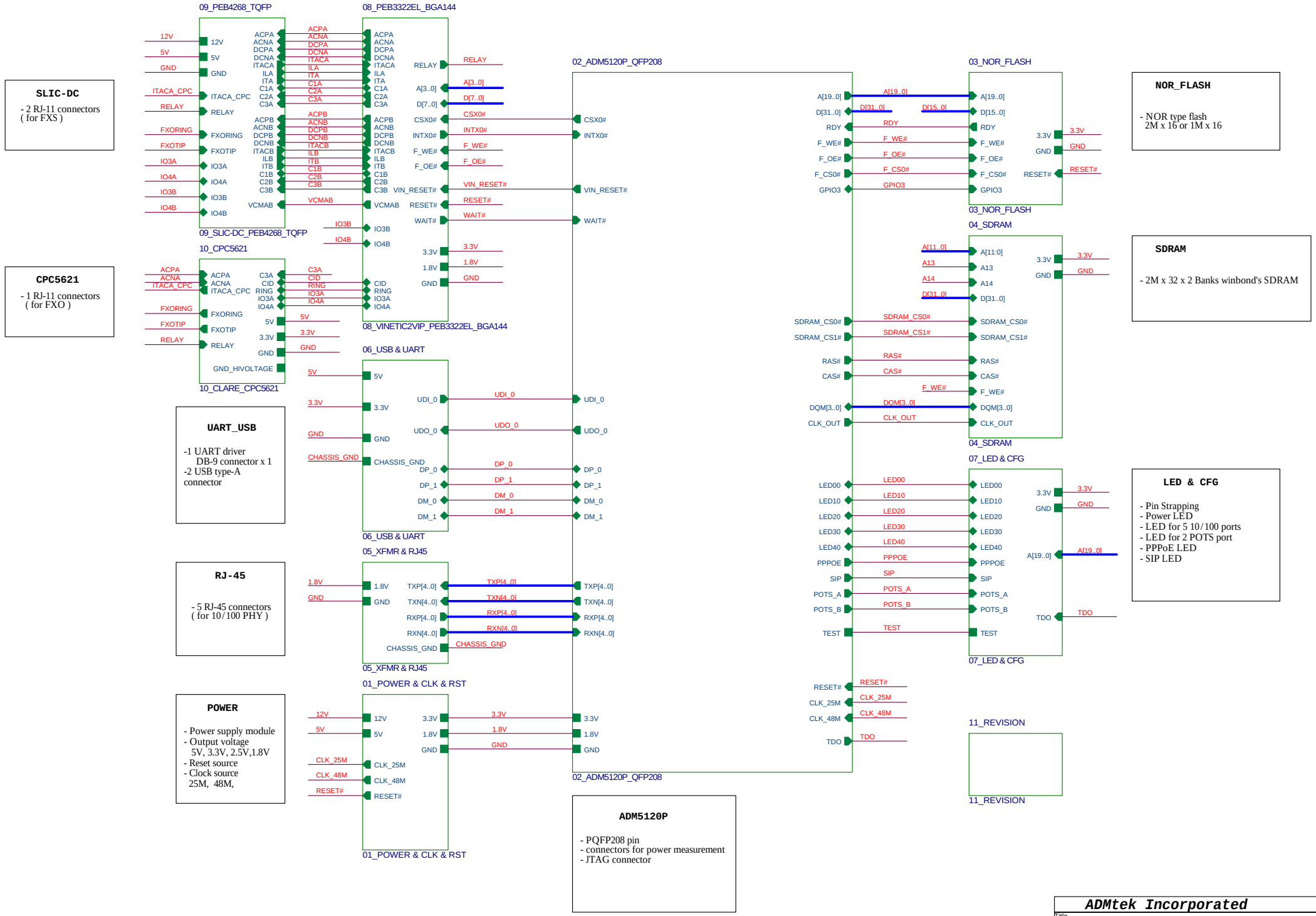
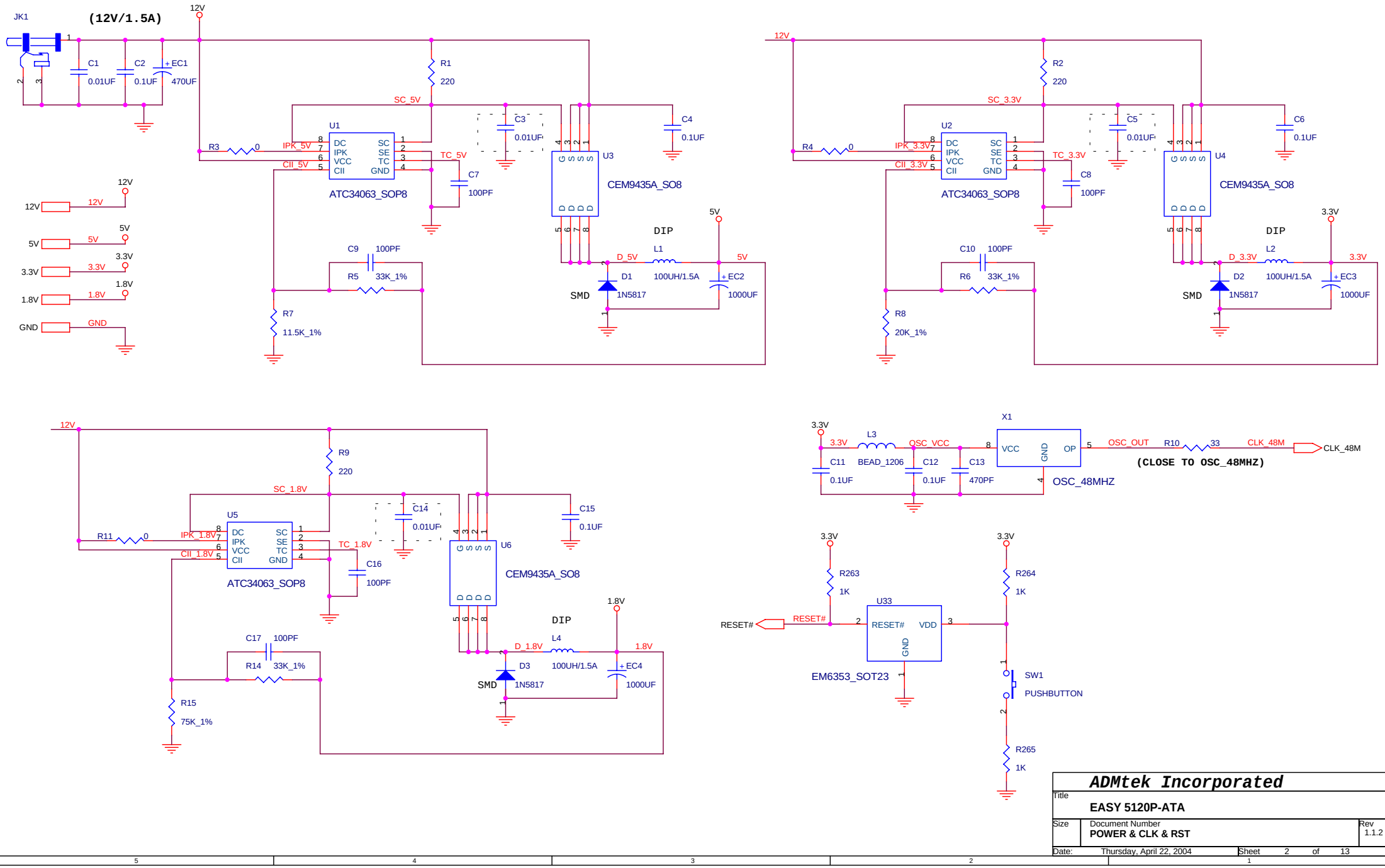
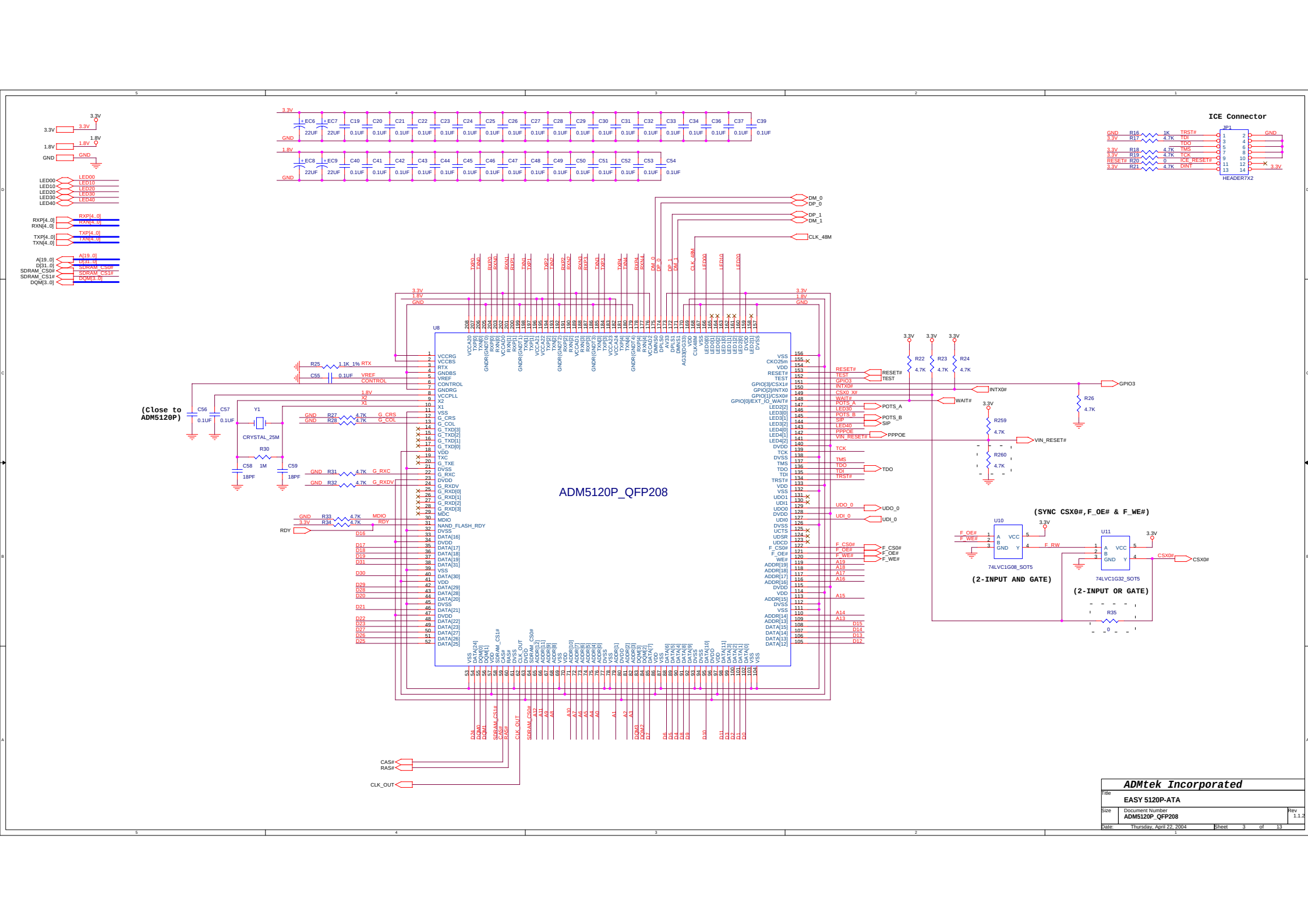
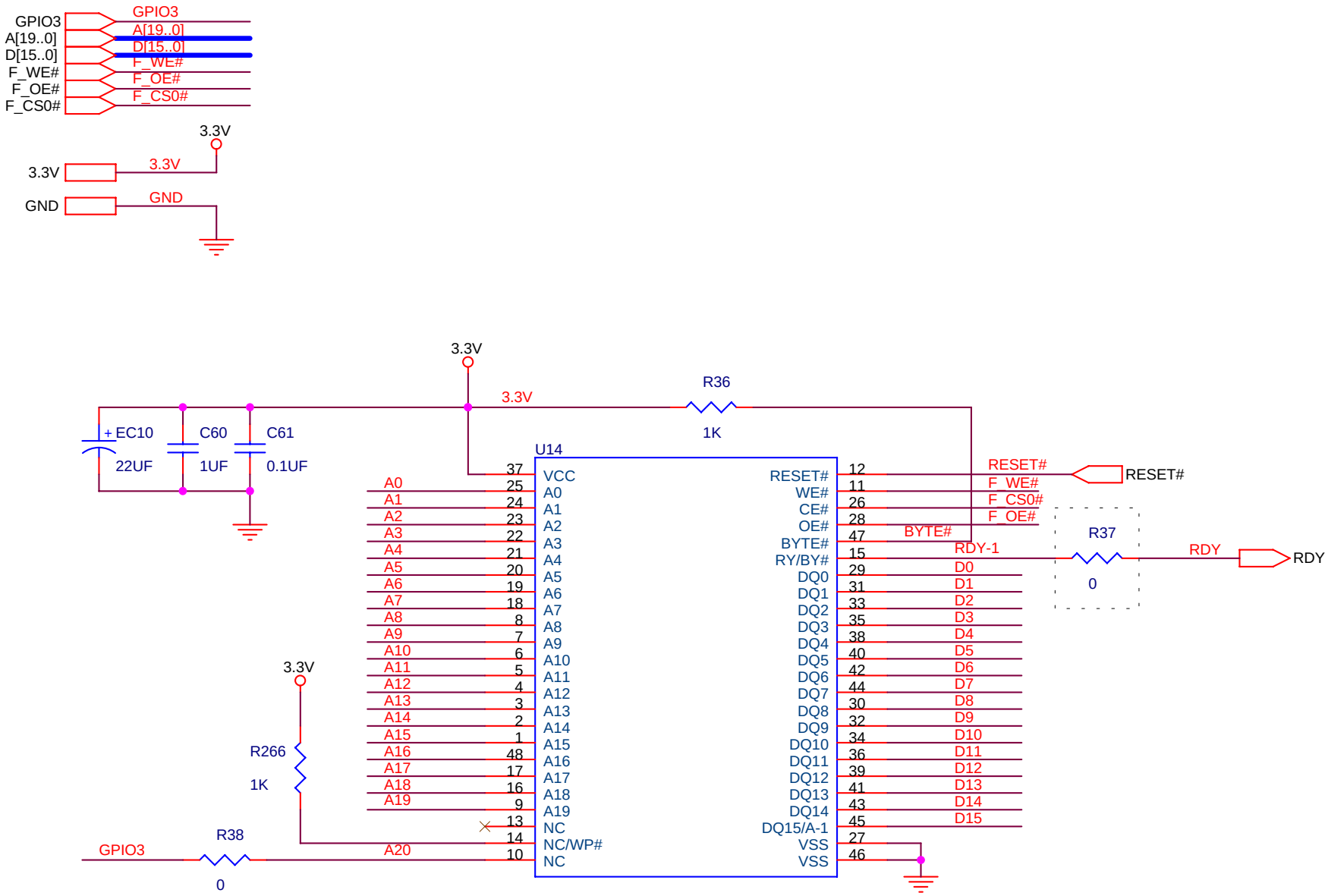

09_PEB4268_TQFP
08_PEB3322EL_BGA144
02_ADM5120P_QFP208
03_NOR_FLASH
SLIC-DC
- 2 RJ-11 connectors
(for FXS)
NOR_FLASH
- NOR type flash
2M x 16 or 1M x 16
09_SLIC-DC_PEB4268_TQFP
10_CPC5621
CPC5621
- 1 RJ-11 connectors
(for FXO)
04_SDRAM
SDRAM
- 2M x 32 x 2 Banks winbond's SDRAM
08_VINETIC2VIP_PEB3322EL_BGA144
10_CLARE_CPC5621
06_USB & UART
UART_USB
-1 UART driver
DB-9 connector x 1
-2 USB type-A
connector
07_LED & CFG
LED & CFG
- Pin Strapping
- Power LED
- LED for 5 10/100 ports
- LED for 2 POTS port
- PPPoE LED
- SIP LED
RJ-45
- 5 RJ-45 connectors
(for 10/100 PHY)
05_XFMR & RJ45
01_POWER & CLK & RST
POWER
- Power supply module
- Output voltage
5V, 3.3V, 2.5V,1.8V
- Reset source
- Clock source
25M, 48M,
11_REVISION
ADM5120P
- PQFP208 pin
- connectors for power measurement
- JTAG connector
ADMtek Incorporated
Title
EASY 5120P-ATA
Size
Document Number
Top Schematics
Rev
1.1.2
Date: Thursday, April 22, 2004
Sheet 1 of 13



ADMtek Incorporated		
Title: **EASY 5120P-ATA**		
Size	Document Number: **POWER & CLK & RST**	Rev: 1.1.2
Date: Thursday, April 22, 2004	Sheet 2 of 13	

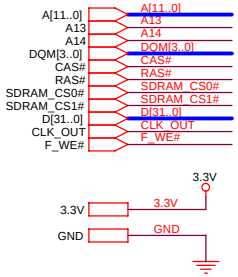

ICE Connector
JP1
HEADER7X2
ADM5120P_QFP208
U8
(Close to ADM5120P)
CRYSTAL_25M
(SYNC CSX0#,F_OE# & F_WE#)
U10
74LVC1G08_SOT5
(2-INPUT AND GATE)
U11
74LVC1G32_SOT5
(2-INPUT OR GATE)
ADMtek Incorporated
EASY 5120P-ATA
ADM5120P_QFP208
Thursday, April 22, 2004

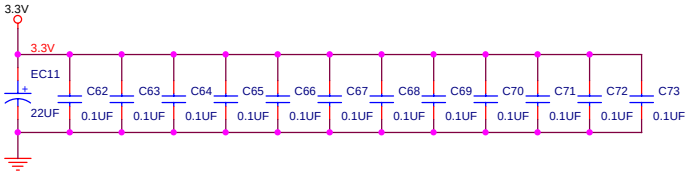


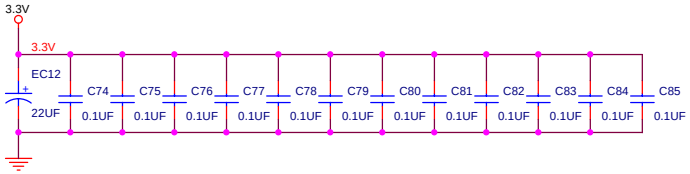
(For MX29LV320(2Mx16))

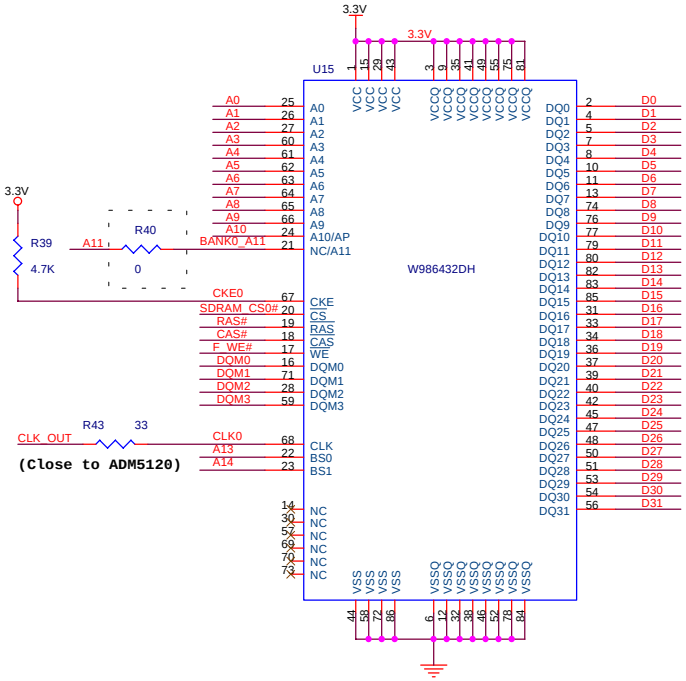
MX29LV320(2Mx16)
(Or MX29LV160(1Mx16))

ADMtek Incorporated		
Title: EASY 5120P-ATA		
Size	Document Number: NOR_FLASH	Rev: 1.1.2
Date: Thursday, April 22, 2004	Sheet 4 of 13	



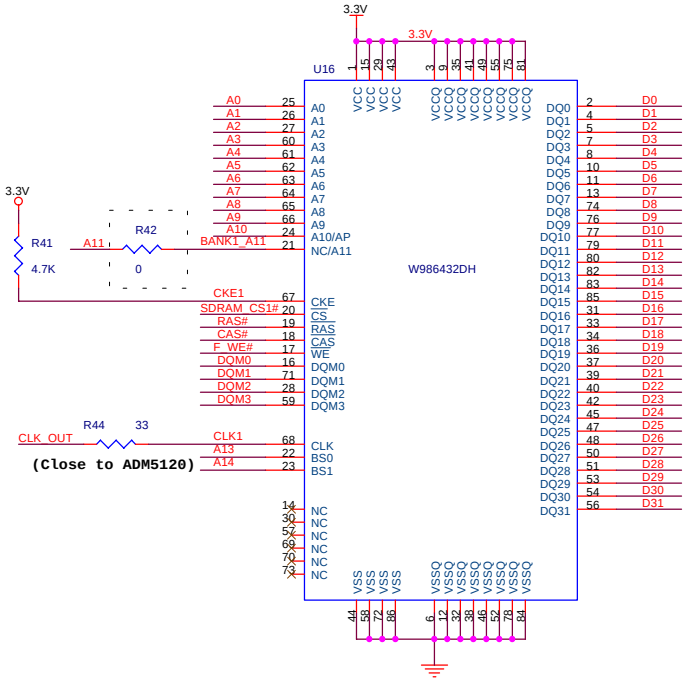






W986432DH(2Mx32)

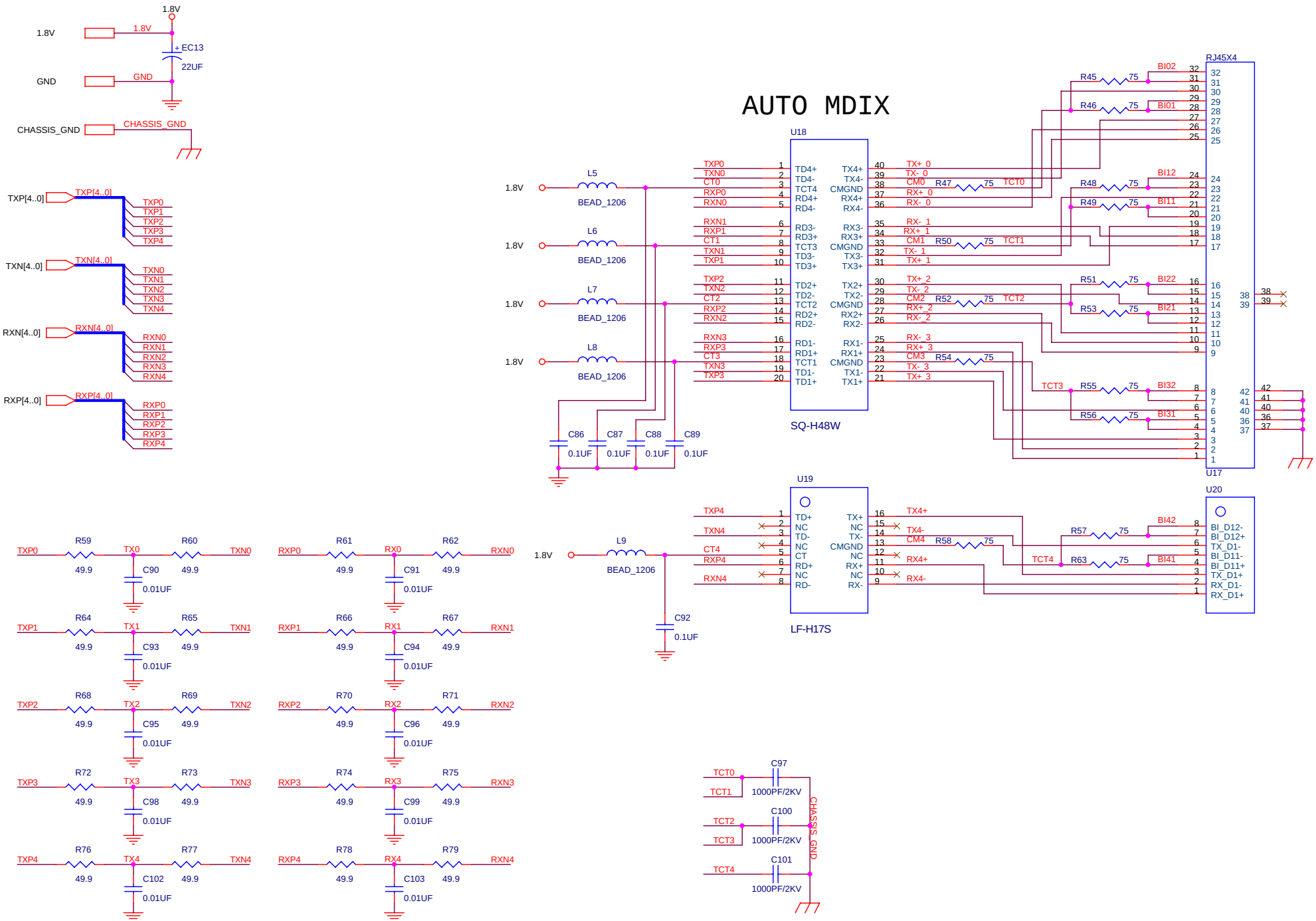
SDRAM Bank 0



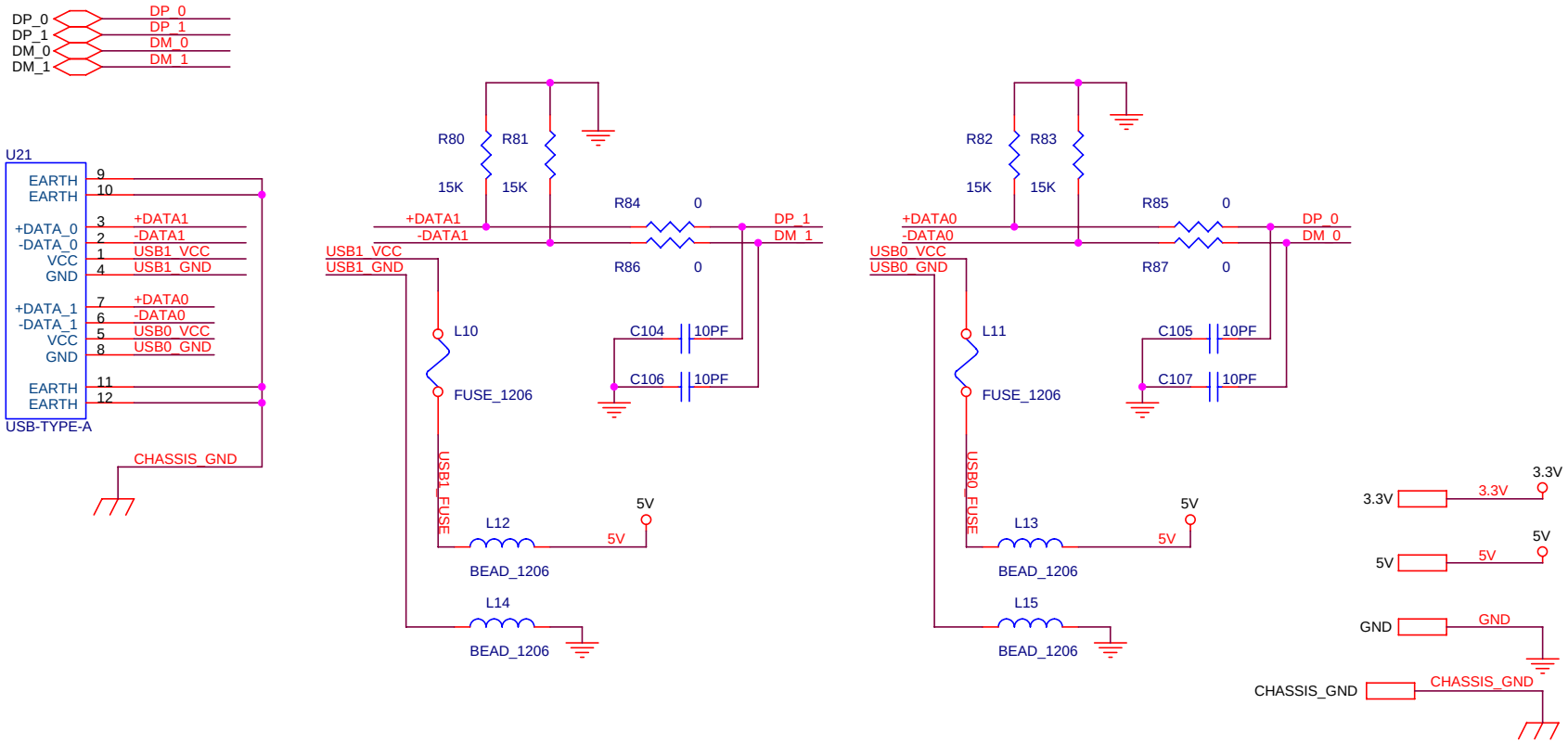
W986432DH(2Mx32)

SDRAM Bank 1

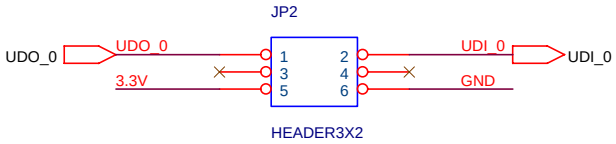
ADMtek Incorporated		
Title: EASY 5120P-ATA		
Size	Document Number: SDRAM	Rev: 1.1.2
Date: Thursday, April 22, 2004	Sheet 5 of 13	



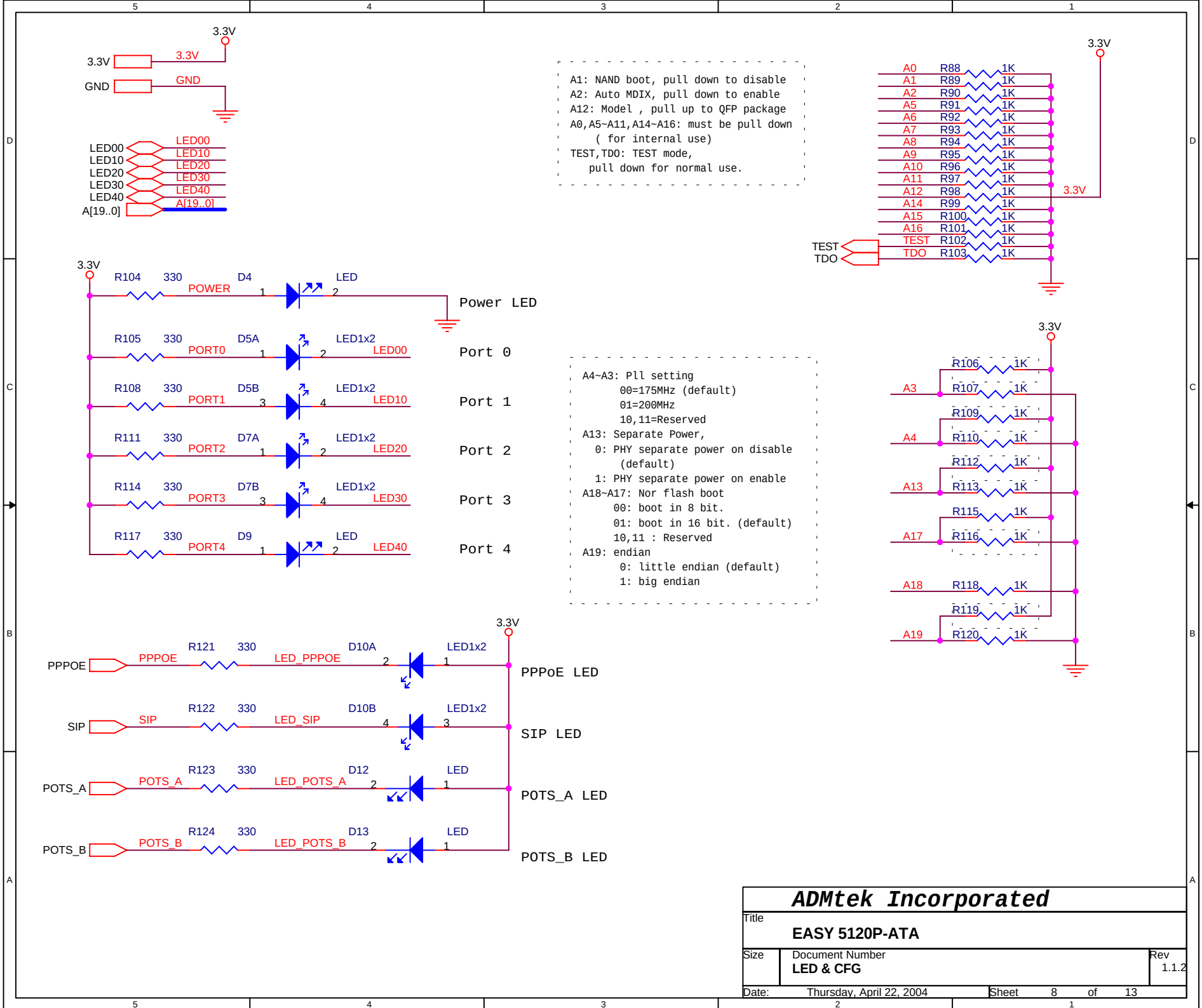
ADMtek Incorporated		
Title: **EASY 5120P-ATA**		
Size	Document Number: **XFMR & RJ45**	Rev: 1.1.2
Date: Thursday, April 22, 2004	Sheet 6 of 13	

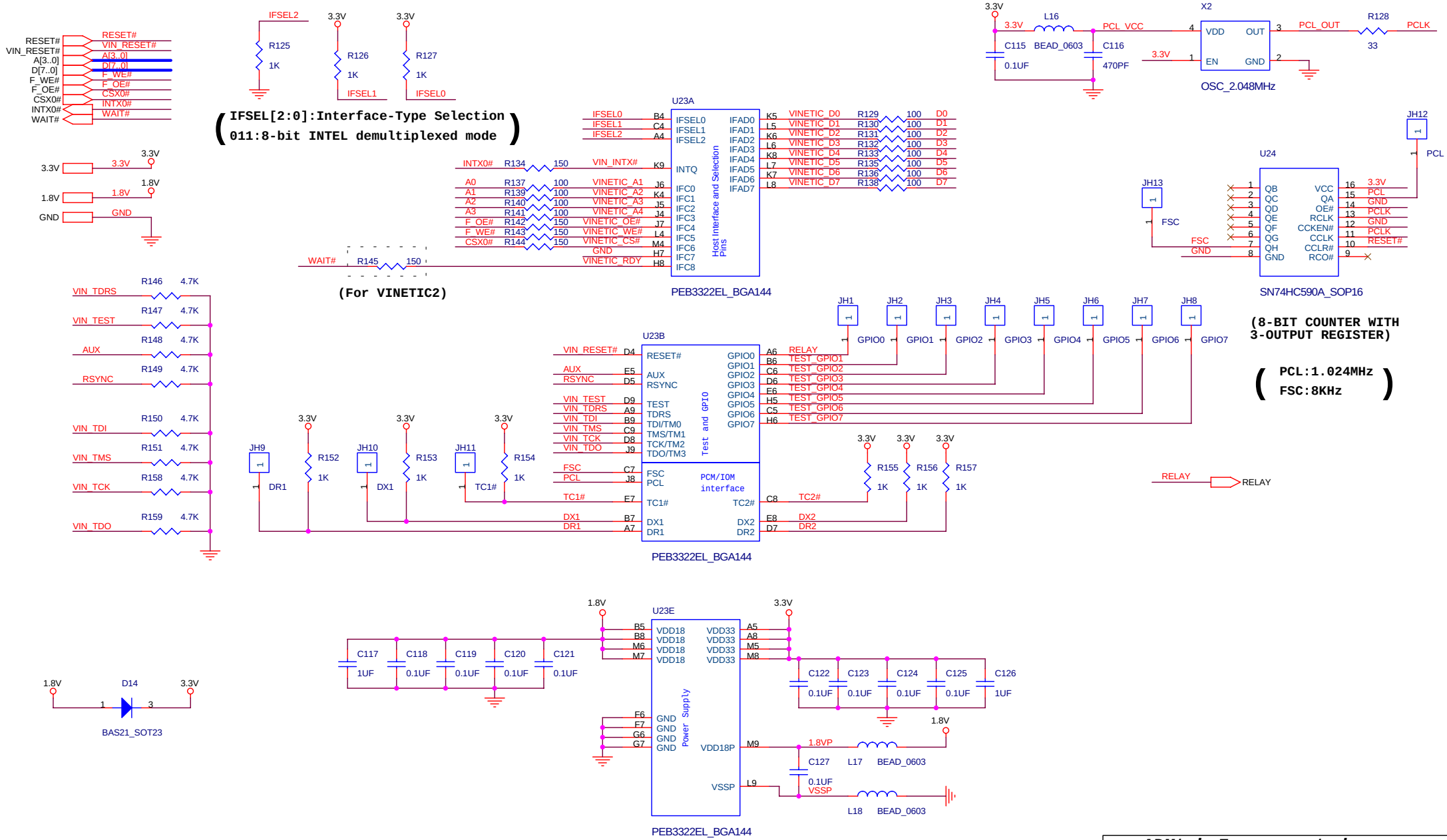


UART Connector

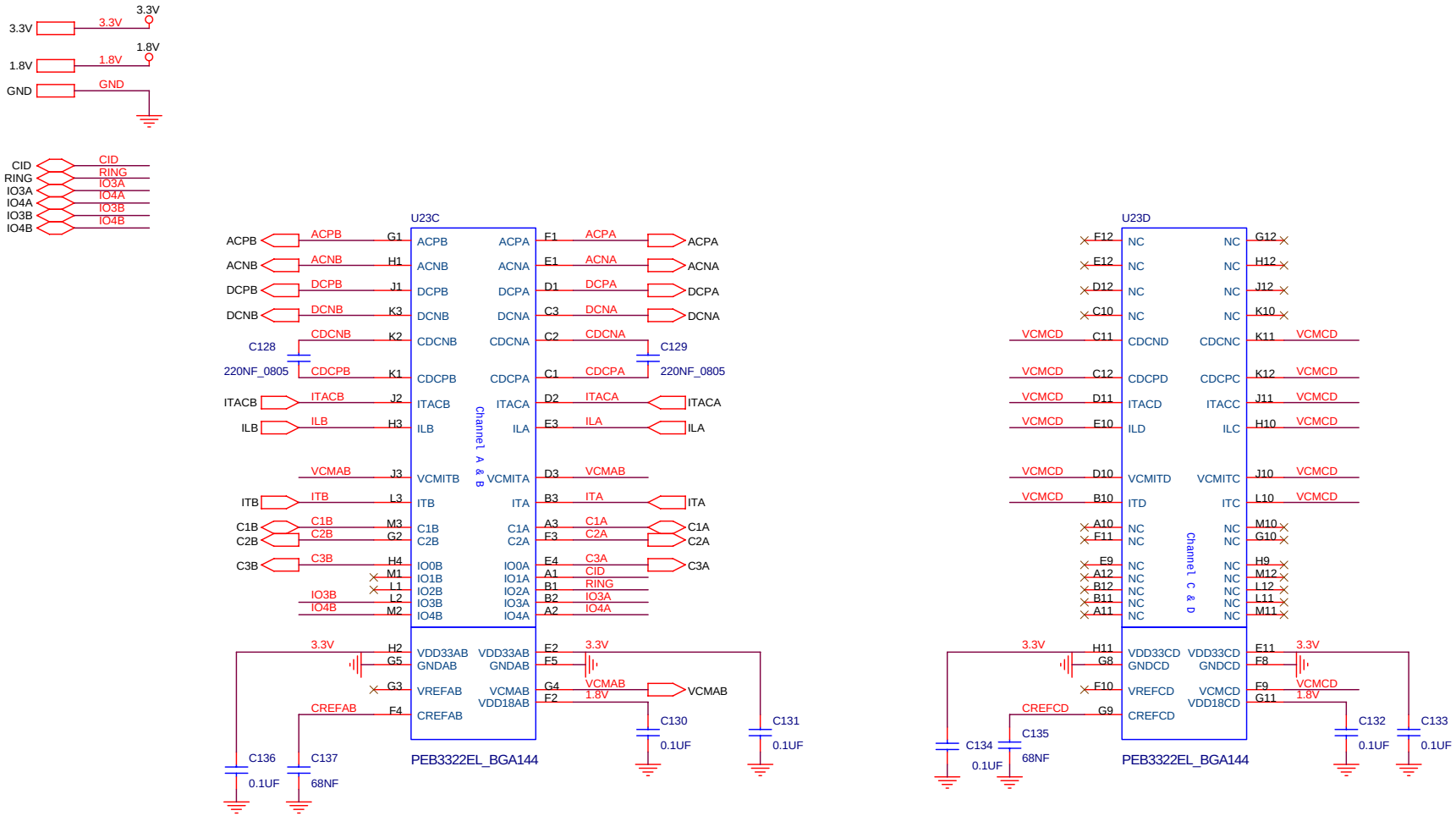


ADMtek Incorporated		
Title: **EASY 5120P-ATA**		
Size	Document Number: **USB & UART**	Rev: 1.1.2
Date: Thursday, April 22, 2004	Sheet 7 of 13	

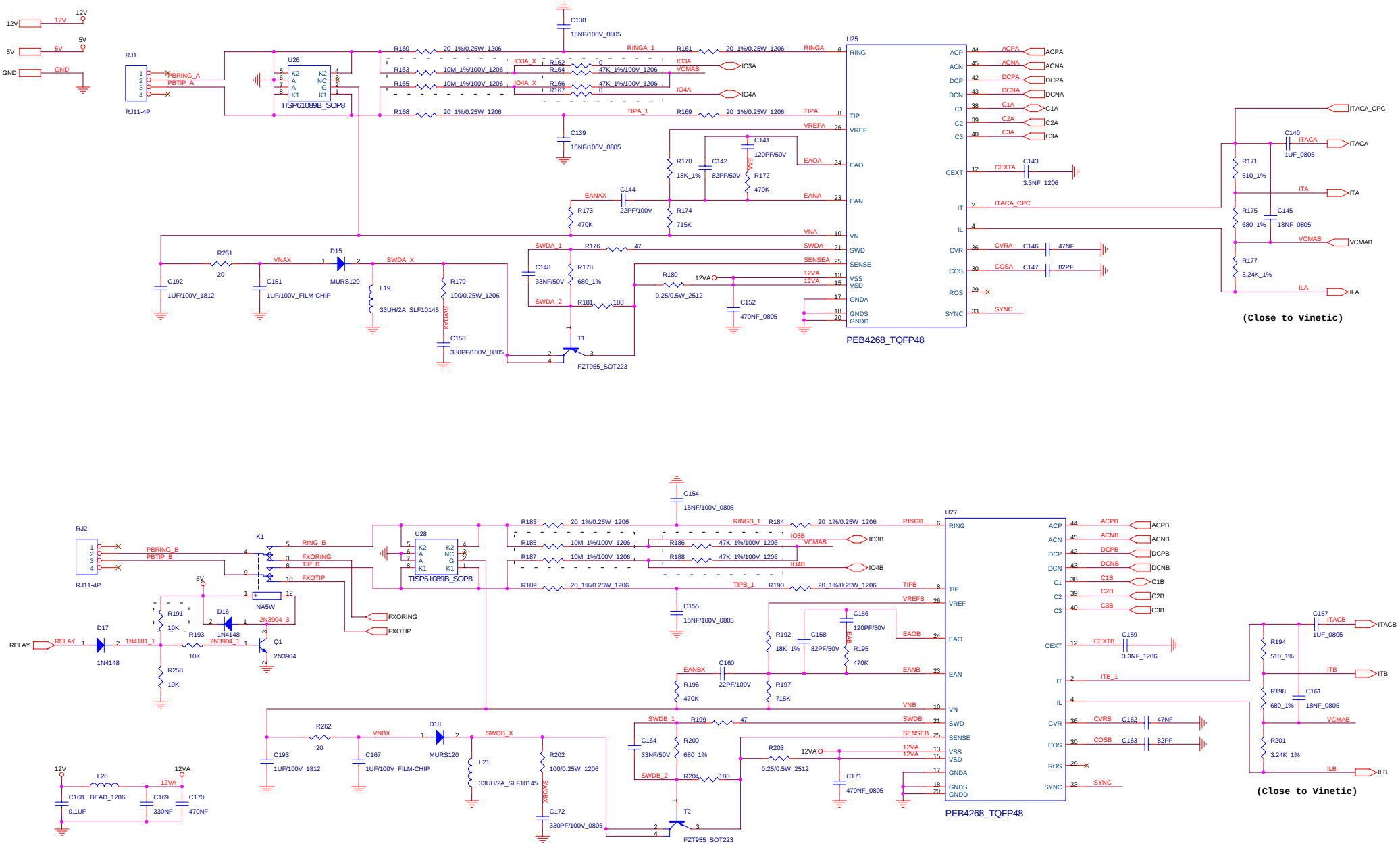

3.3V
3.3V
GND
LED00
LED10
LED20
LED30
LED40
A[19..0]
A1: NAND boot, pull down to disable
A2: Auto MDIX, pull down to enable
A12: Model , pull up to QFP package
A0,A5~A11,A14~A16: must be pull down
(for internal use)
TEST,TDO: TEST mode,
pull down for normal use.
A0 R88 1K
A1 R89 1K
A2 R90 1K
A5 R91 1K
A6 R92 1K
A7 R93 1K
A8 R94 1K
A9 R95 1K
A10 R96 1K
A11 R97 1K
A12 R98 1K
A14 R99 1K
A15 R100 1K
A16 R101 1K
TEST R102 1K
TDO R103 1K
TEST
TDO
R104 330 POWER D4 LED
Power LED
R105 330 PORT0 D5A LED1x2 LED00
Port 0
R108 330 PORT1 D5B LED1x2 LED10
Port 1
R111 330 PORT2 D7A LED1x2 LED20
Port 2
R114 330 PORT3 D7B LED1x2 LED30
Port 3
R117 330 PORT4 D9 LED LED40
Port 4
A4~A3: Pll setting
00=175MHz (default)
01=200MHz
10,11=Reserved
A13: Separate Power,
0: PHY separate power on disable
(default)
1: PHY separate power on enable
A18~A17: Nor flash boot
00: boot in 8 bit.
01: boot in 16 bit. (default)
10,11 : Reserved
A19: endian
0: little endian (default)
1: big endian
A3 R106 R107 1K
A4 R109 R110 1K
A13 R112 R113 1K
A17 R115 R116 1K
A18 R118 1K
A19 R119 R120 1K
PPPOE R121 330 LED_PPPOE D10A LED1x2
PPPoE LED
SIP R122 330 LED_SIP D10B LED1x2
SIP LED
POTS_A R123 330 LED_POTS_A D12 LED
POTS_A LED
POTS_B R124 330 LED_POTS_B D13 LED
POTS_B LED
ADMtek Incorporated
Title
EASY 5120P-ATA
Size
Document Number
LED & CFG
Rev
1.1.2
Date: Thursday, April 22, 2004
Sheet 8 of 13



ADMtek Incorporated			
Title: EASY 5120P-ATA			
Size	Document Number: VINETIC-2VIP_PEB3322EL_BGA144_DIGITAL_PART		Rev: 1.1.2
Date: Thursday, April 22, 2004	Sheet 9 of 13		



ADMtek Incorporated		
Title: EASY 5120P-ATA		
Size	Document Number: VINETIC-2VIP_PEB3322EL_BGA144_ANALOG_PART	Rev: 1.1.2
Date: Thursday, April 22, 2004	Sheet 10 of 13	


12V
5V
GND
RJ1
RJ11-4P
PBRING_A
PBTIP_A
U26
TISP61089B_SOP8
C138
15NF/100V_0805
R160 20_1%/0.25W_1206
R161 20_1%/0.25W_1206
RINGA_1
RINGA
R163 10M_1%/100V_1206
R164 47K_1%/100V_1206
IO3A_X
IO3A
VCMAB
R165 10M_1%/100V_1206
R166 47K_1%/100V_1206
IO4A_X
IO4A
R162 0
R167 0
R168 20_1%/0.25W_1206
R169 20_1%/0.25W_1206
TIPA_1
TIPA
C139
15NF/100V_0805
U25
RING
TIP
VREF
EAO
EAN
VN
SWD
SENSE
VSS
VSD
GNDA
GNDS
GNDD
PEB4268_TQFP48
VREFA
EAOA
EANA
VNA
SENSEA
ACP
ACN
DCP
DCN
C1
C2
C3
CEXT
IT
IL
CVR
COS
ROS
SYNC
ACPA
ACNA
DCPA
DCNA
C1A
C2A
C3A
C140
ITACA
1UF_0805
ITACA_CPC
R171
510_1%
R175
680_1%
R177
3.24K_1%
C145
18NF_0805
ITA
VCMAB
ILA
C143
3.3NF_1206
CEXTA
C146
47NF
CVRA
C147
82PF
COSA
C141
120PF/50V
EAOA
R170
18K_1%
C142
82PF/50V
R172
470K
EANAX
C144
22PF/100V
R173
470K
R174
715K
R261
20
C192
1UF/100V_1812
C151
1UF/100V_FILM-CHIP
VNAX
D15
MURS120
SWDA_X
L19
33UH/2A_SLF10145
SWDAX
R179
100/0.25W_1206
C153
330PF/100V_0805
SWDA_1
R176 47
SWDA
C148
33NF/50V
R178
680_1%
SWDA_2
R181 180
T1
FZT955_SOT223
R180
0.25/0.5W_2512
12VA
C152
470NF_0805
(Close to Vinetic)
RJ2
RJ11-4P
PBRING_B
PBTIP_B
K1
RING_B
FXORING
TIP_B
FXOTIP
U28
TISP61089B_SOP8
C154
15NF/100V_0805
R183 20_1%/0.25W_1206
R184 20_1%/0.25W_1206
RINGB_1
RINGB
R185 10M_1%/100V_1206
R186 47K_1%/100V_1206
IO3B
VCMAB
R187 10M_1%/100V_1206
R188 47K_1%/100V_1206
IO4B
R189 20_1%/0.25W_1206
R190 20_1%/0.25W_1206
TIPB_1
TIPB
C155
15NF/100V_0805
U27
PEB4268_TQFP48
VREFB
EAOB
EANB
VNB
SWDB
SENSEB
ACPB
ACNB
DCPB
DCNB
C1B
C2B
C3B
CEXTB
ITB_1
CVRB
COSB
ITACB
ITB
ILB
C157
1UF_0805
C159
3.3NF_1206
R194
510_1%
R198
680_1%
R201
3.24K_1%
C161
18NF_0805
C162
47NF
C163
82PF
C156
120PF/50V
R192
18K_1%
C158
82PF/50V
R195
470K
EANBX
C160
22PF/100V
R196
470K
R197
715K
R191
10K
R193
10K
R258
10K
D16
1N4148
2N3904_3
Q1
2N3904
NA5W
RELAY
D17
1N4181_1
R262
20
C193
1UF/100V_1812
C167
1UF/100V_FILM-CHIP
VNBX
D18
MURS120
SWDB_X
L21
33UH/2A_SLF10145
SWDBX
R202
100/0.25W_1206
C172
330PF/100V_0805
SWDB_1
R199 47
C164
33NF/50V
R200
680_1%
SWDB_2
R204 180
T2
FZT955_SOT223
R203
0.25/0.5W_2512
C171
470NF_0805
L20
BEAD_1206
C168
0.1UF
C169
330NF
C170
470NF
ADMtek Incorporated
Title
EASY 5120P-ATA
Size
Document Number
SLIC-DC_PEB4268_TQFP
Rev
1.1.2
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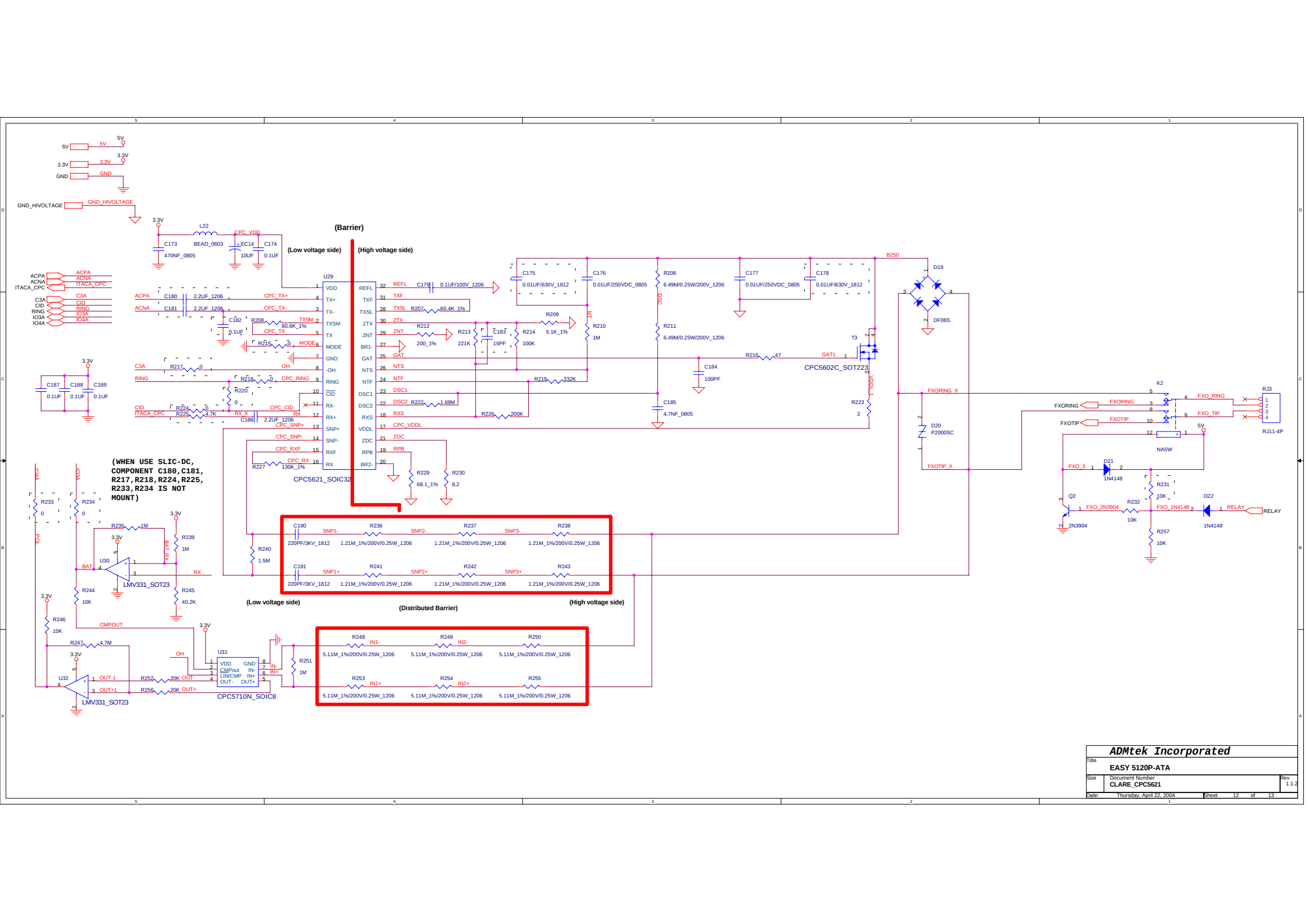
(Barrier)
(Low voltage side)
(High voltage side)
U29
CPC5621_SOIC32
(WHEN USE SLIC-DC, COMPONENT C180,C181, R217,R218,R224,R225, R233,R234 IS NOT MOUNT)
U30
LMV331_SOT23
U32
LMV331_SOT23
U31
CPC5710N_SOIC8
(Low voltage side)
(Distributed Barrier)
(High voltage side)
B250
D19
DF06S
T3
CPC5602C_SOT223
D20
P2000SC
K2
NA5W
RJ3
RJ11-4P
D21
1N4148
D22
1N4148
Q2
2N3904
ADMtek Incorporated
Title
EASY 5120P-ATA
Size
Document Number
CLARE_CPC5621
Rev
1.1.2
Date: Thursday, April 22, 2004
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Rev	Modification
1.0	- First draft
1.1	- SLIC-DC major change release state
1.1.1	- Change EC2 , EC3 , EC4 from 220uF to 1000uF - Add pull up resistor R266 for MX29LV320 WP# pin (this resistor doesn't exist in V1.1 PCB) - Change D15 , D18 pin define
1.1.2	- Change C7 , C8 , C16 from 470pF to 100pF - change R3 , R4 , R11 from 0.22 to 0 - change R1 , R2 , R9 from 100 to 220

ADMtek Incorporated

Title
EASY 5120P-ATA

Size	Document Number	Rev
	REVISION	1.1.2

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