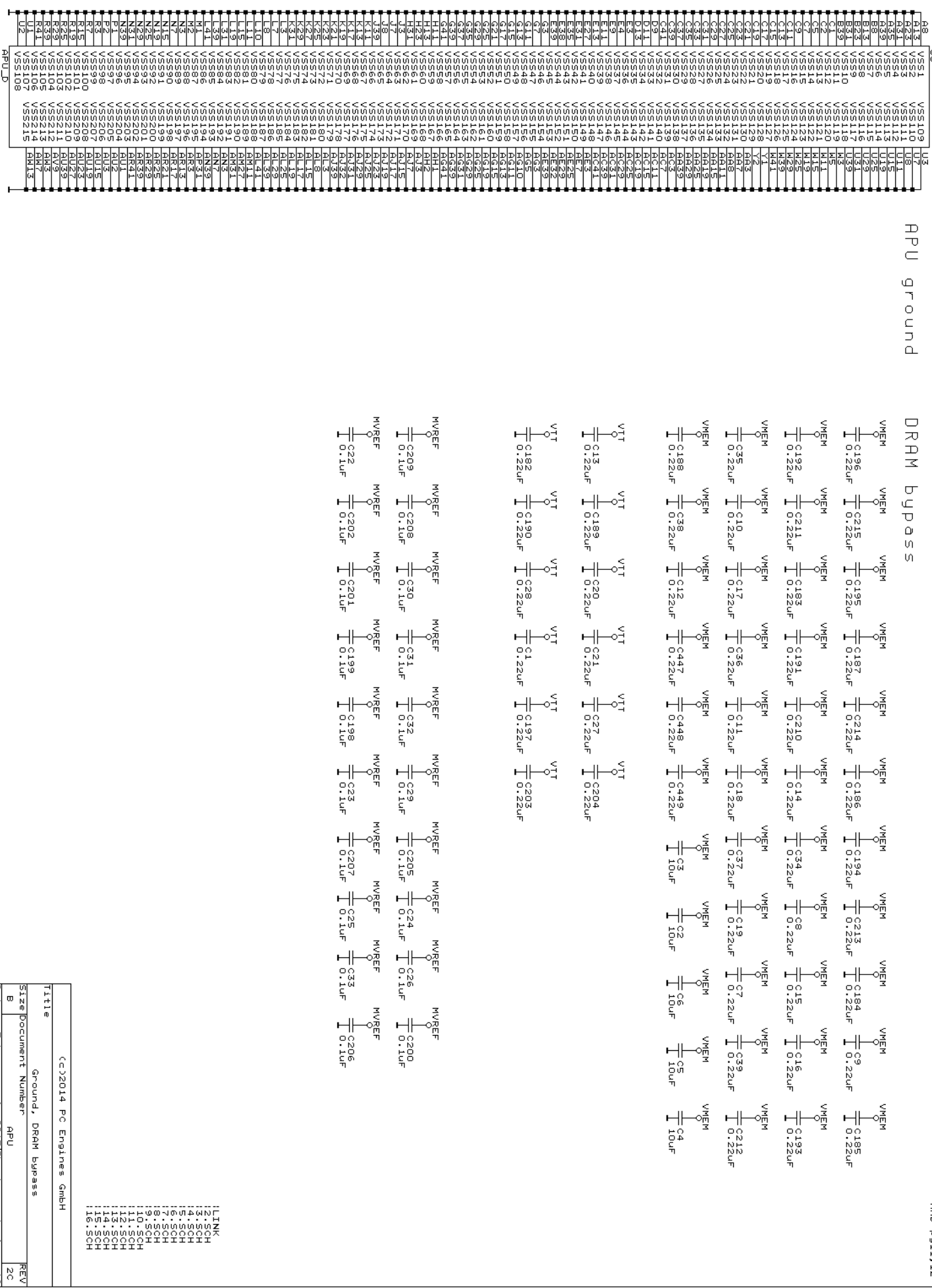


APU ground

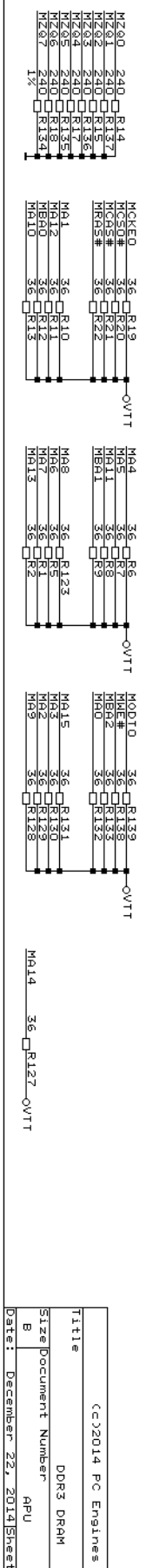
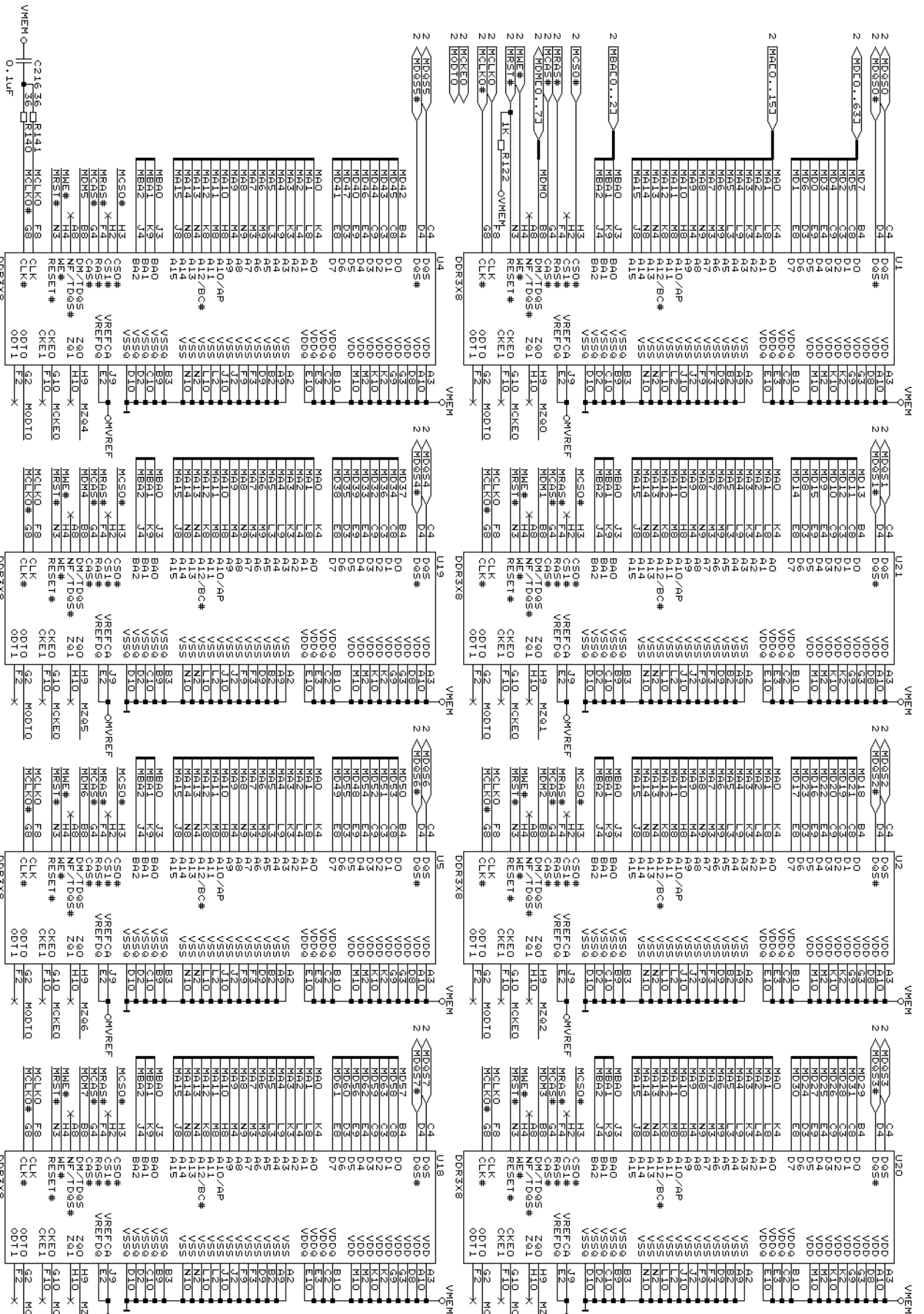
DRAM bypass



- 16.5SCH
- 14.5SCH
- 11.5SCH
- 11.5SCH
- 11.5SCH
- 9.5SCH
- 8.5SCH
- 7.5SCH
- 5.5SCH
- 4.5SCH
- 3.5SCH
- 2.5SCH
- 1.5SCH
- LTNK

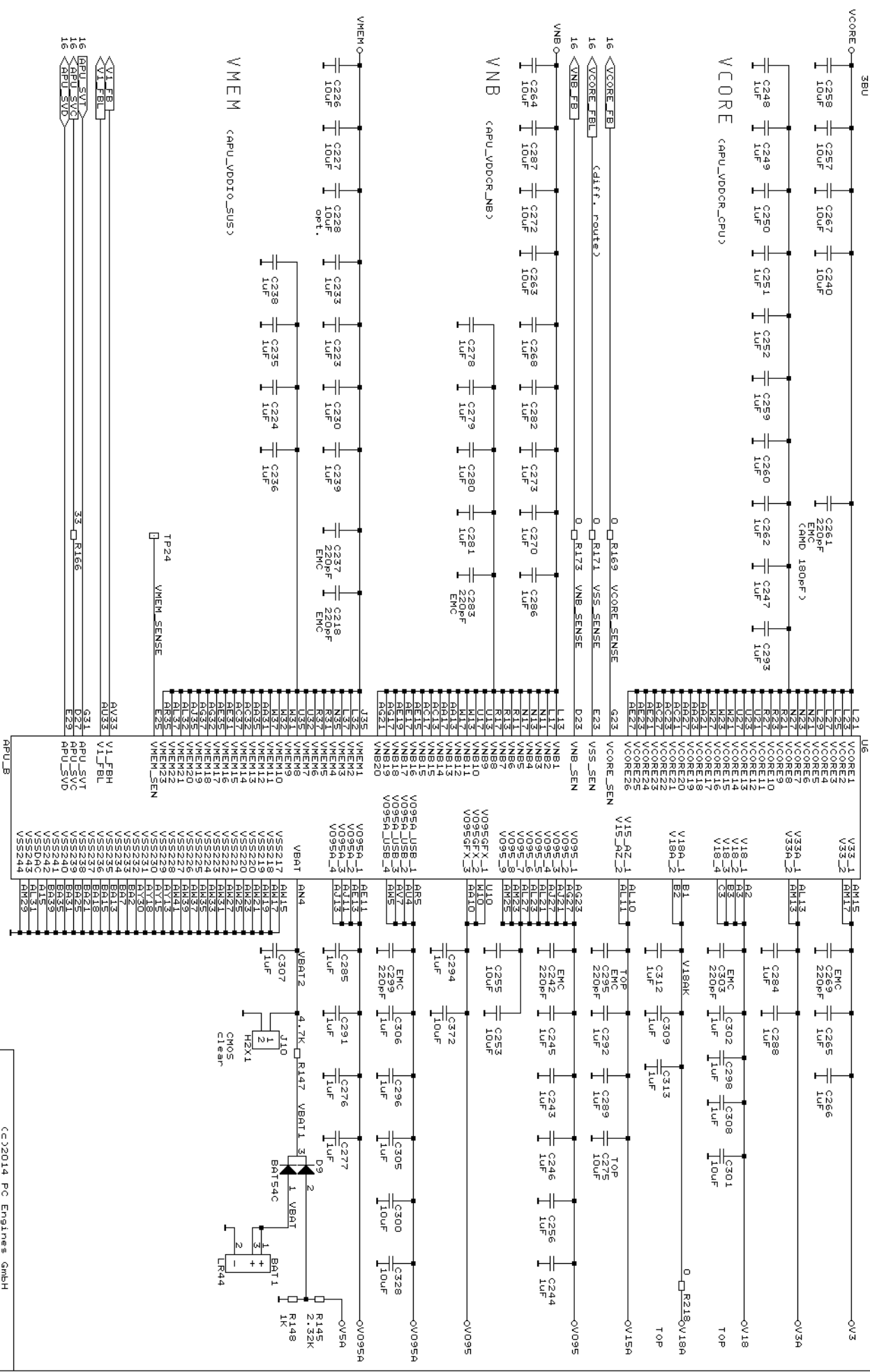
Title		Ground, DRAM Bypass	
Size/Document Number		APU	
Date:		February 4, 2015/Sheet 1 of 16	
REV		2C	

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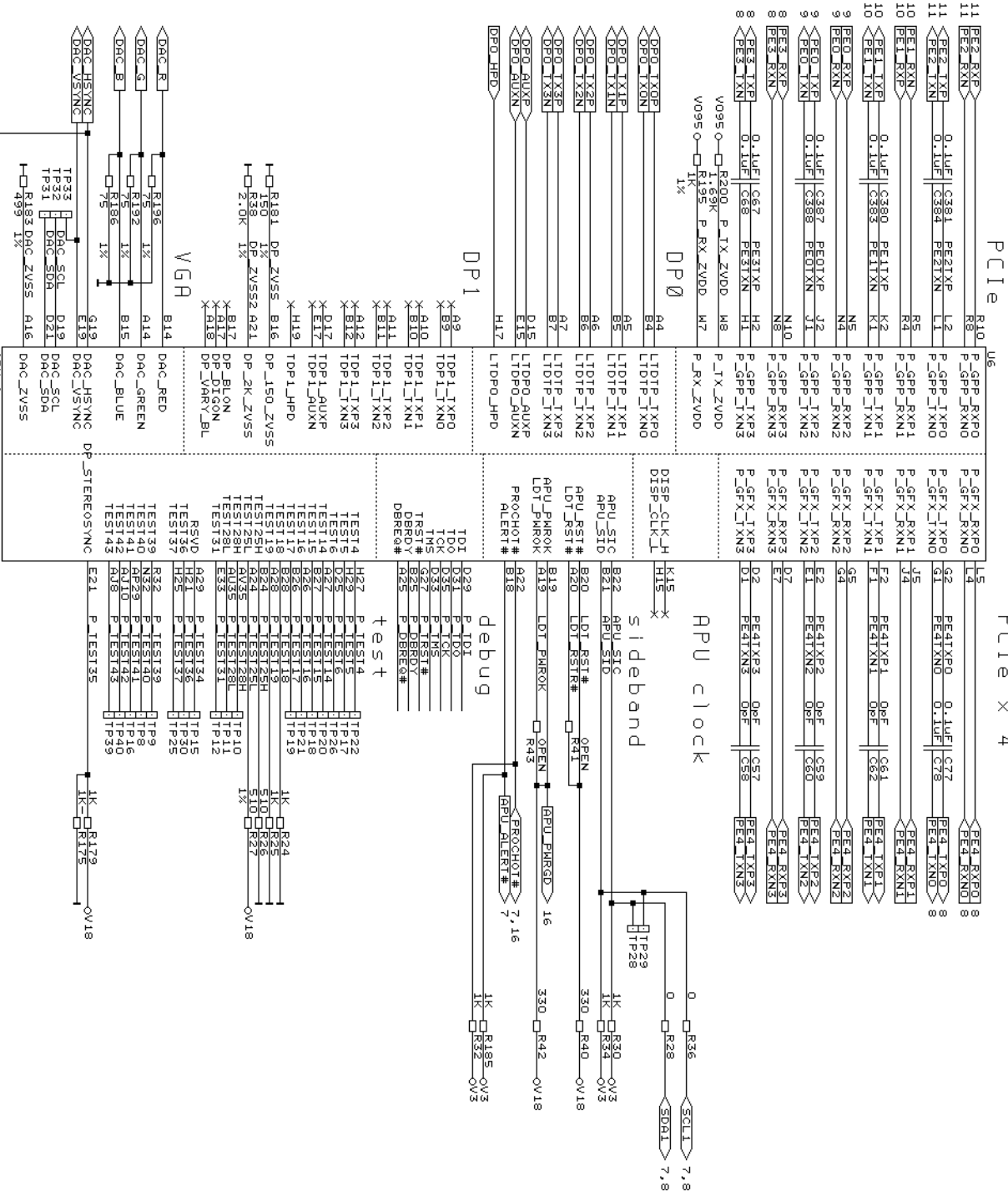
Title	(C)2014 PC Engines GmbH
Size/Document Number	DDR3 DRAM
APU	REV 2C
Date	December 22, 2014 Sheet 3 of 16

APU power



Title		APU power	
Size/Document Number		APU	
Date: February 4, 2015		Sheet	4 of 16
REV		2C	

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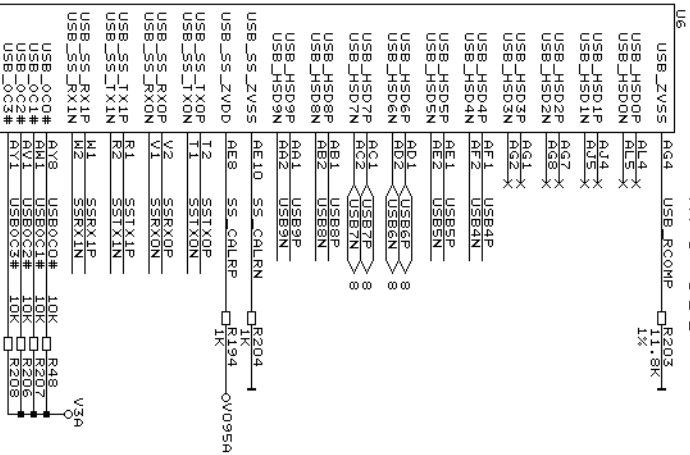


strap L = disable HDMI audio

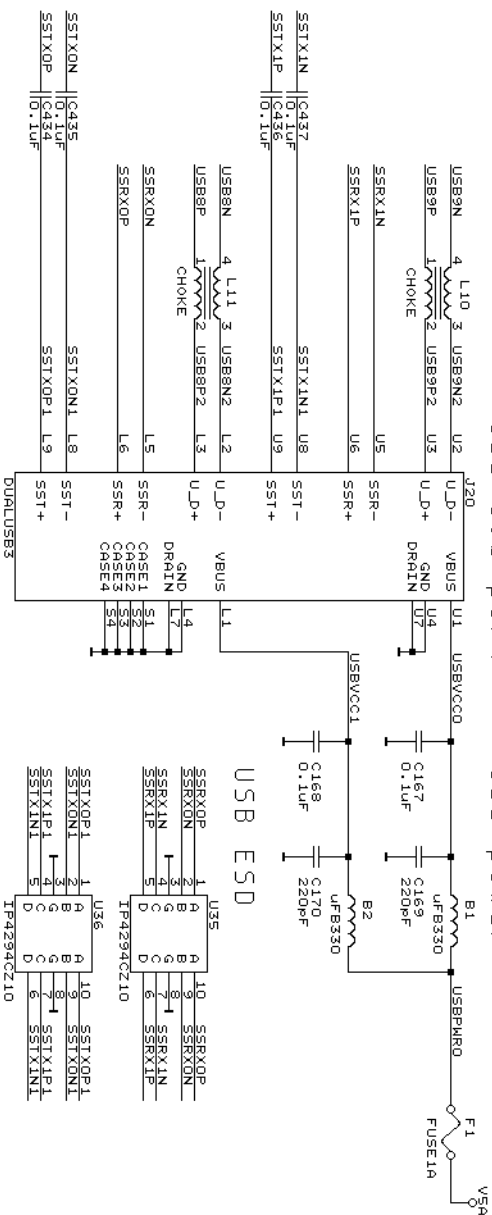
AMD embedded probe header

Title		APU PCIe / display / test	
Size/Document Number		APU	
Date:	January 8, 2015	Sheet	5 of 16

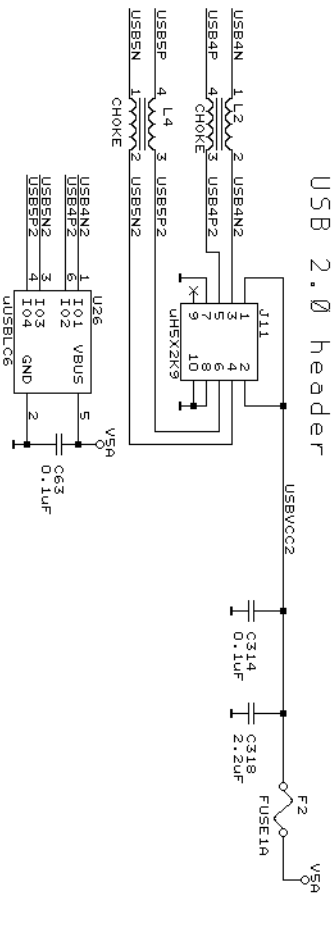
APU USB



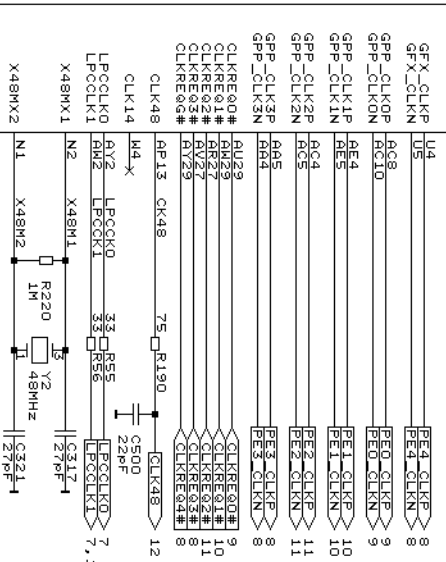
USB 3.0 port



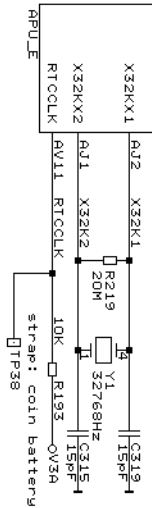
USB 2.0 header



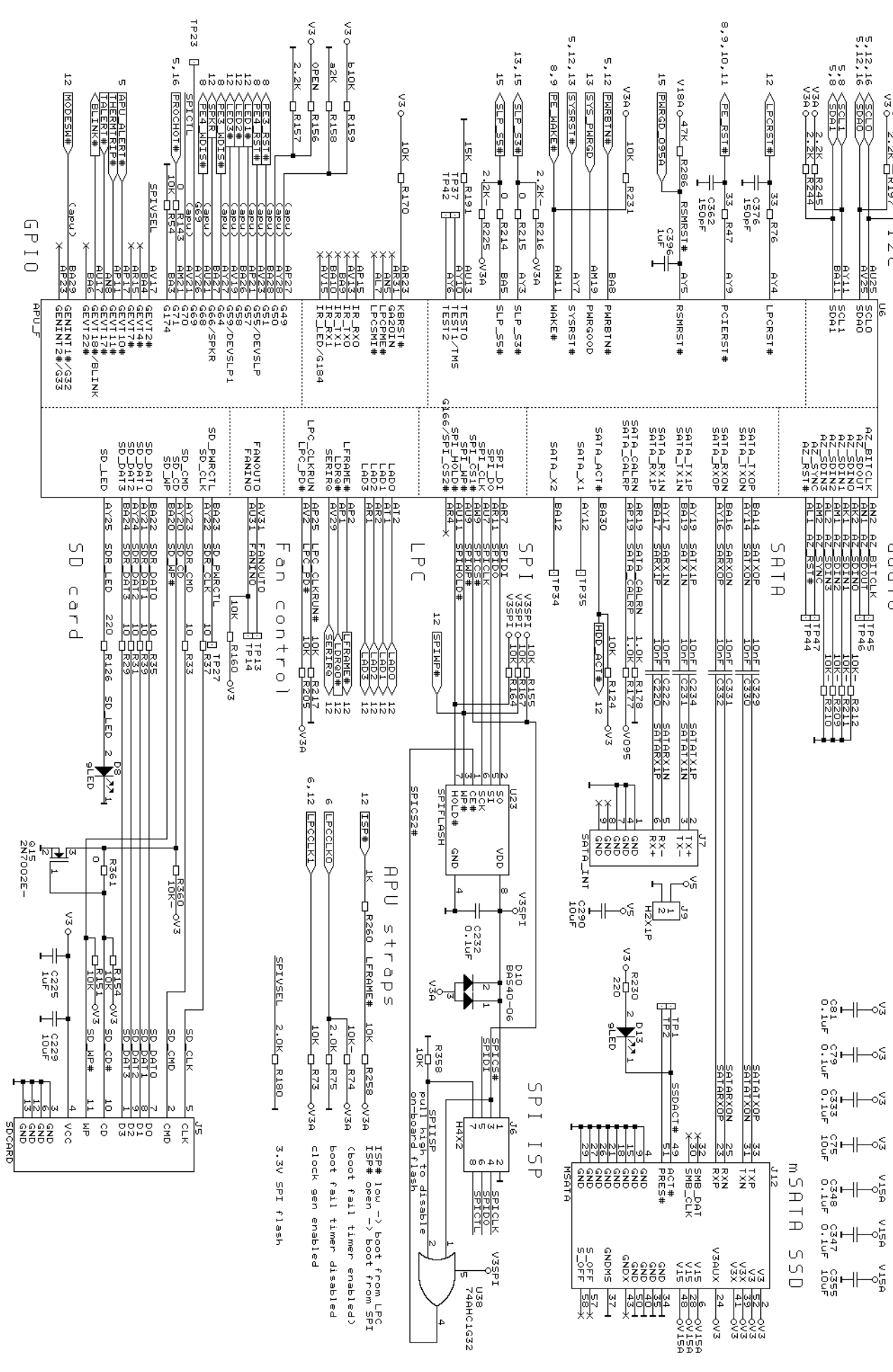
APU clock



RTC



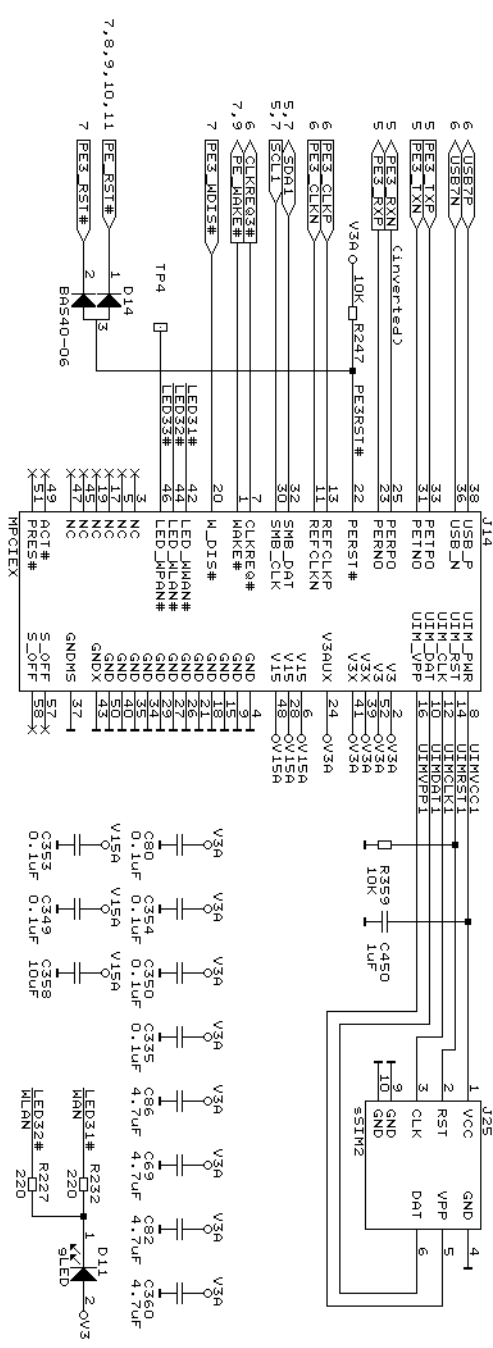
Title	(C)2014 PC Engines GmbH
Size	USB, clock
Document Number	APU
Date	December 2, 2015
Sheet	6 of 16



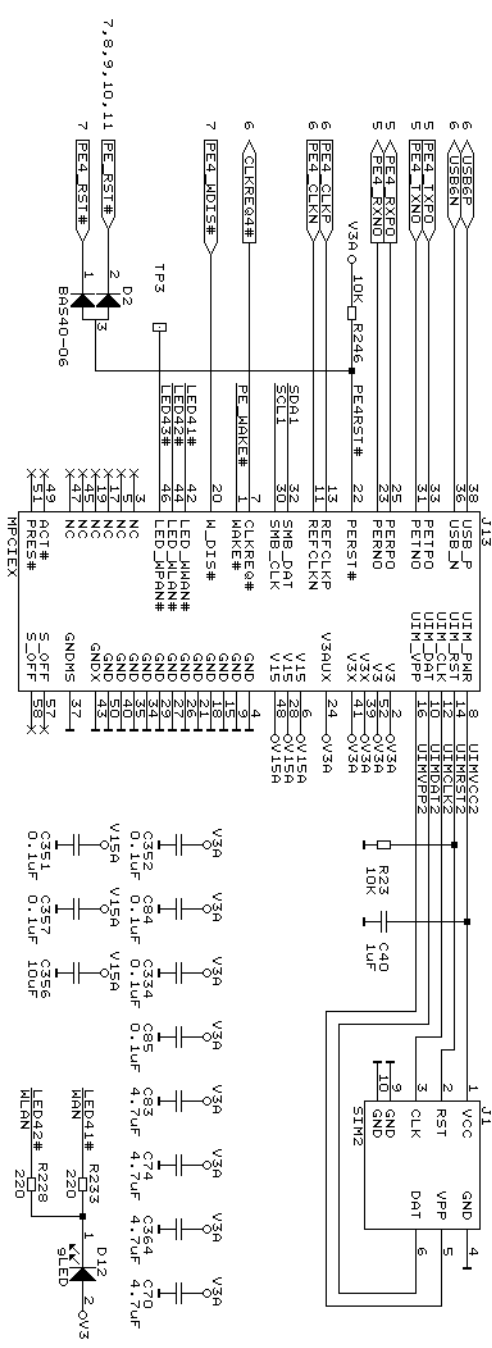
Component	Value	Location
R188	10K	U6
R197	10K	U6
R245	10K	U6
R244	10K	U6
C376	100pF	U6
C362	100pF	U6
C396	100pF	U6
R194	10K	U6
R195	10K	U6
R196	10K	U6
R197	10K	U6
R212	10K	U6
R213	10K	U6
R214	10K	U6
R215	10K	U6
R225	10K	U6
R226	10K	U6
R227	10K	U6
R228	10K	U6
R205	10K	U6
R206	10K	U6
R160	10K	U6
R161	10K	U6
R231	10K	U6
R232	10K	U6
R233	10K	U6

Mini PCI Express

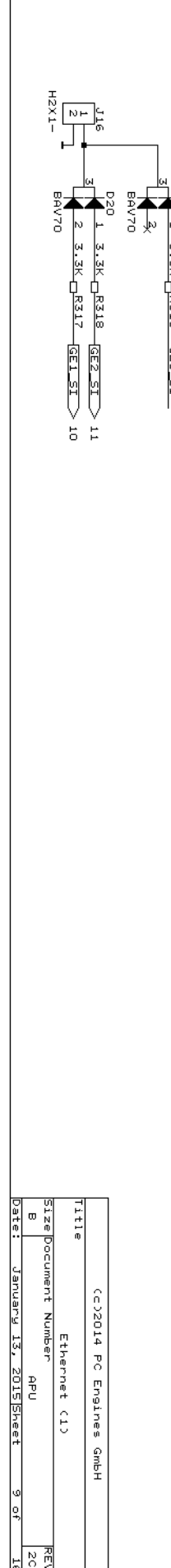
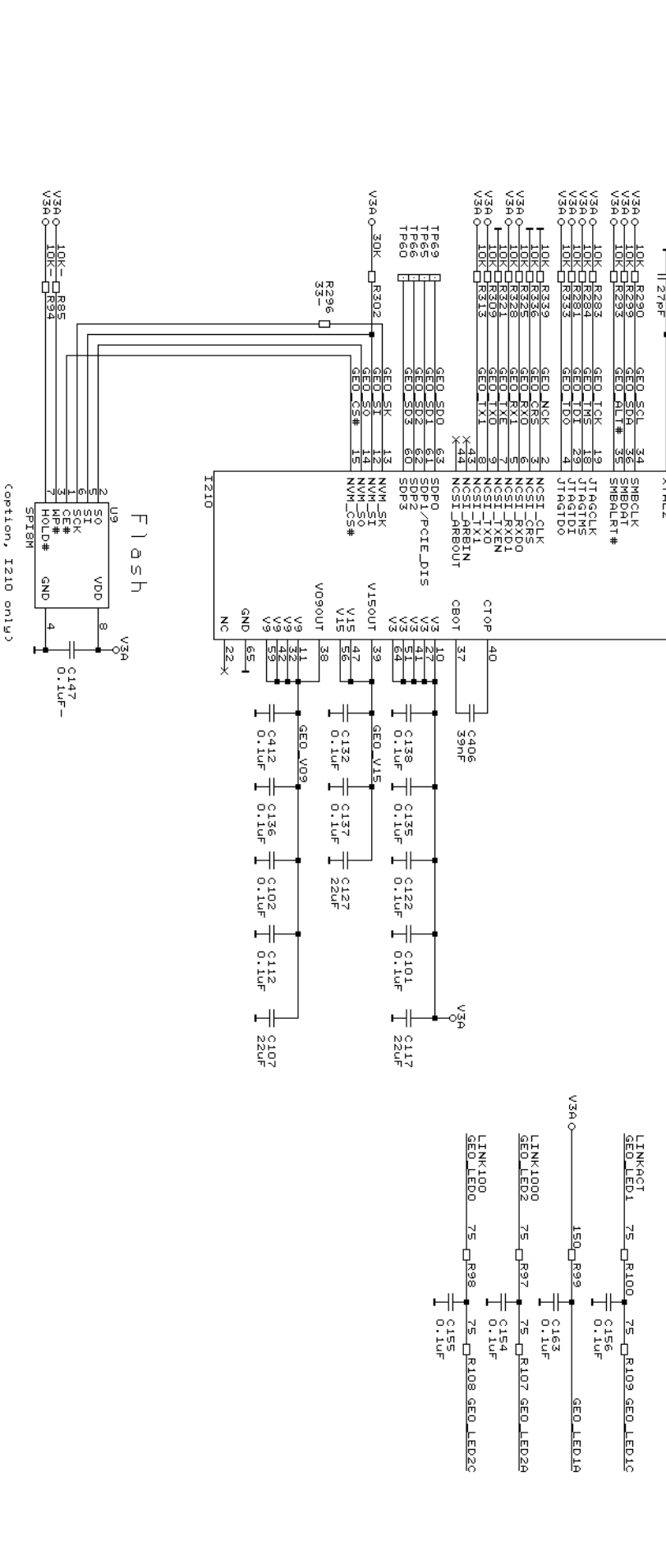
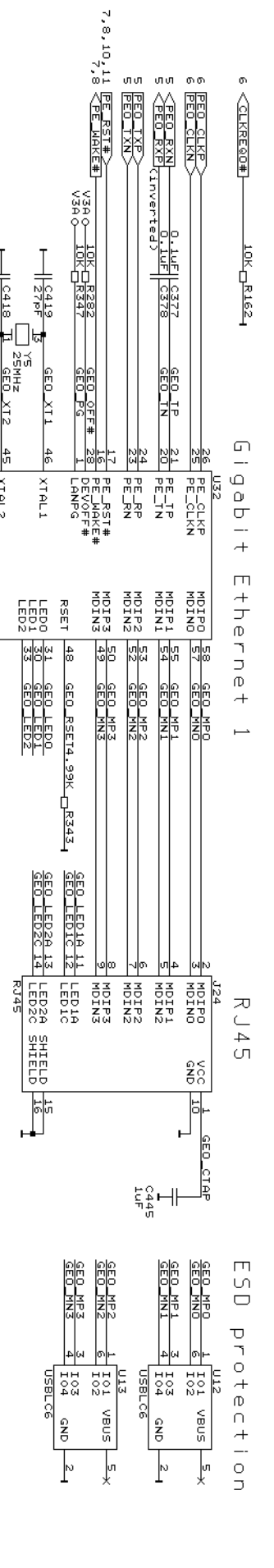
SIM (option 5)



SIM

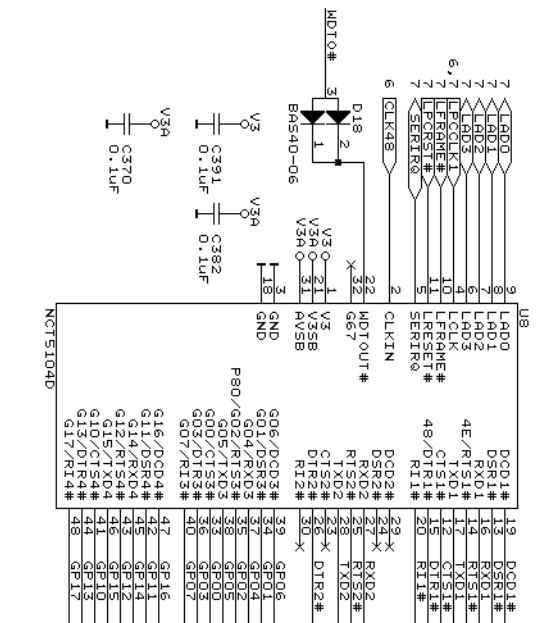


Title		C:\2014 PC Engines GmbH	
Size		miniPCI express	
Document Number		APU	
Date:		August 21, 2015	
REV		2C	
Page		8 of 16	

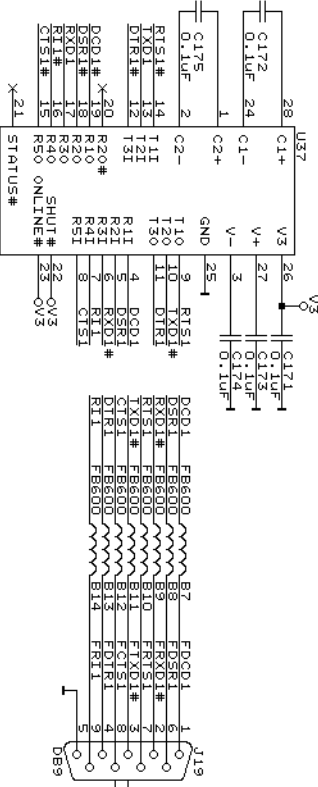


ESD protection

LPC UART

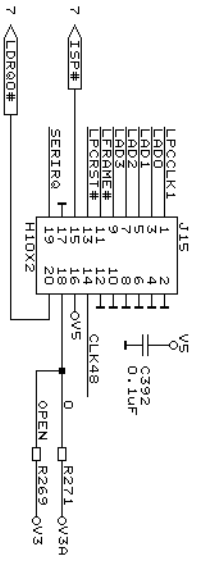


COM1

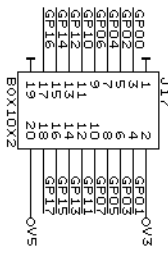


AMD p920

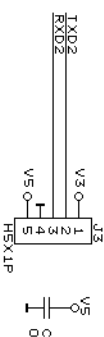
LPC expansion + ISP



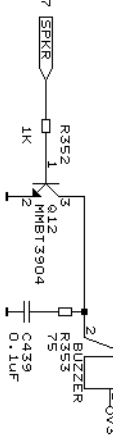
GPIO



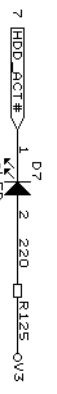
COM2



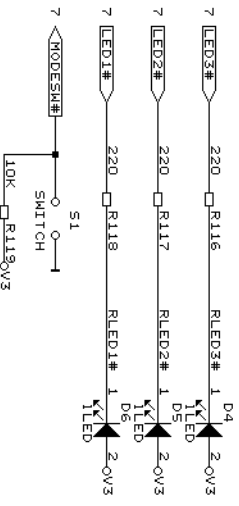
Buzzer



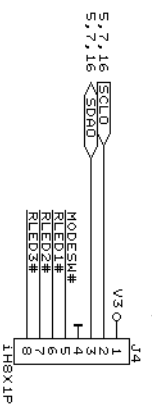
SATA activity LED



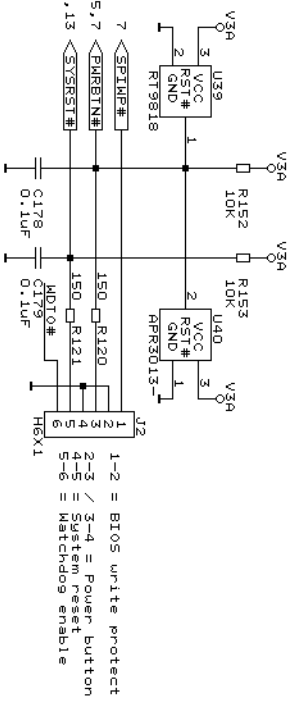
LED + switch



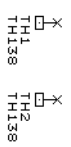
I2C option



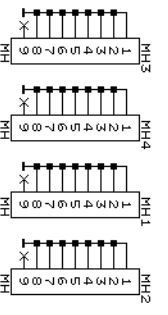
Power / reset / watchdog header



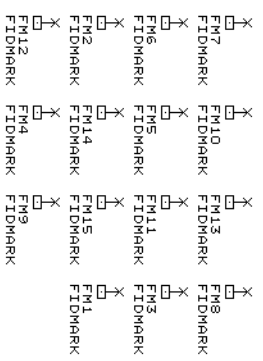
Heat spreader mounting



Mounting holes



Fiducial marks

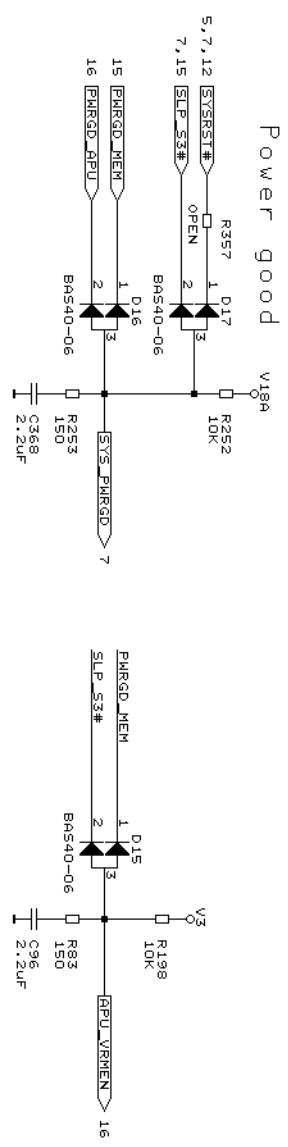


Title	LPC bus, LPC UART, front panel	
Size/Document Number	APU	REV 2C
Date:	December 8, 2015	Sheet 12 of 16

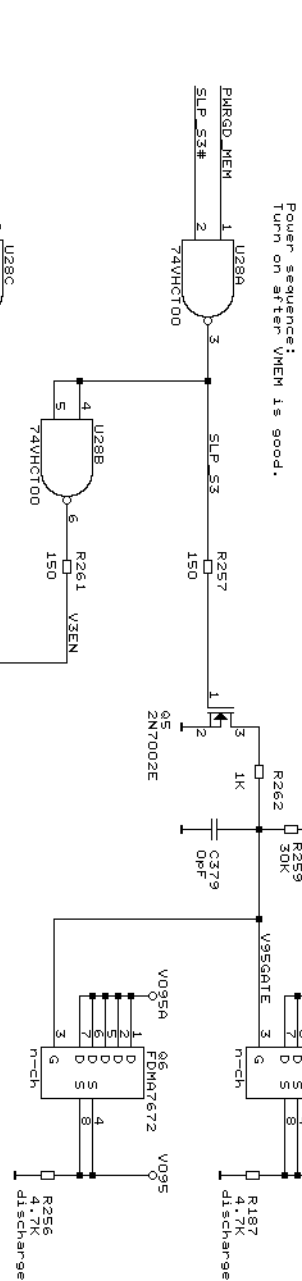
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VRM test points

V5A-O	TP570	V5-O	TP57
V3A-O	TP56	V3-O	TP55
V18A-O	TP49	V18-O	TP48
V15A-O	TP52	V15A-O	TP52
VMEM-O	TP41	VT-O	TP36
V095A-O	TP54	V095-O	TP53
VCORE-O	TP50	VNB-O	TP51



Power switch

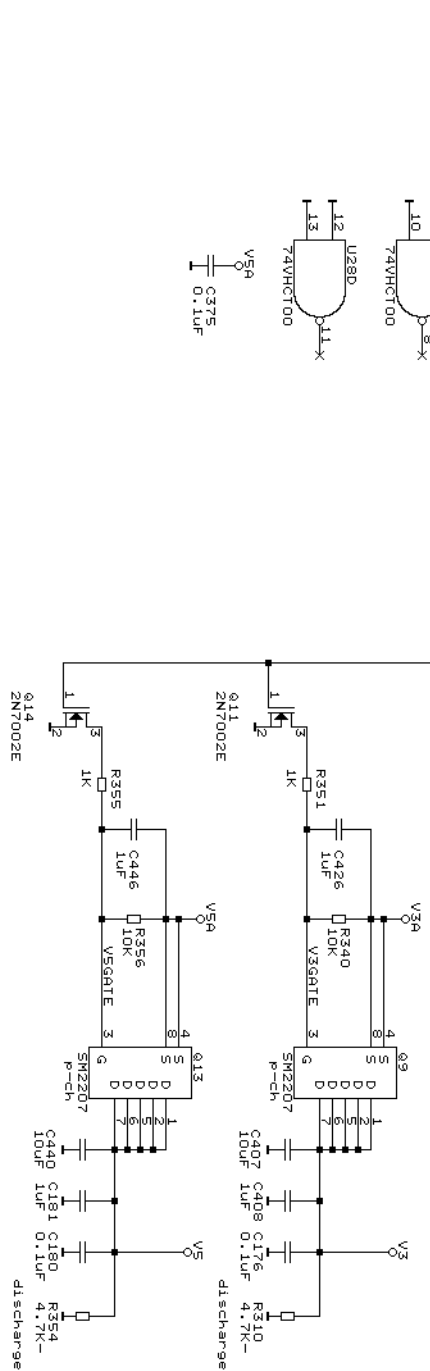


1.8V

0.95V

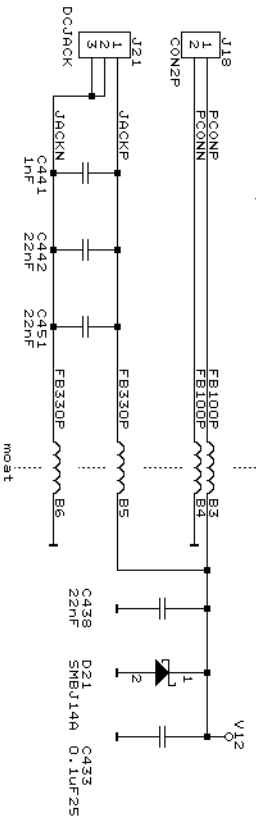
3.3V

5V

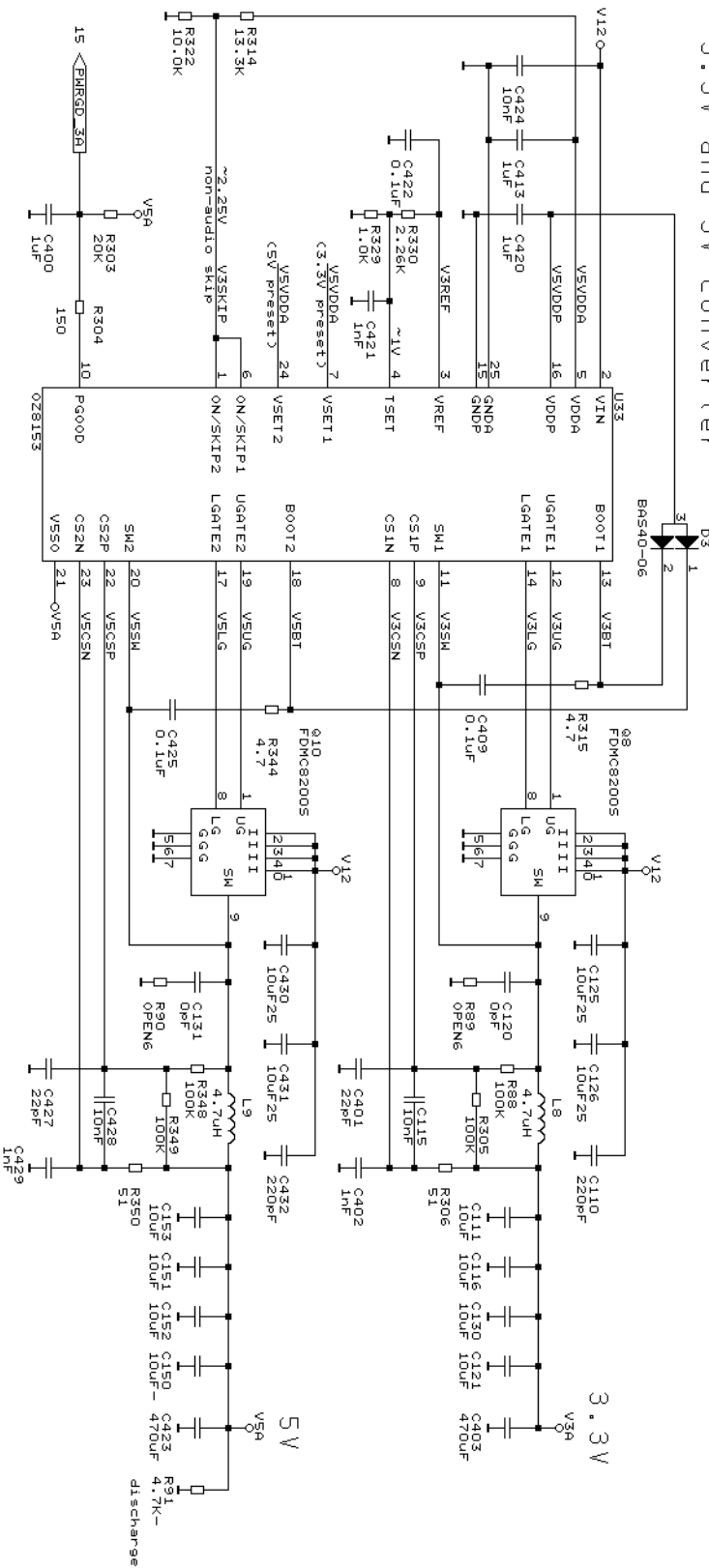


Title		power good, power switch	
Size/Document Number		APU	
REV		2C	
Date: February 5, 2015		Sheet 13 of 16	

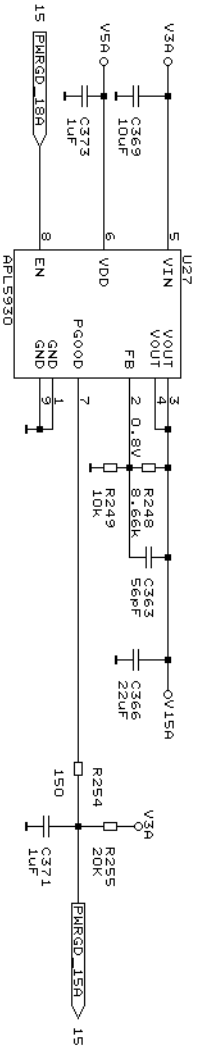
Power input +12V



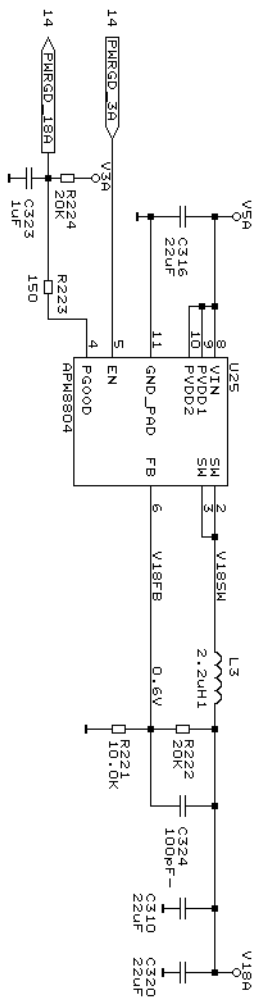
3.3V and 5V converter



3.3V -> 1.5V LDO (0.5A)



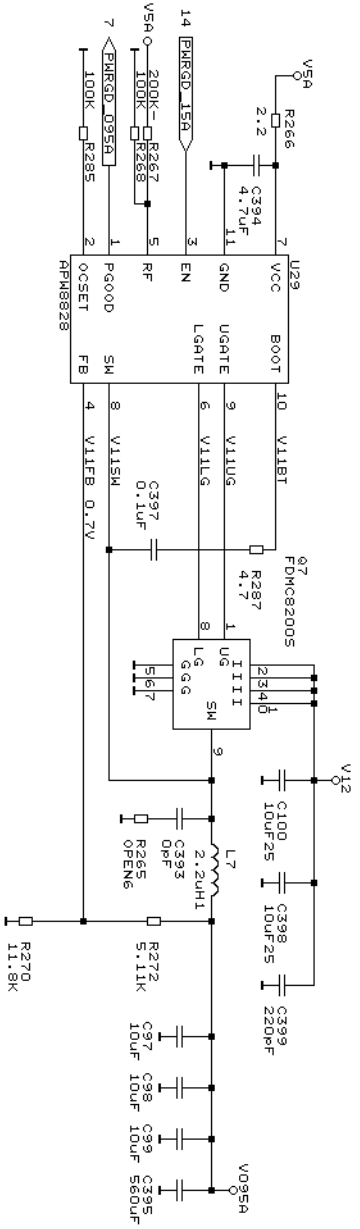
Title		AMD P922	
Size		AMD P920	
Date:		August 19, 2015	
Sheet		14 of 15	
Title		Power In, 3.3V, 5V, 1.5V	
Size		APU	
Date:		August 19, 2015	
Sheet		14 of 15	



1.8V, 2A

AMD P924

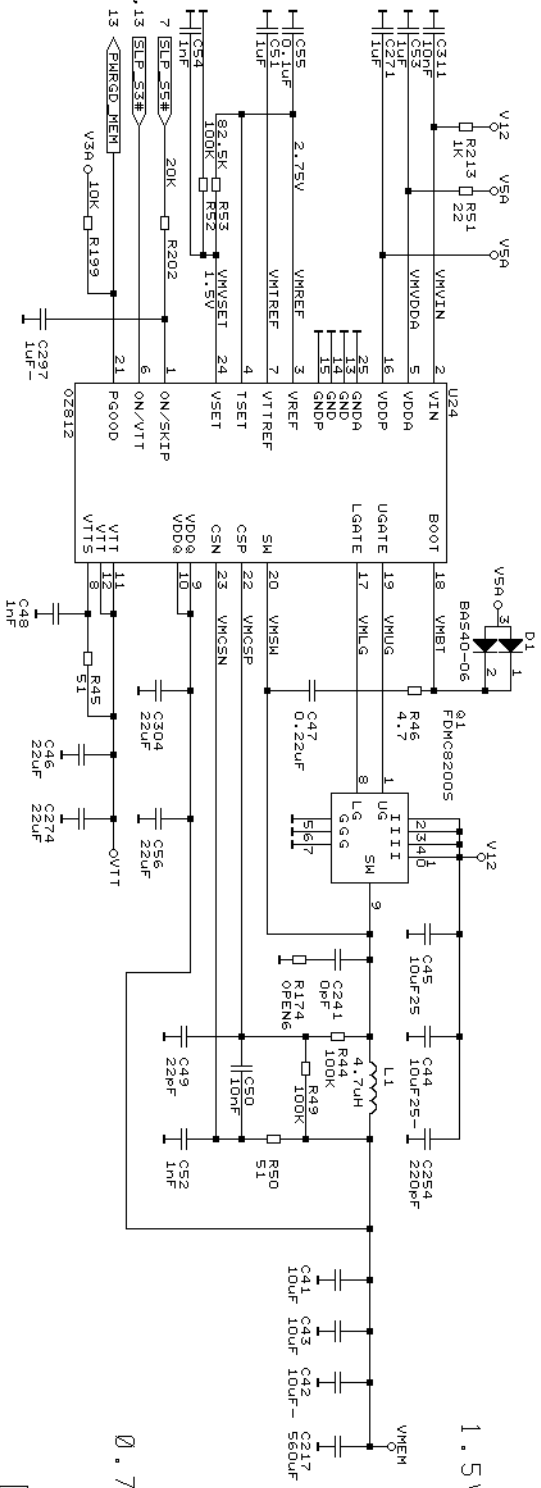
AMD P924



0.95V, 5A

AMD P921

VMEM converter and VTT LDO

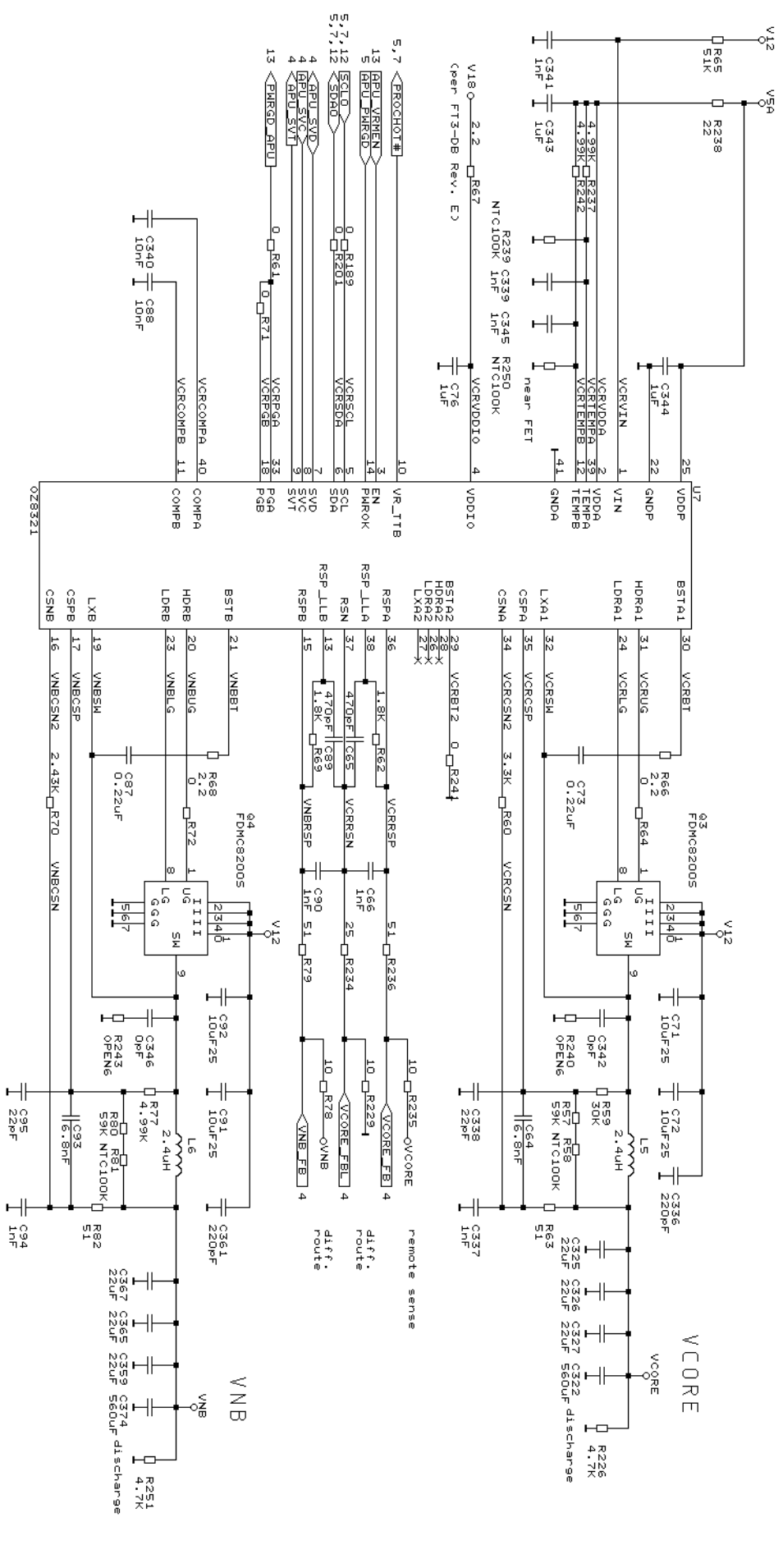


1.5V VMEM

0.75V VTT

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Title	1.8V, 0.95V, VMEM, VTT
Size	Document Number
B	APU
Date:	February 19, 2015
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REV	2C

VCORE and VNB converter



Title		VCORE, VNB	
Size/Document Number		APU	
Date:		January 21, 2015/Sheet 16 of 16	
REV		2C	

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