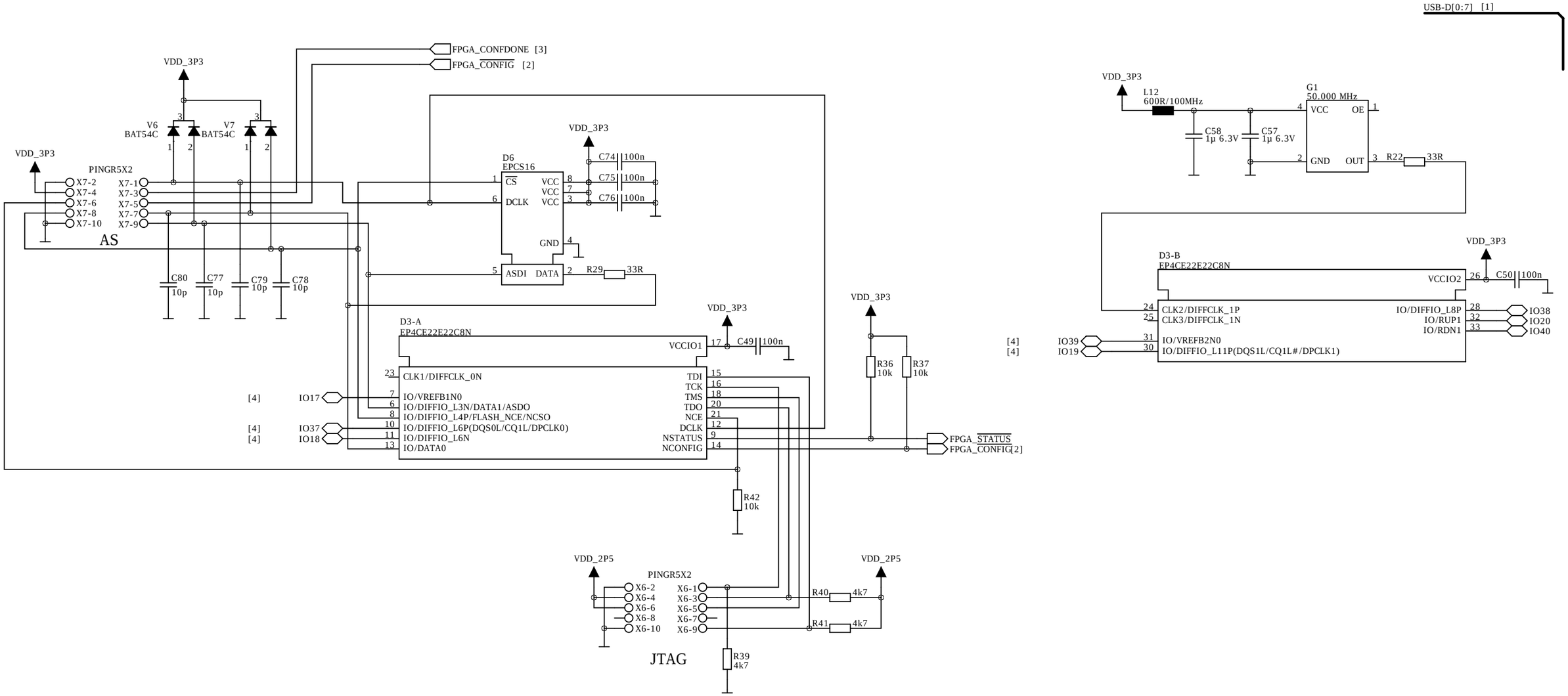
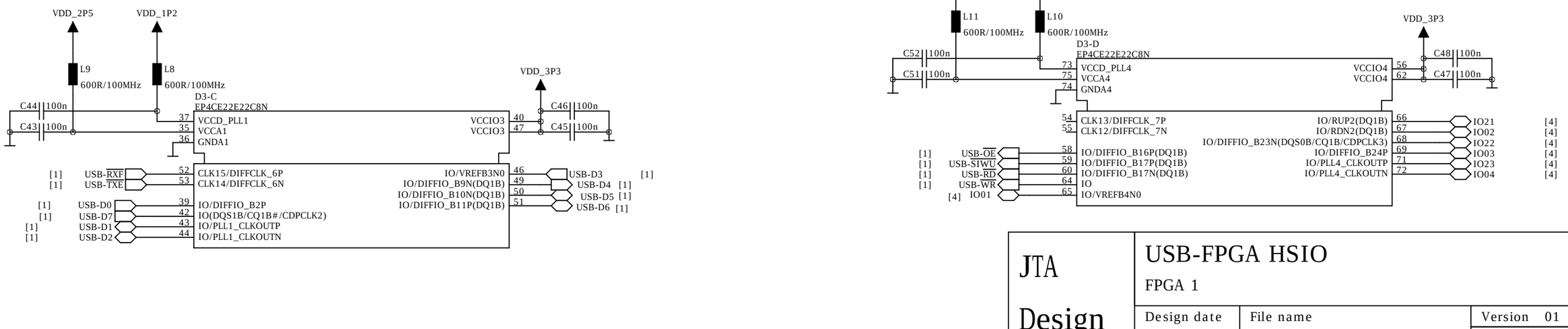
Inrush current limiter
Imax=240 mA

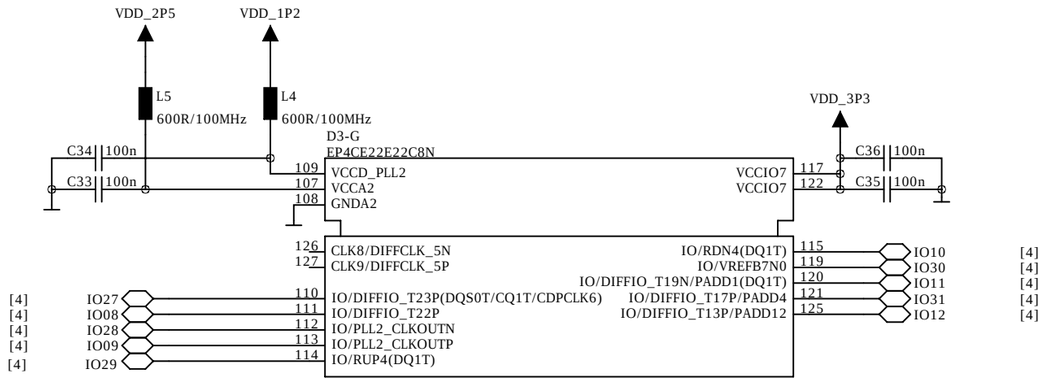
V3
FDN304P
V4
FDN304P
R30
10k
R32
22R
R33
10k
[1] USB-PWREN
C69
100n
D7
74AHC1G14
V5
BAT54
R35
47k
C68
100n
RC=5 ms
D8
74AHC1G14
C70
100n
L16
600R/100MHz
L17
600R/100MHz
L18
600R/100MHz
N1
TPS62260
N2
TPS62260
N3
TPS62260
L13
4u7 1.35A
L14
4u7 1.35A
L15
4u7 1.35A
L21
600R/100MHz
L20
600R/100MHz
L19
600R/100MHz
C67
10µ 10V
C66
10µ 10V
C65
10µ 10V
C73
120p
R23
68k
R24
15k
C72
1n6
R25
15k
R26
4k7
C71
820p
R28
10k
R27
10k
C59
10µ 10V
C60
10µ 10V
C61
10µ 10V
C62
10µ 10V
C63
10µ 10V
C64
10µ 10V
VDD_3P3
VDD_2P5
VDD_1P2
E1
NP HOLE 3.2 mm
E2
NP HOLE 3.2 mm
E3
NP HOLE 3.2 mm
E4
NP HOLE 3.2 mm
VDDUSB_3P3
L2
600R/100MHz
L3
600R/100MHz
C11
100n
C15
4u7
C12
100n
C16
4u7
C13
100n
C14
4u7
R2
10k
D1
FT232HL
USB_VBUS
C17
100n
C18
4u7
C1
10n
C9
100n
C10
100n
C2
33p
C3
33p
B1
12.000 MHz
R1
12k
C6
100n
C7
100n
C8
100n
VDDUSB_3P3
R7
10k
R8
10k
L1
600R/100MHz
C4
10n
X1
USB-MINI-B
V1
PGB1010603MR
V2
PGB1010603MR
D2
93LC56B
C5
100n
R9
10k
R3
2k2
R10
10k
R11
10k
R12
10k
R13
10k
R6
33R
R5
33R
R4
33R
USB_D+
USB_D-
USB-RXF [2]
USB-TXE [2]
USB-RD [2]
USB-WR [2]
USB-SIWU [2]
USB-CLK [3]
USB-OE [2]
USB-PWREN [1]
USB-D0
USB-D1
USB-D2
USB-D3
USB-D4
USB-D5
USB-D6
USB-D7
USB-D[0:7] [2]

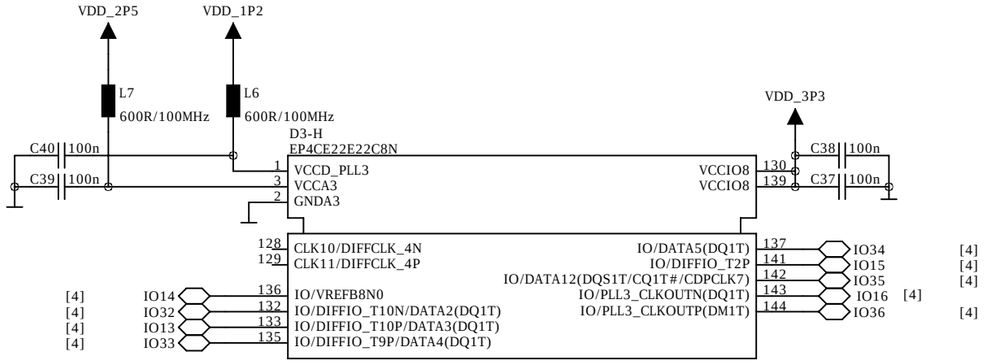
JTA Design	USB-FPGA HSIO USB	
Design date 2013-01-16	File name USB-FPGA HSIO 01.sch	Version 01 Sheet 1 OF 4

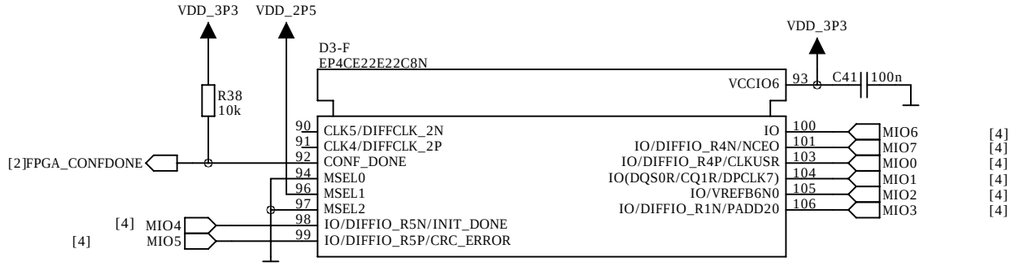


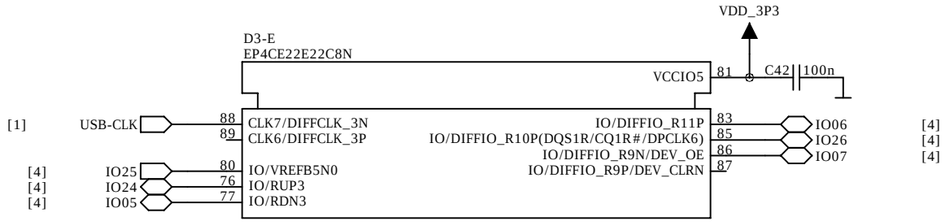


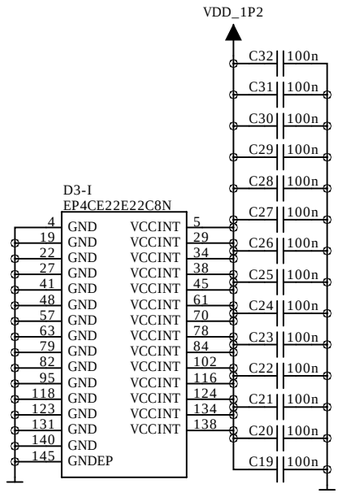
JTA	USB-FPGA HSIO	
Design	FPGA 1	
Design date 2013-01-16	File name USB-FPGA HSIO 01.sch	Version 01
		Sheet 2 OF 4



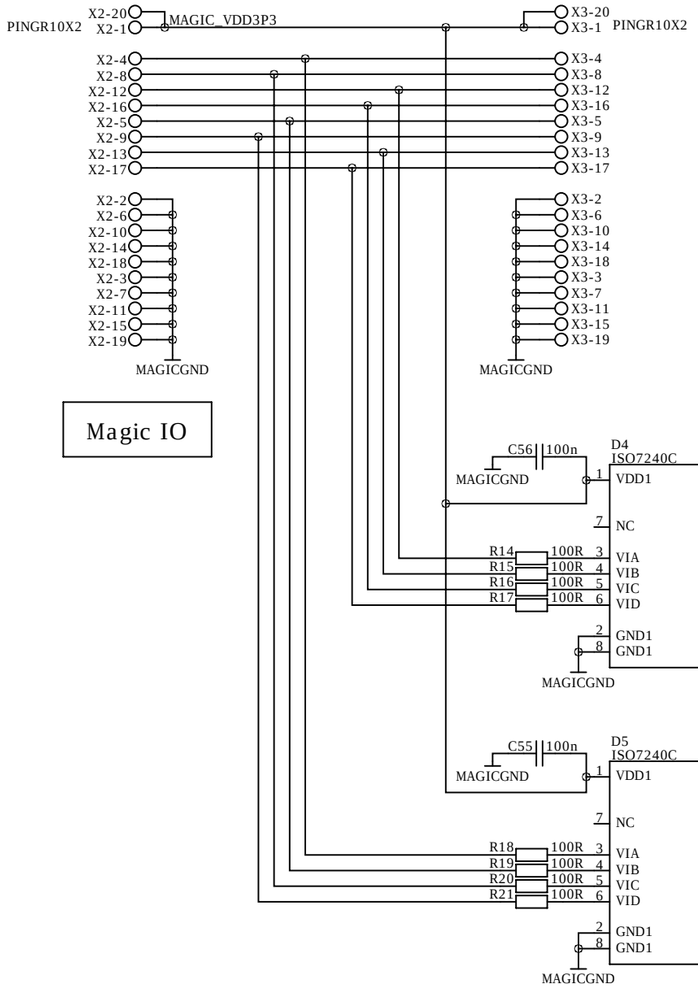


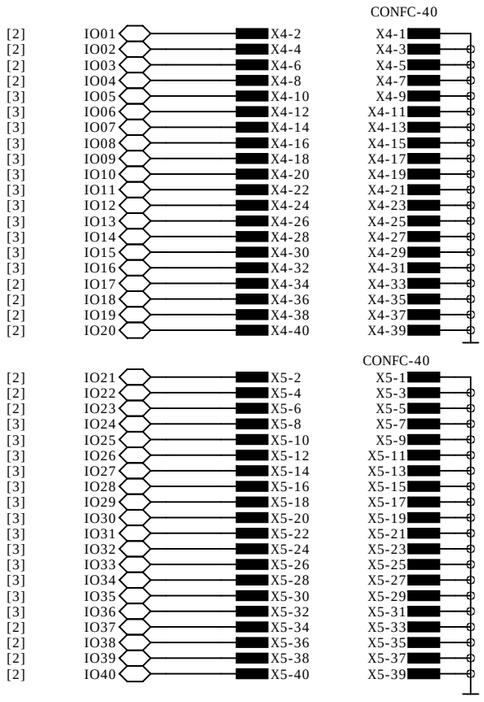






JTA	USB-FPGA HSIO	
Design	Sheet Description	
Design date	File name	Version 01
2013-01-16	USB-FPGA HSIO 01.sch	Sheet 3 OF 4





FPGA pin map

Signal	FPGA PIN	Signal	FPGA PIN
50 MHz oscillator	24		
USB CLK	88		
USB $\overline{\text{RXF}}$	52		
USB $\overline{\text{TXE}}$	53		
USB $\overline{\text{RD}}$	60		
USB $\overline{\text{WR}}$	64		
USB $\overline{\text{SIWU}}$	59		
USB $\overline{\text{OE}}$	58		
USB D0	39	MIO0 (X2/X3-12)	103
USB D1	43	MIO1 (X2/X3-13)	104
USB D2	44	MIO2 (X2/X3-16)	105
USB D3	46	MIO3 (X2/X3-17)	106
USB D4	49	MIO4 (X2/X3-4)	98
USB D5	50	MIO5 (X2/X3-5)	99
USB D6	51	MIO6 (X2/X3-8)	100
USB D7	42	MIO7 (X2/X3-9)	101
IO01	65	IO21	66
IO02	67	IO22	68
IO03	69	IO23	71
IO04	72	IO24	76
IO05	77	IO25	80
IO06	83	IO26	85
IO07	86	IO27	110
IO08	111	IO28	112
IO09	113	IO29	114
IO10	115	IO30	119
IO11	120	IO31	121
IO12	125	IO32	132
IO13	133	IO33	135
IO14	136	IO34	137
IO15	141	IO35	142
IO16	143	IO36	144
IO17	7	IO37	10
IO18	11	IO38	28
IO19	30	IO39	31
IO20	32	IO40	33

JTA Design	USB-FPGA HSIO IO connectors		
	Design date 2013-01-16	File name USB-FPGA HSIO 01.sch	Version 01 Sheet 4 OF 4