- RES\_CEN : reseau de resistance 270
- RES\_DIZ : reseau de resistance 270
- RES\_UNI : reseau de resistance 270
- AFF\_MIL : HDSP-7501 AC
- AFF\_CEN : HDSP-7501 AC
- AFF\_DIZ : HDSP-7501 AC
- AFF\_UNI : HDSP-7501 AC
- R0 : 1K5
- R1 : 5K6
- C1 : 10uF
- C2 C3 C5 : 100nF
- C4 : 10nF
- SW1 a SW 3 : poussoirs
- CON\_JTAG : HE10 2x5
- CON ALIM : connecteur alimentation
- J1 : Barette secable 2x5 + jump



Title				ISP starter kit	
Size	Number			Rev	
A4	Schema sans connecteur				
Date	11/07/2004		Drawn by	GDA	
Filename	isp_starter_kit.sch		Sheet	1 of 1	