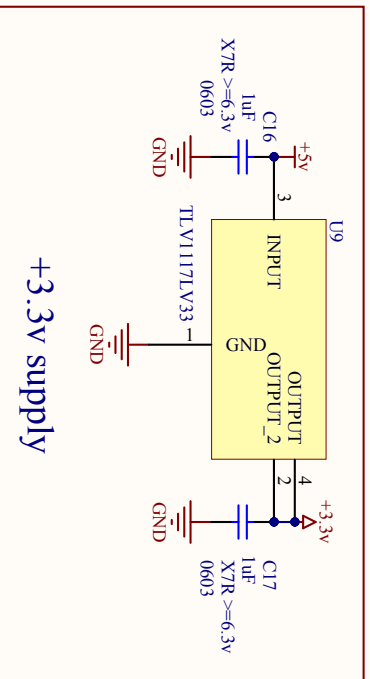
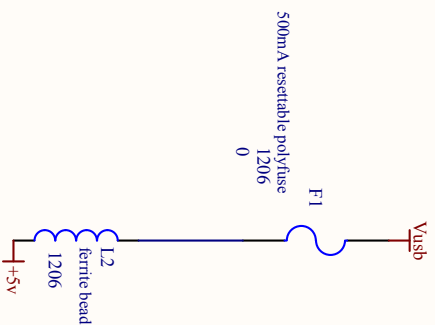
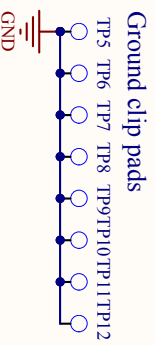


+1.2v supply

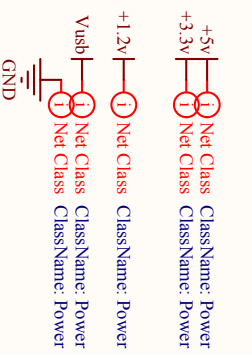
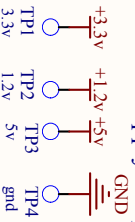


+3.3v supply



Ground clip pads

Power supply test points, top side



+5v Net Class ClassName: Power

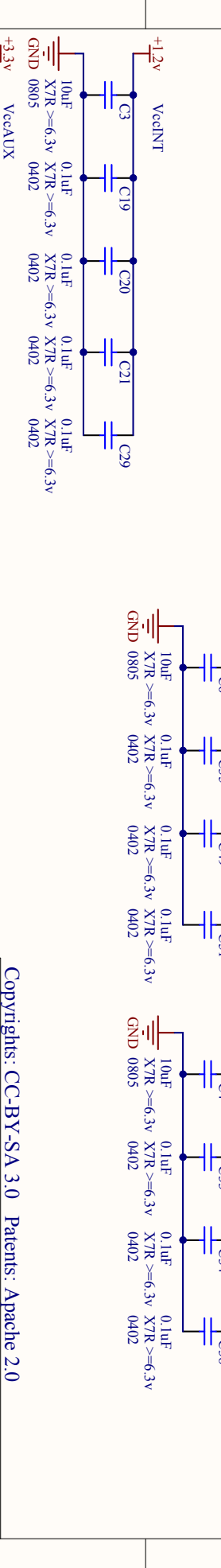
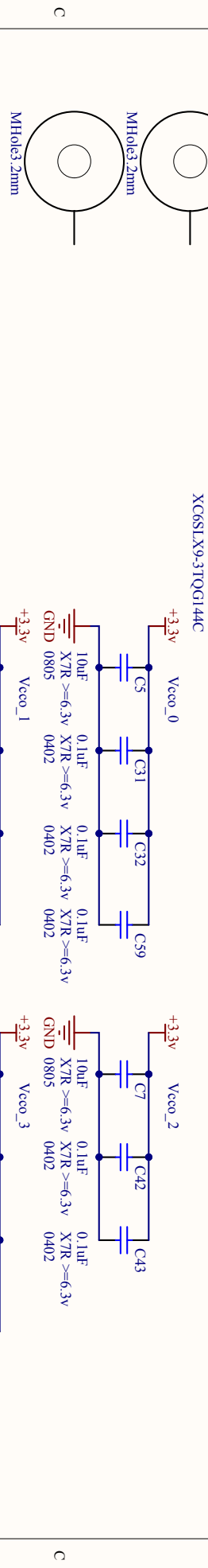
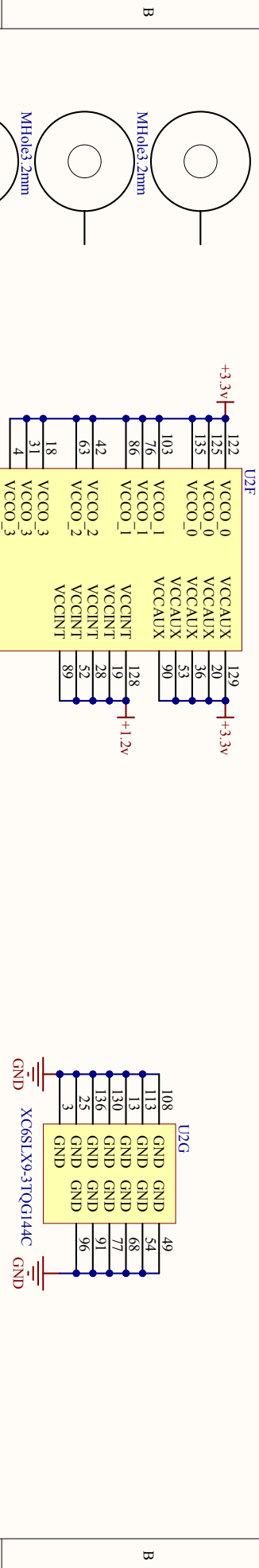
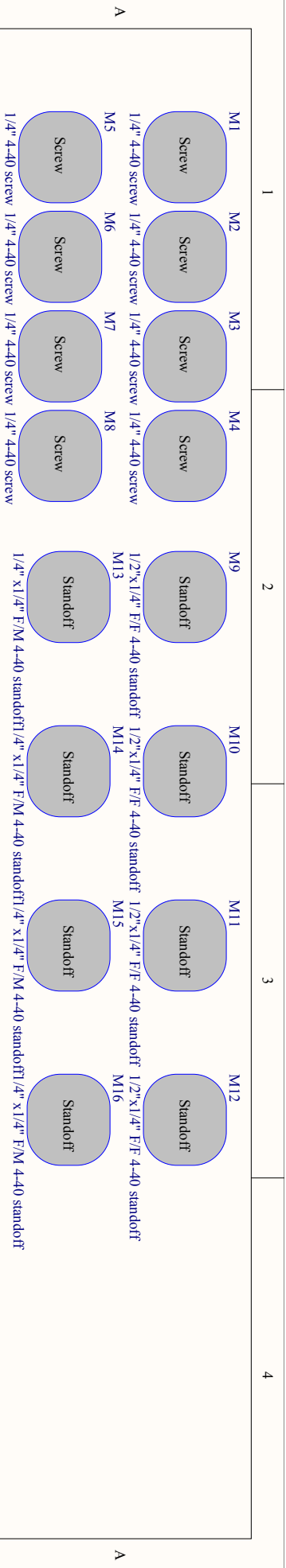
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+1.2v Net Class ClassName: Power

Vusb Net Class ClassName: Power

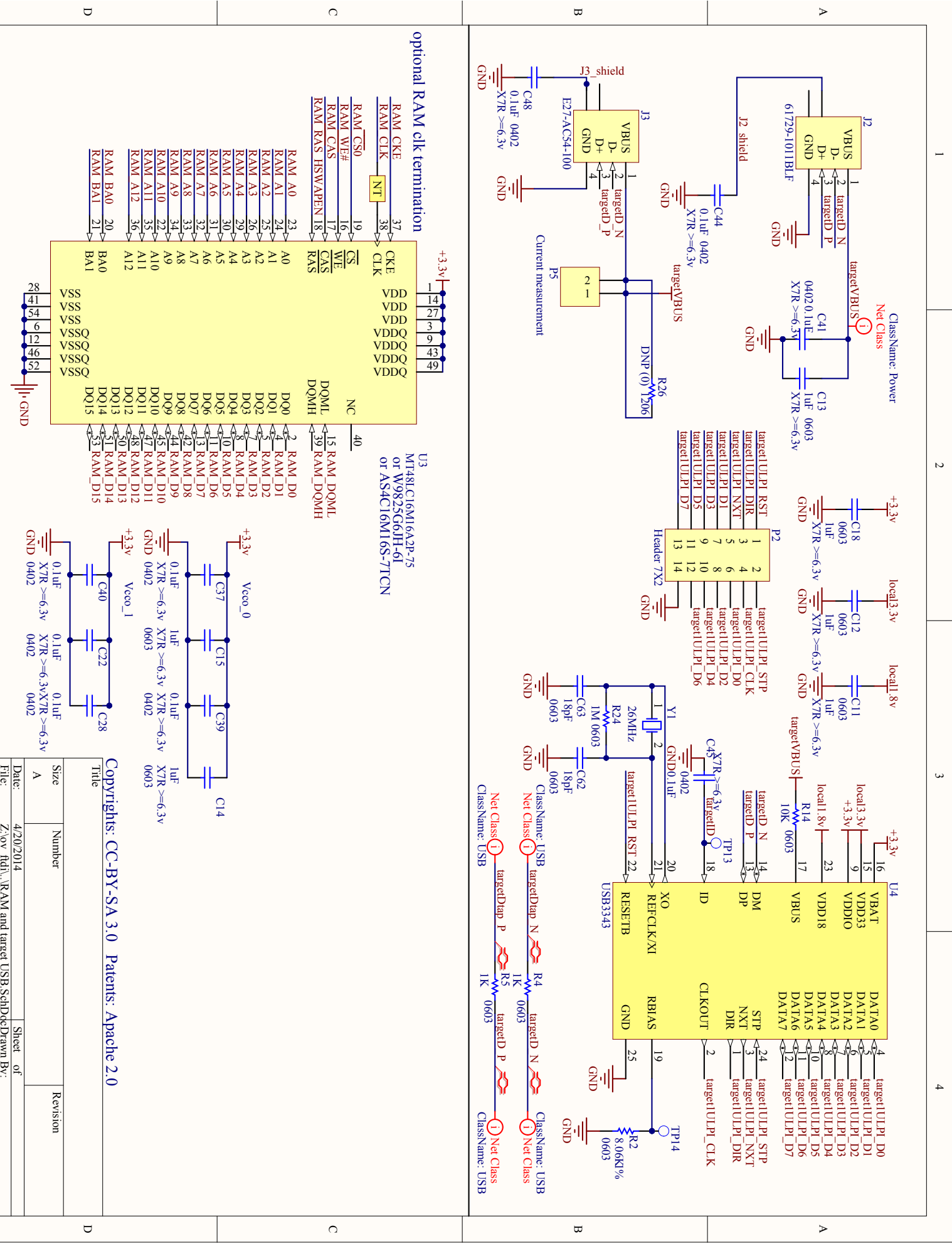
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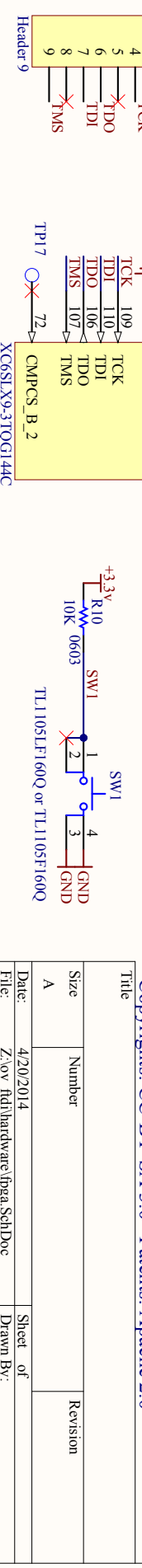
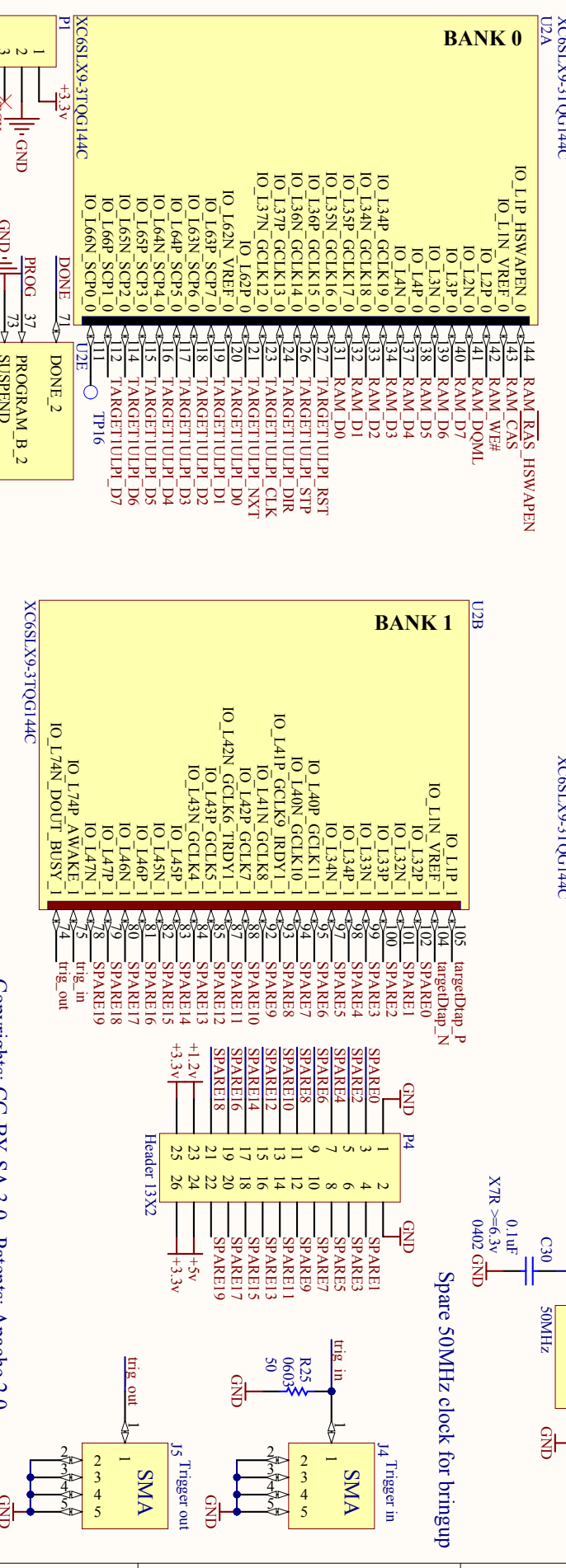
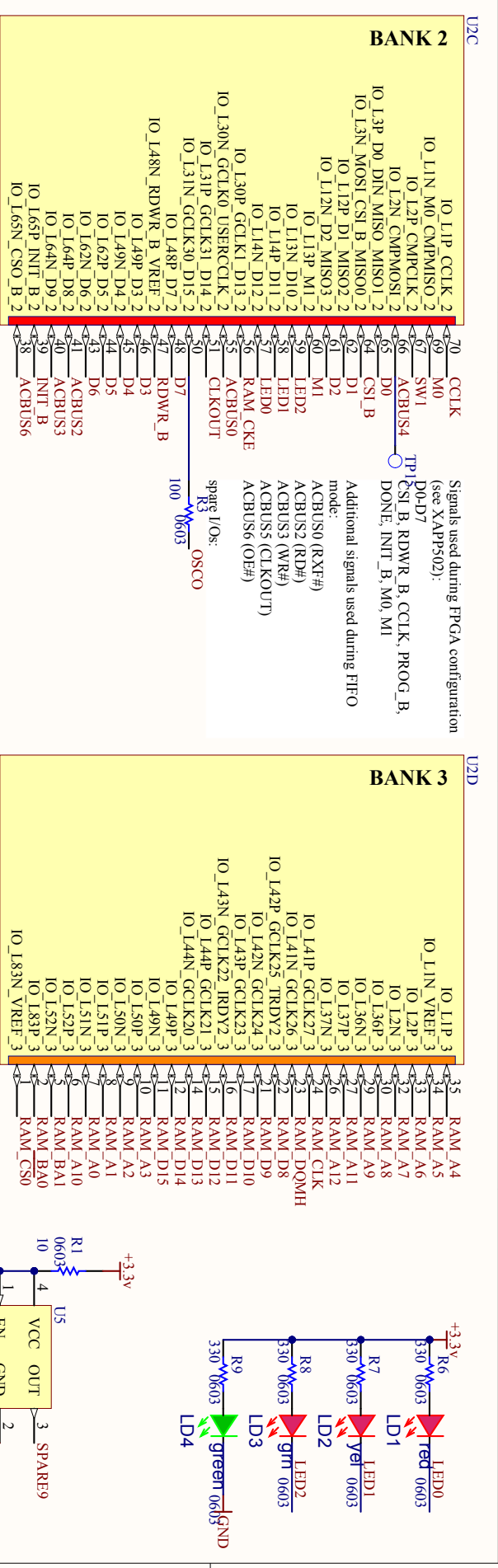
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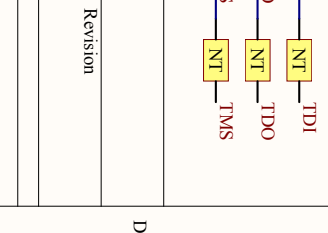
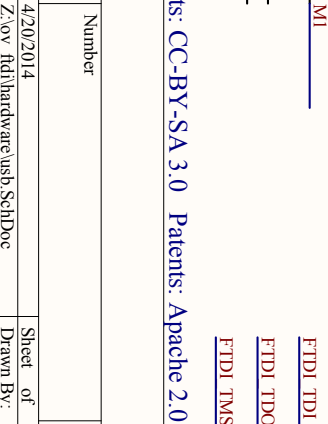
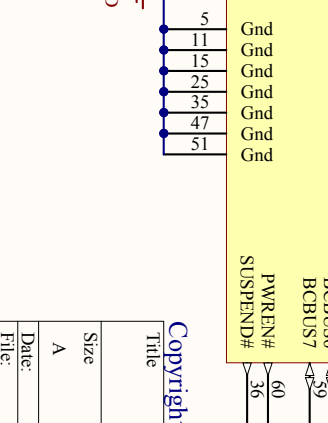
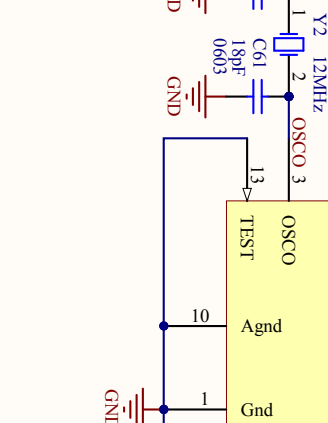
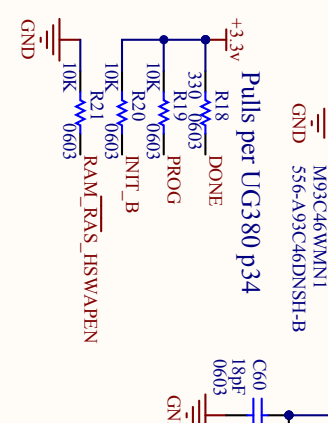
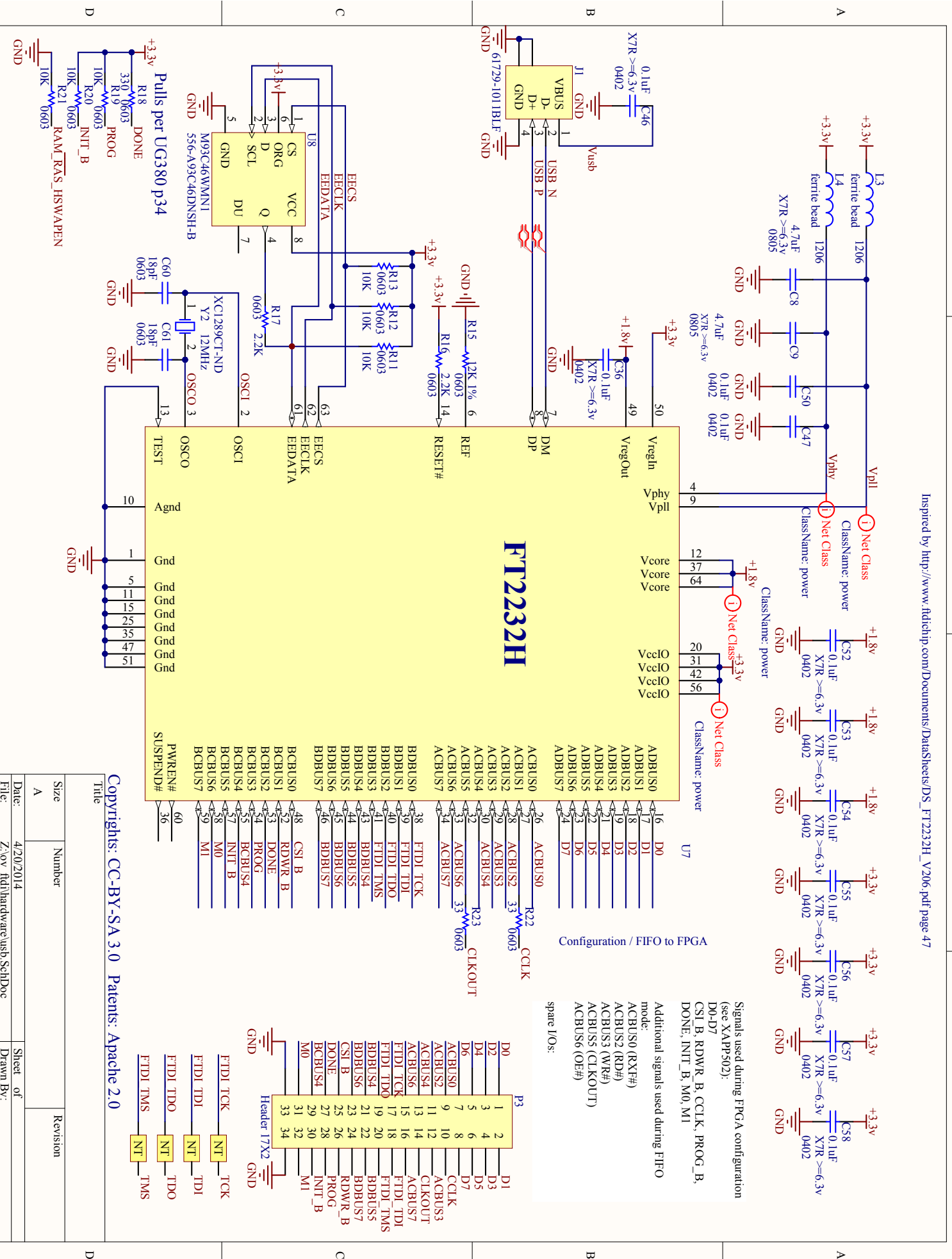
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Title	Number	Revision
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Date: 4/20/2014
 File: Z:\ov fdt\hardware\usb SchDoc
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Size	Number	Revision
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Quantity	Designator	VALUE	Comment	Footprint	DigiKey PN	Mouser PN	Notes
7	C1-C7	10uF 0805 X5R >=6.3v	Ceramic cap	0805	587-1300-1-ND	81-GRM21BR61A106KE19	
3	C8-C10	4.7uF 0805 X7R >=6.3v	Ceramic cap	0805	1276-1065-1-ND	81-GRM21BR61C475KA8K	
8	C11-C18	1uF 0603 X7R >=6.3v	Ceramic cap	0603	587-1242-1-ND	80-C0603C105K9P	
41	C19-C59	0.1uF 0402 X7R >=6.3v	Ceramic cap	0402	587-1227-1-ND	80-C0402C104M8P	Might be able to use 0603 parts here
4	C60-C63	18pF 0603 X7R >=6.3v	Ceramic cap	0603	399-1052-1-ND	80-C0603C180J5G	
1	F1	0	500mA resettable polyfuse	1206	F2112CT-ND	576-1206L050YR	
2	J1, J2	61729-1011BLF	USB B jack	PTH	609-3657-ND	61729-1011BLF	
1	J3	E27-AC54-100	USB A jack	PTH	UE27AC54100-ND	E27-AC54-100	
1	L1	4.7uH	3x3mm power inductor	3x3mm	SRN3015-4R7MCT-ND	652-SRN3015-4R7M	Needs hot air to solder
4	L2-L5	0	ferrite bead	1206	240-2410-1-ND	875-HI1206P121R-10	
1	LD1	red	LED	0603	475-3016-1-ND	78-VLMS1300-GS08	
1	LD2	yellow	LED	0603	475-2558-1-ND	78-VLMY1300-GS08	
2	LD3, LD4	green	LED	0603	475-1409-1-ND	78-VLMTG1300-GS08	
8	M1-M8	1/4 4-40 screw	case part	mech	H703-ND	534-9900	only necessary for case
4	M9-M12	1/2x1/4" F/F 4-40 standoff	case part	mech	2203K-ND	761-2104-440-AL-7	only necessary for case
4	M13-M16	1/4 x1/4" F/M 4-40 standoff	case part	mech	8714K-ND	534-8714	only necessary for case
1	R1	10	Resistor	0603	RMCF0603JT10R0CT-ND	71-CRCW0603-10-E3	
1	R2	8.06K	Resistor	0603	311-8.06KHRCT-ND	660-RK73H1JTTDD8061F	
1	R3	100	Resistor	0603	RMCF0603JT100RCT-ND	71-CRCW0603-100-E3	
2	R4, R5	1K	Resistor	0603	RMCF0603JT1K00CT-ND	71-CRCW0603-1.0K-E3	
5	R6-R9, R18	330	Resistor	0603	RMCF0603JT330RCT-ND	71-CRCW0603-330-E3	
8	R10-R14, R19-R21	10K	Resistor	0603	P10KGCT-ND	71-CRCW0603-10K-E3	
1	R15	12K 1%	Resistor	0603	P12.0KHCT-ND	71-CRCW0603-12K-E3	
2	R16, R17	2.2K	Resistor	0603	P2.2KGCT-ND	71-CRCW0603-2.2K-E3	
2	R22, R23	33	Resistor	0603	RMCF0603JT33R0CT-ND	71-CRCW0603-33-E3	
1	R24	1M	Resistor	0603	RMCF0603JT1M00CT-ND	71-CRCW0603-1.0M-E3	
1	R25	50	Resistor	0603	RNCP0603FTD49R9CT-ND	71-CRCW0603-50-E3	
1	R26	DNP (0)	Resistor	1206			optional (for current measurement)
1	SW1 (option with case)	TL1105LF160Q	4pin button	PTH	EG2505-ND	612-TL1105LF	button with long stalk, for use with case
1	SW1 (option without case)	TL1105F160Q	4pin button	PTH	EG1827-ND	612-TL1105	button with short stalk, for use without case
1	U1	LM3670MF-1.2	1.2v switching regulator	SOT23-5AN	LM3670MF-1.2/NOPBCT-ND	926-LM3670MF12NOPB	
1	U2	XC6SLX9-3TQG144C	FPGA	QFP144	122-1747-ND		not available at Mouser
1	U3	AS4C16M16S-7TCN	RAM	TSOP2-54	1450-1003-ND	913-AS4C16M16S-7TCN	
1	U4	USB3343	ULPI PHY	QFN24	638-1116-1-ND	886-USB3343-CP-TR	
1	U5	50MHz	ASEMB 3.2x2.5 oscillator	DNP			not used
1	U7	FT2232H	USB FIFO	QFP64	768-1024-1-ND	895-FT2232HL	
1	U8	M93C46WMN1	EEPROM	SOP8_N	AT93C46DN-SH-TCT-ND	511-M93C46-WMN6TP	
1	U9	TLV1117LV33	3.3v LDO	SOT223-4	296-28778-1-ND	595-TLV1117LV33DCYR	
1	Y1	26 MHz	26MHz	HC49/US	887-1069-1-ND	774-ATS260BSM-1E	
1	Y2	12 MHz	12MHz	HC49/US	887-2414-1-ND	774-ATS120BSM-1	