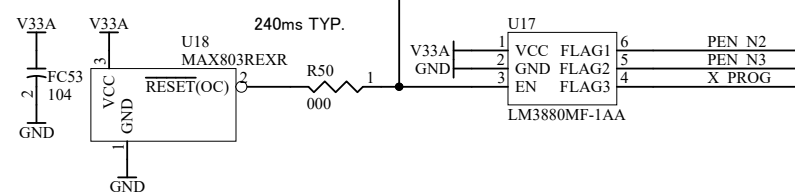
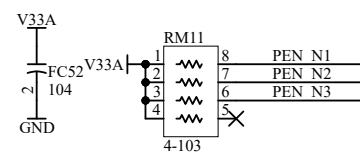
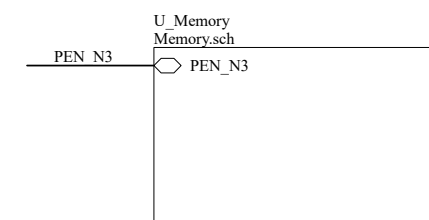
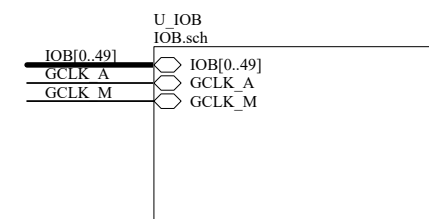
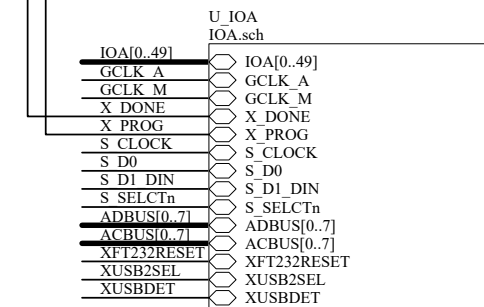
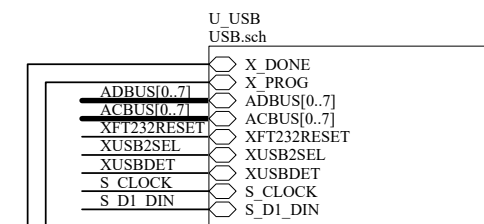
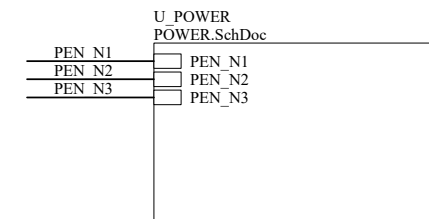
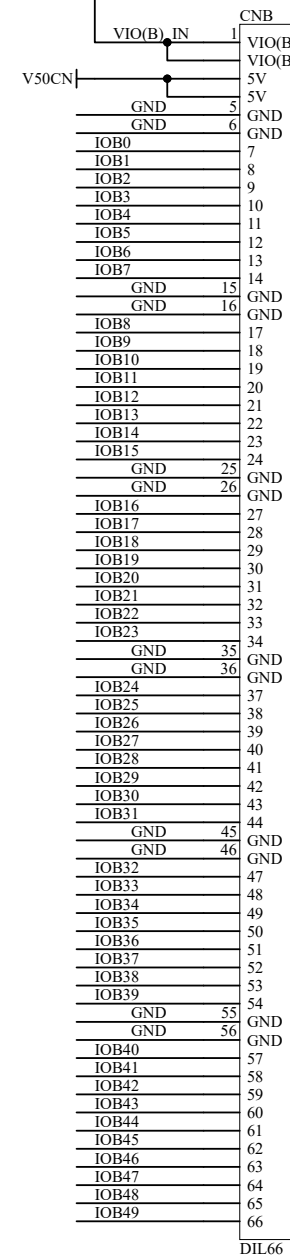
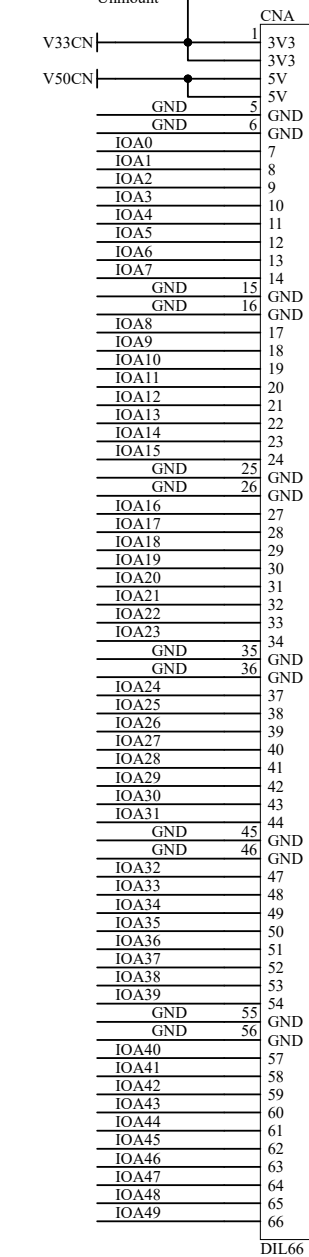
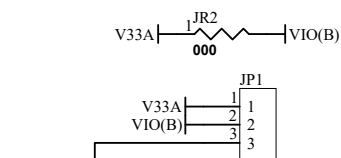
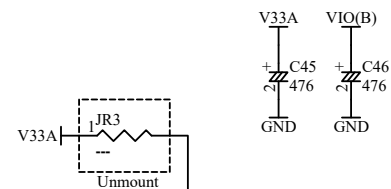


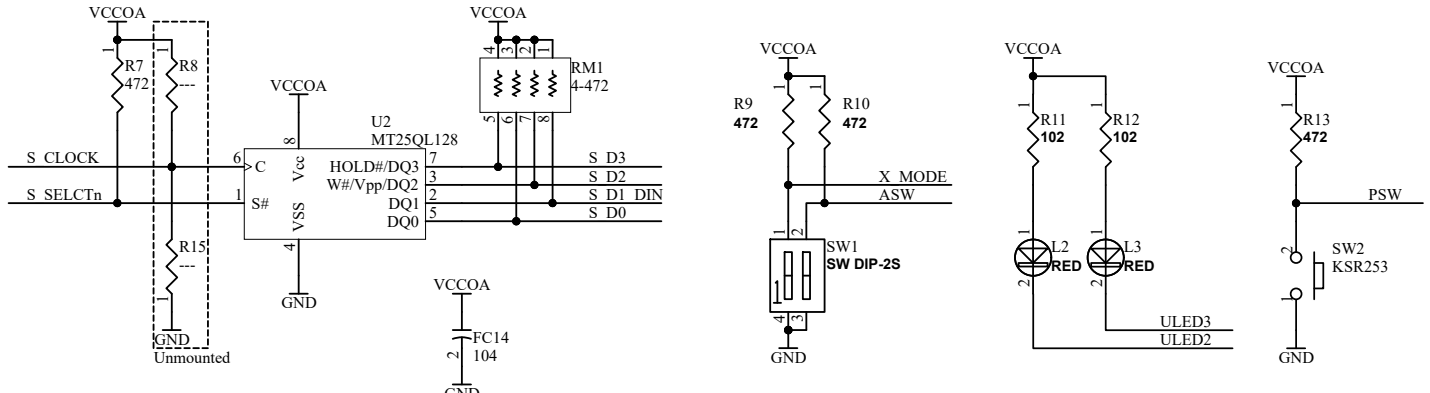
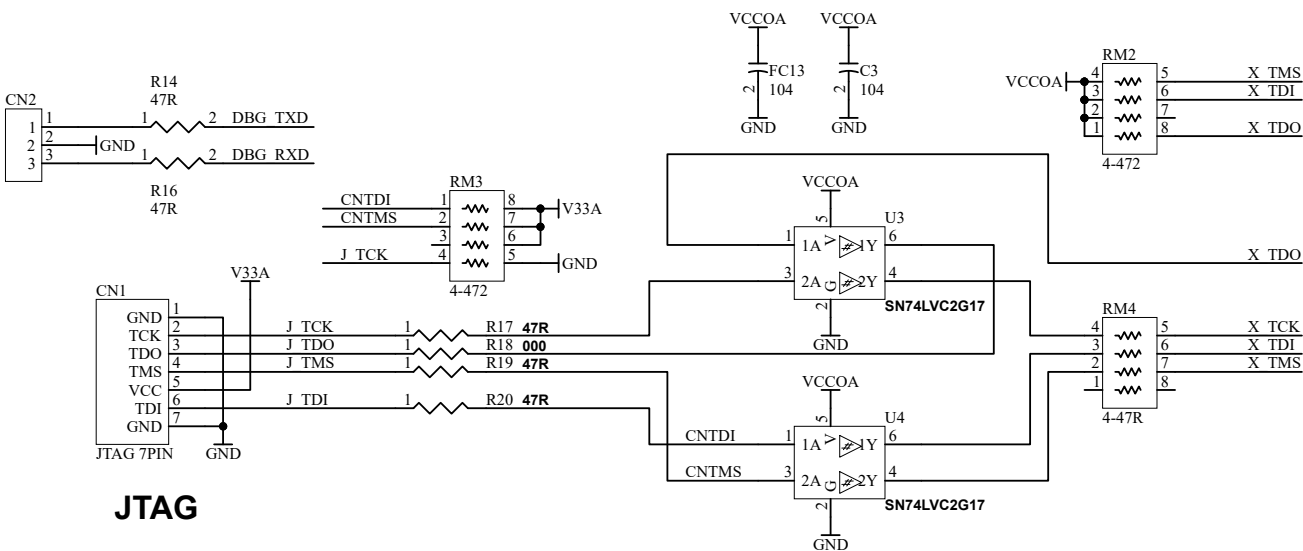
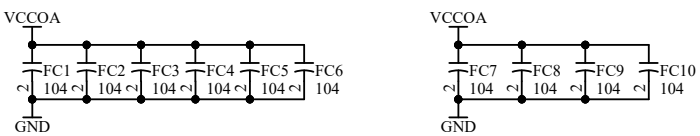
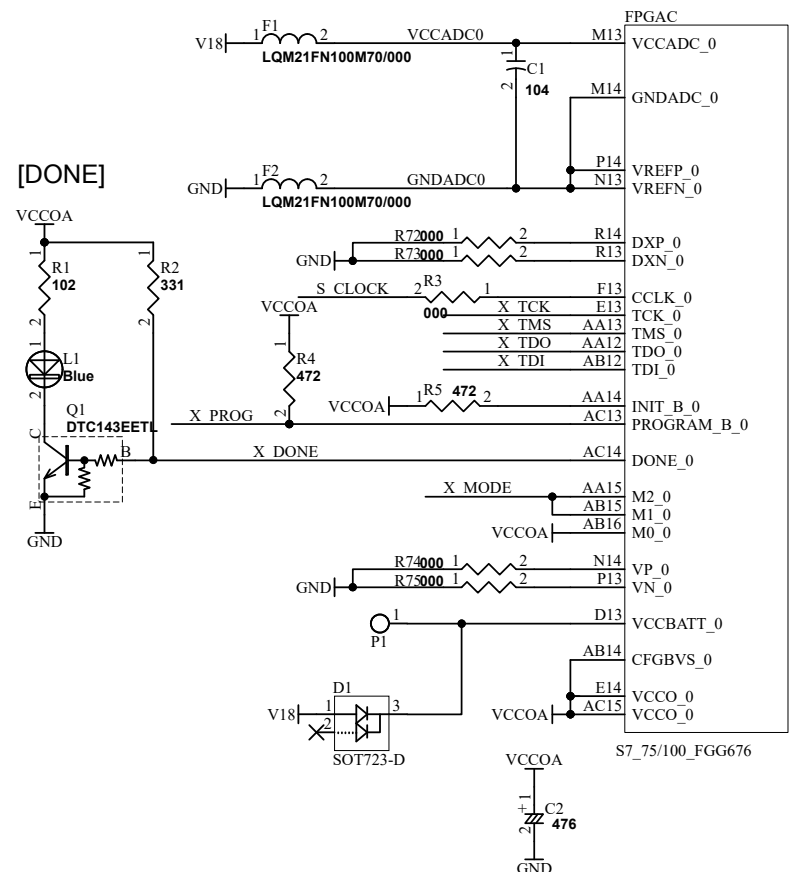
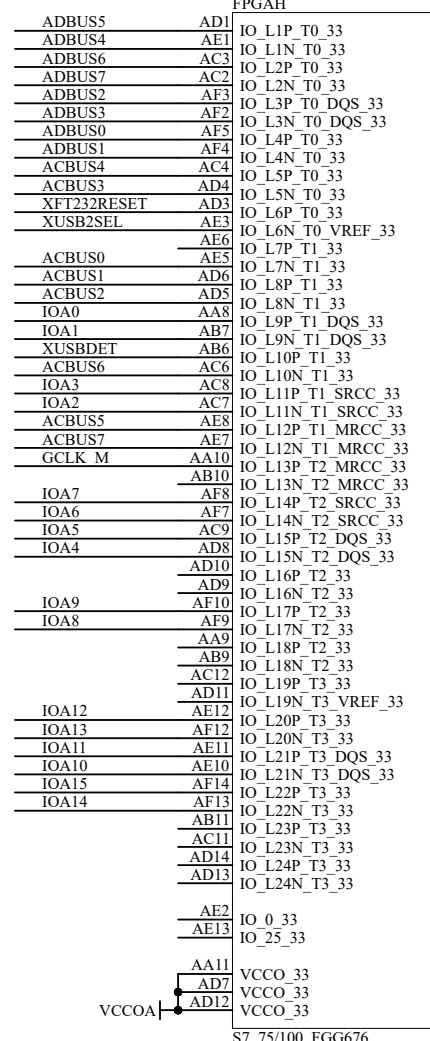
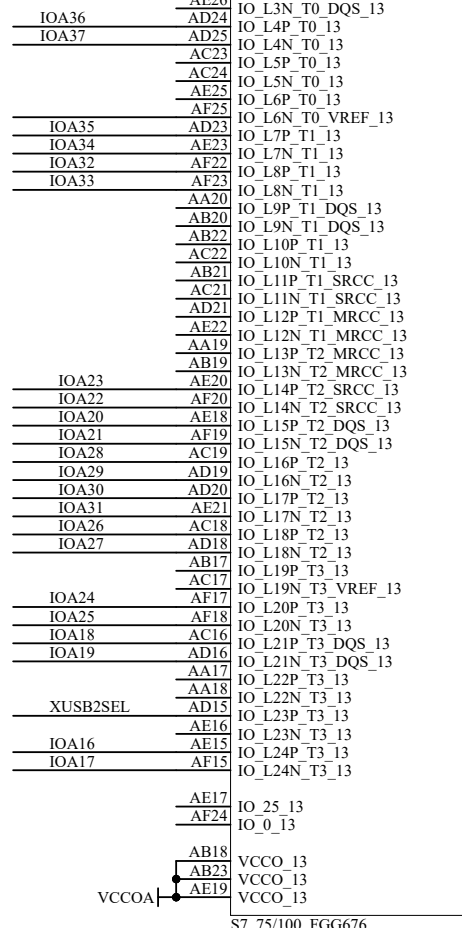
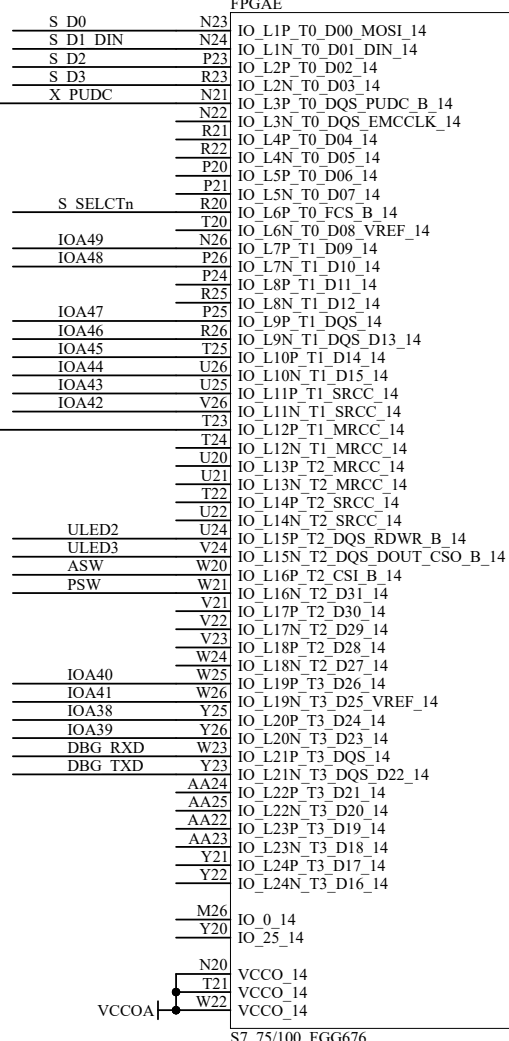
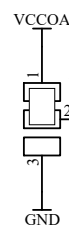
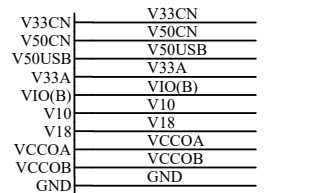
V33CN	V33CN
V50CN	V50CN
V50USB	V50USB
V33A	V33A
VIO(B)	VIO(B)
V10	V10
V18	V18
VCCOA	VCCOA
VCCOB	VCCOB
GND	GND



EDX013R1-SCH-C.pdf

HUMANDATA
 HuMANDATA LTD.
www.hdl.co.jp/ (Japan)
www2.hdl.co.jp/en/ (Global)

DSN:	TITLE: FT601+ Spartan-7 USB-FPGA Board
DOC. No:	EDX-013
FILE: EDX013B_C.sch	DATE: 2023/06/07 17:30:47
Sheet: 1 / 8	C



HUMAN DATA
 HuMANDATA LTD.
www.hdl.co.jp/ (Japan)
www2.hdl.co.jp/en/ (Global)

DSN:	TITLE:	EDX013R1-SCH-C.pdf
		FT601+ Spartan-7 USB-FPGA Board
DOC. No:	EDX-013	
FILE: IOA.sch	DATE: 2023/06/07 17:30:47	Sheet: 2 / 8

V33CN	V33CN
V50CN	V50CN
V50USB	V50USB
V33A	V33A
VIO(B)	VIO(B)
V10	V10
V18	V18
VCCOA	VCCOA
VCCOB	VCCOB
GND	GND

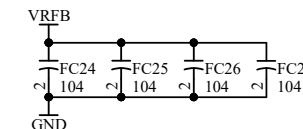
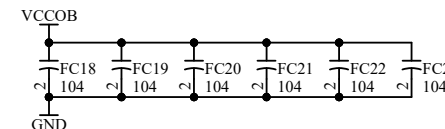
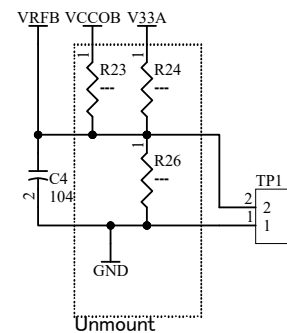
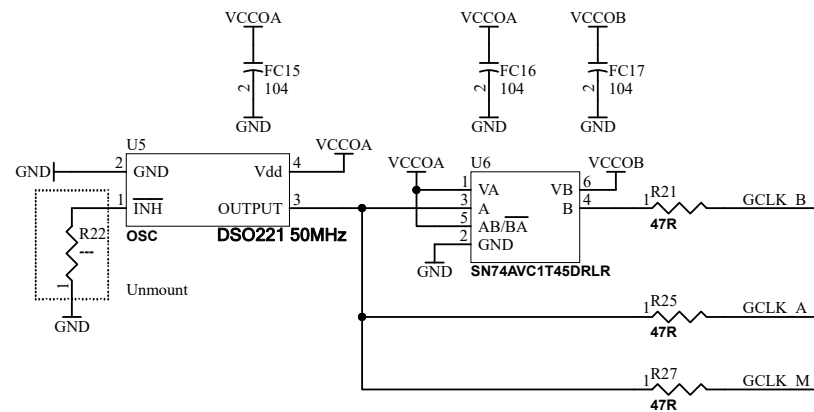
IOB[0..49]	IOB[0..49]
GCLK A	GCLK A
GCLK M	GCLK M

FPGAJ	
IOB27	G5 IO L1P_T0_AD4P_35
IOB26	F5 IO L1N_T0_AD4N_35
	K8 IO L2P_T0_AD12P_35
	J8 IO L2N_T0_AD12N_35
	G4 IO L3P_T0_DQS_AD5P_35
	H6 IO L3N_T0_DQS_AD5N_35
	G6 IO L4P_T0_35
	J6 IO L4N_T0_35
	J5 IO L5P_T0_AD13P_35
	H7 IO L5N_T0_AD13N_35
	H7 IO L6P_T0_35
VRFB	G7 IO L6N_T0_VREF_35
IOB12	G2 IO L7P_T1_AD6P_35
IOB13	F2 IO L7N_T1_AD6N_35
IOB16	F3 IO L8P_T1_AD14P_35
IOB17	E3 IO L8N_T1_AD14N_35
IOB10	H1 IO L9P_T1_DQS_AD7P_35
IOB11	G1 IO L9N_T1_DQS_AD7N_35
IOB14	E2 IO L10P_T1_AD15P_35
IOB15	E1 IO L10N_T1_AD15N_35
IOB6	H3 IO L11P_T1_SRCC_35
IOB7	H2 IO L11N_T1_SRCC_35
IOB9	J4 IO L12P_T1_MRCC_35
IOB8	H4 IO L12N_T1_MRCC_35
	K7 IO L13P_T2_MRCC_35
	K6 IO L13N_T2_MRCC_35
	M7 IO L14P_T2_SRCC_35
	L7 IO L14N_T2_SRCC_35
	L5 IO L15P_T2_DQS_35
	K5 IO L15N_T2_DQS_35
	N6 IO L16P_T2_35
	M6 IO L16N_T2_35
	M5 IO L17P_T2_35
	M4 IO L17N_T2_35
	L4 IO L18P_T2_35
	L3 IO L18N_T2_35
	N4 IO L19P_T3_35
VRFB	N3 IO L19N_T3_VREF_35
	K3 IO L20P_T3_35
	J3 IO L20N_T3_35
IOB2	L2 IO L21P_T3_DQS_35
IOB3	K2 IO L21N_T3_DQS_35
IOB1	N2 IO L22P_T3_35
IOB0	N1 IO L22N_T3_35
IOB4	K1 IO L23P_T3_35
IOB5	J1 IO L23N_T3_35
	M2 IO L24P_T3_35
	M1 IO L24N_T3_35
	H8 IO_0_35
	N7 IO_25_35
	H5 VCCO_35
	L6 VCCO_35
VCCOB	P7 VCCO_35

S7_75/100_FGG676

FPGA K	
IOB46	E11 IO L1P_T0_36
IOB47	E10 IO L1N_T0_36
IOB48	F12 IO L2P_T0_36
IOB49	E12 IO L2N_T0_36
IOB44	D11 IO L3P_T0_DQS_36
IOB45	D10 IO L3N_T0_DQS_36
IOB41	B10 IO L4P_T0_36
IOB40	A10 IO L4N_T0_36
IOB42	C12 IO L5P_T0_36
IOB43	C11 IO L5N_T0_36
	B12 IO L6P_T0_36
	B11 IO L6N_T0_VREF_36
VRFB	F8 IO L7P_T1_36
	E8 IO L7N_T1_36
IOB38	C9 IO L8P_T1_36
IOB39	C8 IO L8N_T1_36
	B9 IO L9P_T1_DQS_36
	A9 IO L9N_T1_DQS_36
	F10 IO L10P_T1_36
	F9 IO L10N_T1_36
IOB34	A8 IO L11P_T1_SRCC_36
IOB35	A7 IO L11N_T1_SRCC_36
	D9 IO L12P_T1_MRCC_36
	D8 IO L12N_T1_MRCC_36
IOB30	C7 IO L13P_T2_MRCC_36
IOB31	C6 IO L13N_T2_MRCC_36
IOB32	B7 IO L14P_T2_SRCC_36
IOB33	B6 IO L14N_T2_SRCC_36
	E6 IO L15P_T2_DQS_36
	D6 IO L15N_T2_DQS_36
IOB36	F7 IO L16P_T2_36
IOB37	E7 IO L16N_T2_36
IOB29	E5 IO L17P_T2_36
IOB28	D5 IO L17N_T2_36
IOB25	B5 IO L18P_T2_36
IOB24	A5 IO L18N_T2_36
	C3 IO L19P_T3_36
VRFB	C2 IO L19N_T3_VREF_36
	C4 IO L20P_T3_36
	B4 IO L20N_T3_36
IOB21	B2 IO L21P_T3_DQS_36
IOB20	B1 IO L21N_T3_DQS_36
IOB23	A3 IO L22P_T3_36
IOB22	A2 IO L22N_T3_36
IOB18	D1 IO L23P_T3_36
IOB19	C1 IO L23N_T3_36
	D4 IO L24P_T3_36
	D3 IO L24N_T3_36
	A12 IO_0_36
	A4 IO_25_36
	C10 VCCO_36
	D7 VCCO_36
VCCOB	F11 VCCO_36

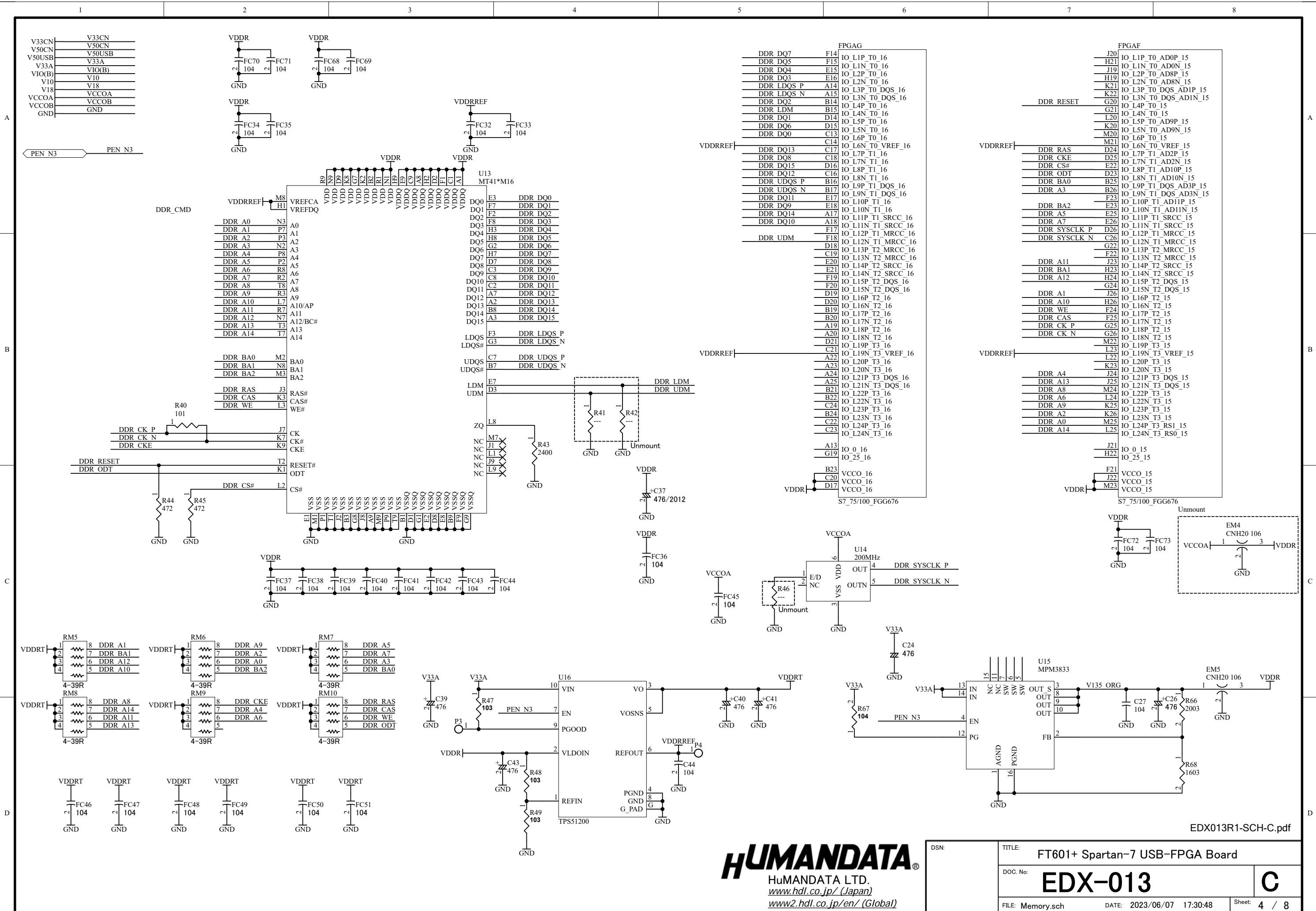
S7_75/100_FGG676



EDX013R1-SCH-C.pdf

HUMANDATA
 HuMANDATA LTD.
www.hdl.co.jp/ (Japan)
www2.hdl.co.jp/en/ (Global)

DSN:	TITLE: FT601+ Spartan-7 USB-FPGA Board
DOC. No:	EDX-013
FILE: IOB.sch	DATE: 2023/06/07 17:30:47
Sheet: 3 / 8	C



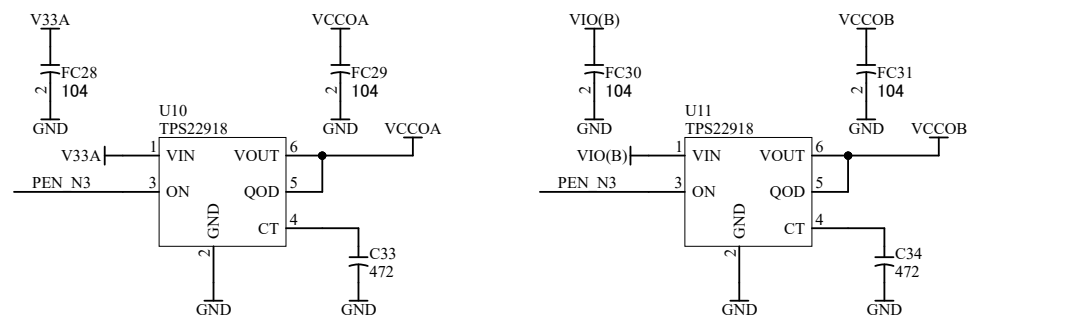
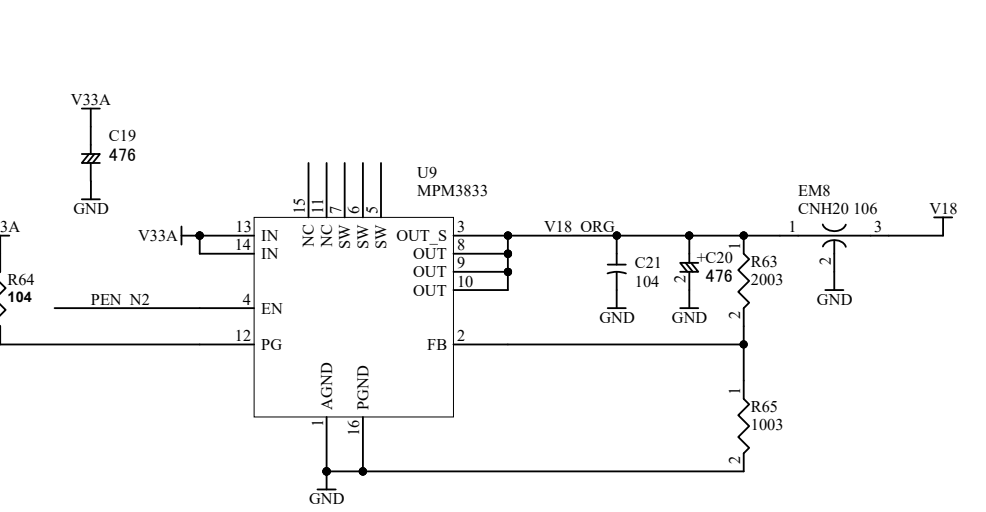
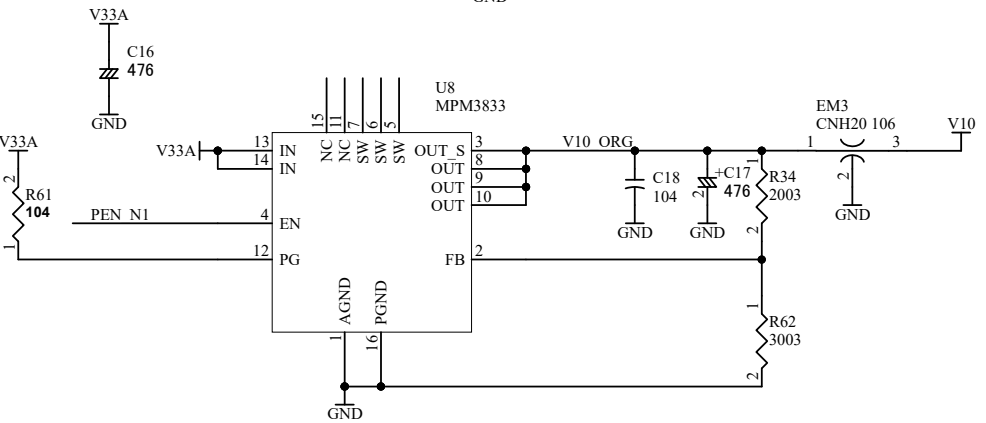
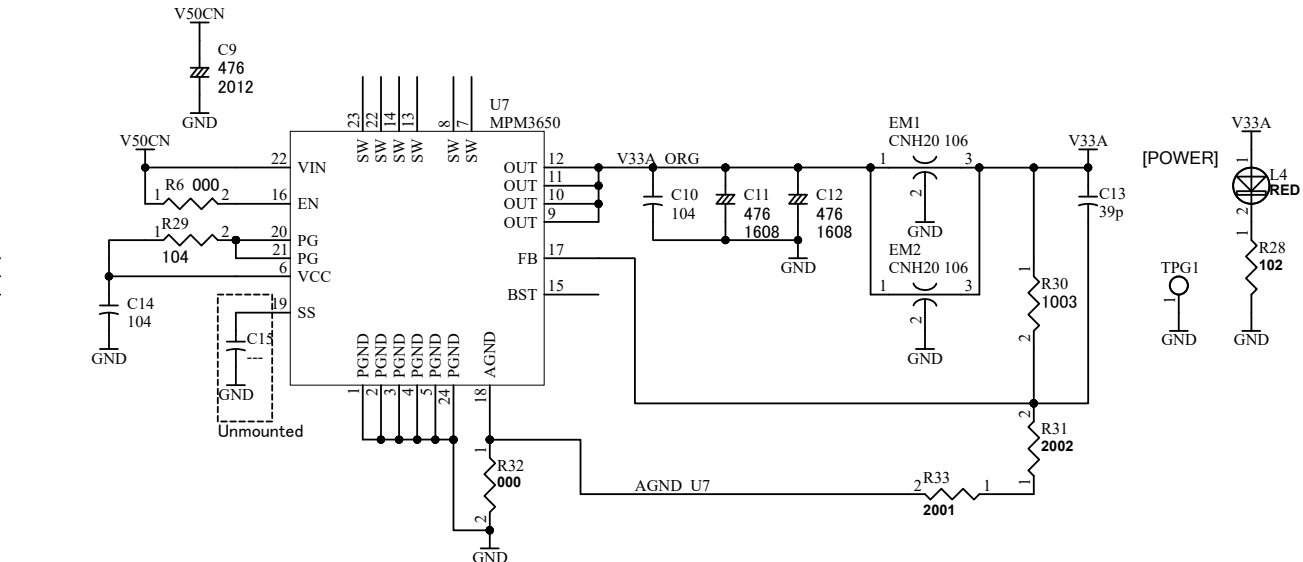
EDX013R1-SCH-C.pdf



DSN:	TITLE: FT601+ Spartan-7 USB-FPGA Board
DOC. No:	EDX-013
FILE: Memory.sch	DATE: 2023/06/07 17:30:48
Sheet: 4 / 8	C

V33CN	V33CN
V50CN	V50CN
V50USB	V50USB
V33A	V33A
VIO(B)	VIO(B)
V10	V10
V18	V18
VCCOA	VCCOA
VCCOB	VCCOB
GND	GND

PEN N1	PEN N1
PEN N2	PEN N2
PEN N3	PEN N3

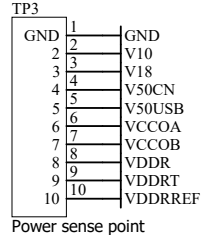


A1	GND	AF26	GND
A6	GND	AF21	GND
A11	GND	AF16	GND
A16	GND	AF11	GND
A21	GND	AF6	GND
A26	GND	AF1	GND
B3	GND	AE24	GND
B8	GND	AE14	GND
B13	GND	AE9	GND
B18	GND	AE4	GND
C5	GND	AD22	GND
C15	GND	AD17	GND
C25	GND	AD2	GND
D2	GND	AC25	GND
D12	GND	AC20	GND
D22	GND	AC10	GND
E4	GND	AC5	GND
E9	GND	AB13	GND
E19	GND	AB8	GND
E24	GND	AB3	GND
F1	GND	AA26	GND
F6	GND	AA21	GND
F16	GND	AA16	GND
F26	GND	AA1	GND
G3	GND	Y24	GND
G8	GND	Y19	GND
G9	GND	Y18	GND
G11	GND	Y16	GND
G13	GND	Y14	GND
G15	GND	Y12	GND
G17	GND	Y10	GND
G23	GND	Y4	GND
H10	GND	W19	GND
H12	GND	W17	GND
H14	GND	W15	GND
H16	GND	W13	GND
H18	GND	W11	GND
H20	GND	W9	GND
H25	GND	W7	GND
J2	GND	W2	GND
J7	GND	V25	GND
J9	GND	V20	GND
J11	GND	V18	GND
J13	GND	V16	GND
J15	GND	V14	GND
J17	GND	V12	GND
K4	GND	V10	GND
K10	GND	V8	GND
K12	GND	U23	GND
K14	GND	U19	GND
K16	GND	U17	GND
K18	GND	U15	GND
K24	GND	U13	GND
L1	GND	U11	GND
L9	GND	U9	GND
L11	GND	U3	GND
L13	GND	T26	GND
L15	GND	T18	GND
L17	GND	T16	GND
L19	GND	T14	GND
L21	GND	T12	GND
L26	GND	T10	GND
M3	GND	T8	GND
M8	GND	T6	GND
M10	GND	T1	GND
M12	GND	R24	GND
M16	GND	R19	GND
M18	GND	R17	GND
N5	GND	R15	GND
N9	GND	R11	GND
N11	GND	R9	GND
N15	GND	P22	GND
N17	GND	P18	GND
N19	GND	P16	GND
N25	GND	P12	GND
P2	GND	P10	GND
P8	GND		GND

S7_75/100_FGG676

HUMAN DATA
 HuMANDATA LTD.
www.hdl.co.jp/ (Japan)
www2.hdl.co.jp/en/ (Global)

DSN:	TITLE: FT601+ Spartan-7 USB-FPGA Board
DOC. No:	EDX-013
FILE: POWER.SchDoc	DATE: 2023/06/07 17:30:48
Sheet: 5 / 8	

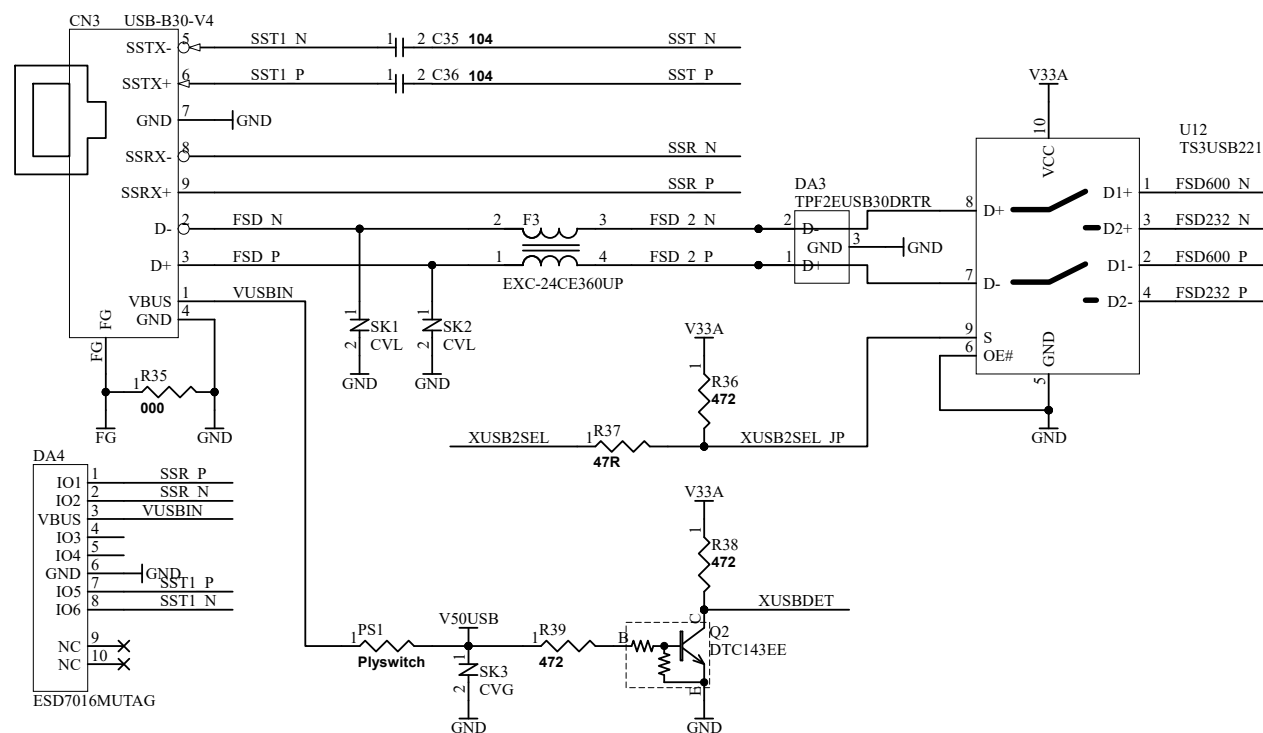


V33CN	V33CN
V50CN	V50CN
V50USB	V50USB
V33A	V33A
VIO(B)	VIO(B)
V10	V10
V18	V18
VCCOA	VCCOA
VCCOB	VCCOB
GND	GND

X DONE	X DONE
X PROG	X PROG

ADBUS[0..7]	ADBUS[0..7]
ACBUS[0..7]	ACBUS[0..7]
XFT232RESET	XFT232RESET
XUSB2SEL	XUSB2SEL
XUSBDET	XUSBDET

S CLOCK	S CLOCK
S D1 DIN	S D1 DIN



STXEN	STXEN
SRXFN	SRXFN
SWRN	SWRN
SRDN	SRDN
SOEN	SOEN
SSIWUN	SSIWUN
SBE[0..3]	SBE[0..3]
SDATA[0..31]	SDATA[0..31]
XFT601RESET	XFT601RESET
SCLK2	SCLK2
SGPIO0	SGPIO0
SGPIO1	SGPIO1
FSD600 N	FSD600 N
FSD600 P	FSD600 P
SST N	SST N
SST P	SST P
SSR N	SSR N
SSR P	SSR P
XUSB2SEL JP	XUSB2SEL JP

ADBUS[0..7]	ADBUS[0..7]
ACBUS[0..7]	ACBUS[0..7]
X PROG	X PROG
X DONE	X DONE
XFT232RESET	XFT232RESET
XUSB2SEL	XUSB2SEL
FSD232 N	FSD232 N
FSD232 P	FSD232 P
S CLOCK	S CLOCK
S D1 DIN	S D1 DIN
XUSBDET	XUSBDET

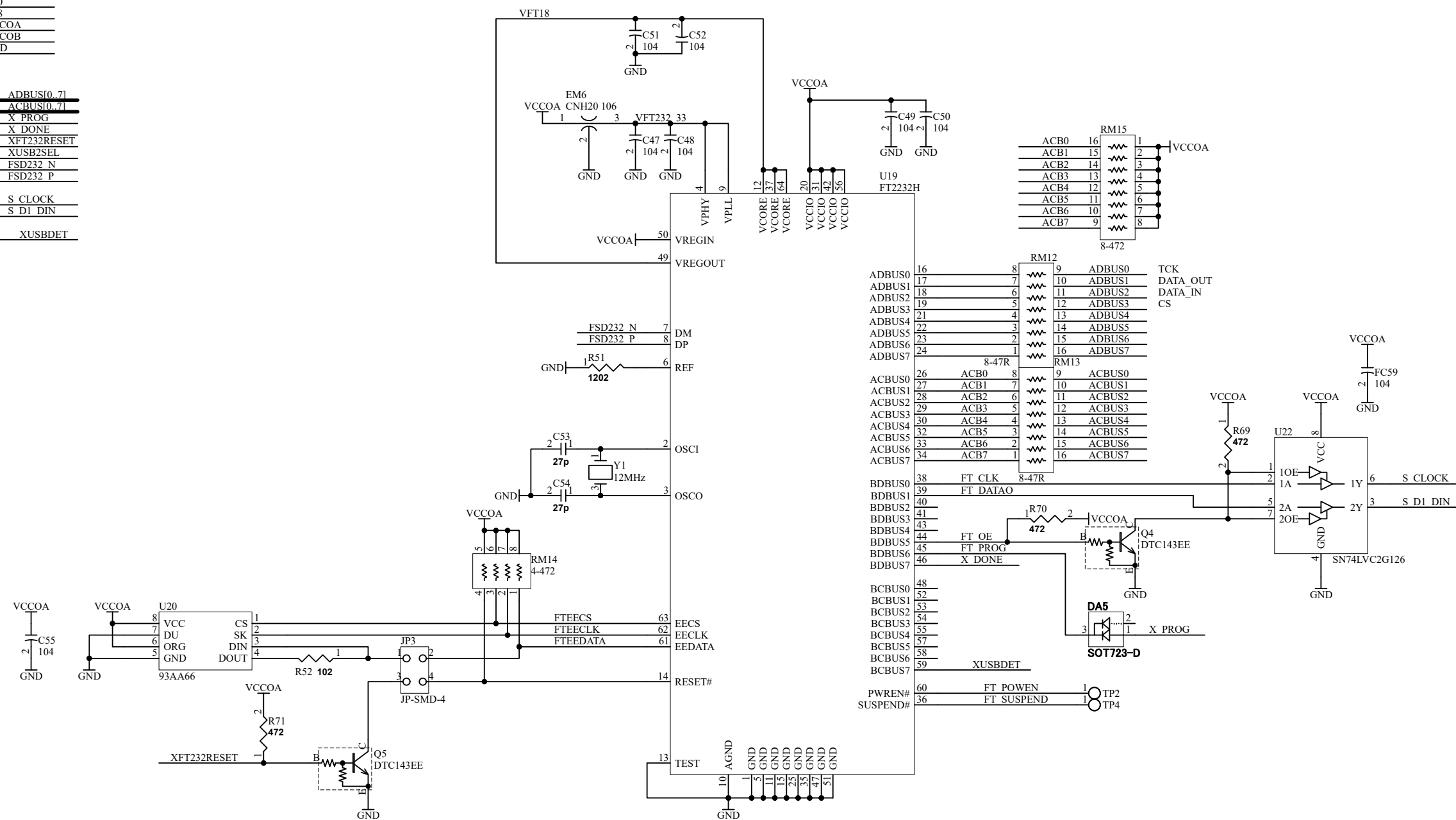
EDX013R1-SCH-C.pdf

HUMANDATA
 HuMANDATA LTD.
[www.hdl.co.jp/ \(Japan\)](http://www.hdl.co.jp/)
[www2.hdl.co.jp/en/ \(Global\)](http://www2.hdl.co.jp/en/ (Global))

DSN:	TITLE: FT601+ Spartan-7 USB-FPGA Board
DOC. No:	EDX-013
FILE: USB.sch	DATE: 2023/06/07 17:30:48
Sheet: 6 / 8	C

V33CN	V33CN
V50CN	V50CN
V50USB	V50USB
V33A	V33A
VIO(B)	VIO(B)
V10	V10
V18	V18
VCCOA	VCCOA
VCCOB	VCCOB
GND	GND

ADBUS[0..7]	ADBUS[0..7]
ACBUS[0..7]	ACBUS[0..7]
X_PROG	X_PROG
X_DONE	X_DONE
XFT232RESET	XFT232RESET
XUSB2SEL	XUSB2SEL
FSD232_N	FSD232_N
FSD232_P	FSD232_P
S_CLOCK	S_CLOCK
S_D1_DIN	S_D1_DIN
XUSBDET	XUSBDET



V33CN	V33CN
V50CN	V50CN
V50USB	V50USB
V33A	V33A
VIO(B)	VIO(B)
V10	V10
V18	V18
VCCOA	VCCOA
VCCOB	VCCOB
GND	GND

STXEN	STXEN
SRXFN	SRXFN
SWRN	SWRN
SRDN	SRDN
SOEN	SOEN
SSIWUN	SSIWUN
SBE[0..3]	SBE[0..3]
SDATA[0..31]	SDATA[0..31]
XFT601RESET	XFT601RESET
SCLK2	SCLK2
SGPIO0	SGPIO0
SGPIO1	SGPIO1
XUSB2SEL JP	XUSB2SEL JP

FSD600 N	FSD600 N
FSD600 P	FSD600 P
SST N	SST N
SST P	SST P
SSR N	SSR N
SSR P	SSR P

