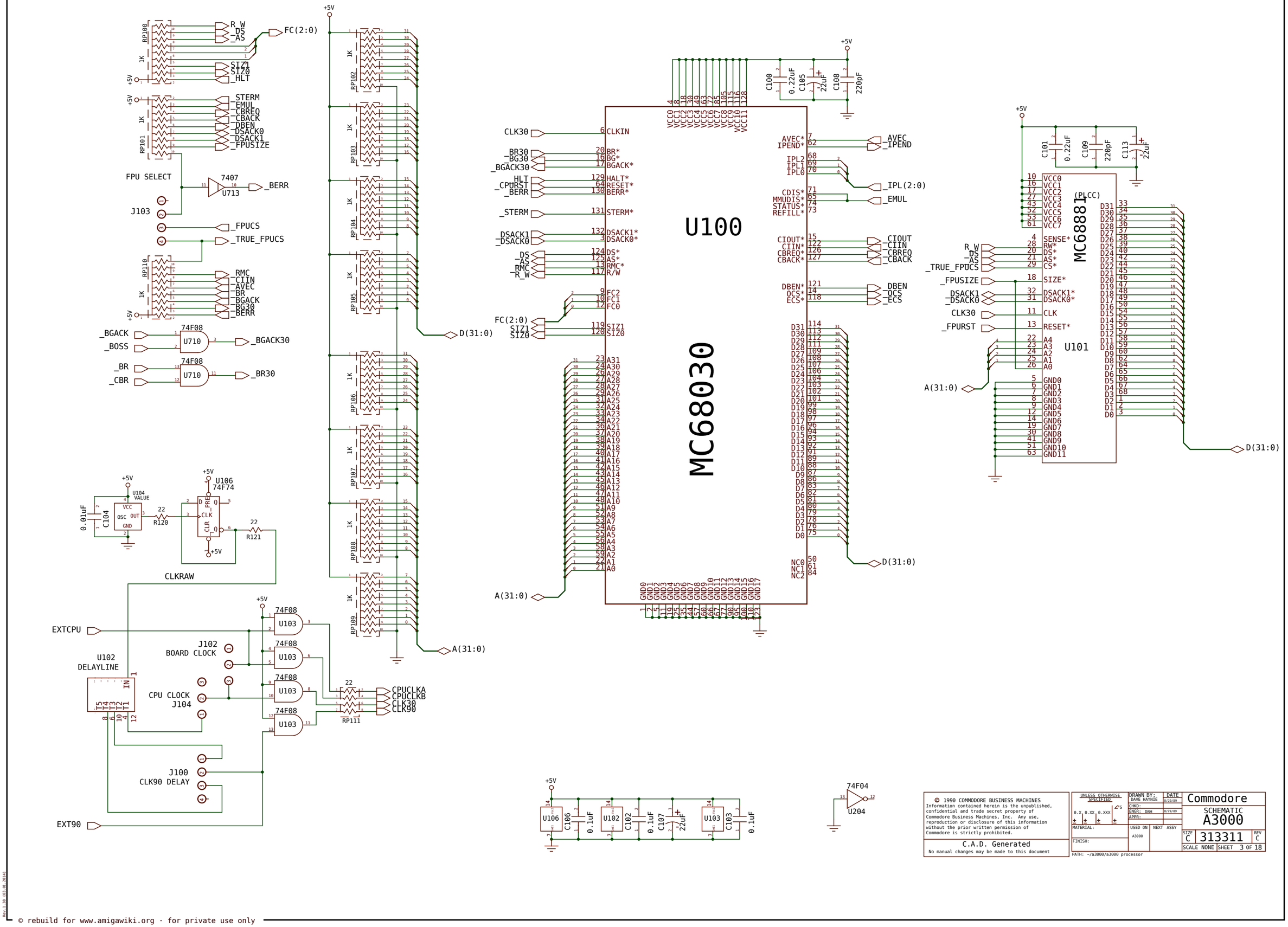
Amiga

A3000D

Rev.1.38 (03.01.2014)



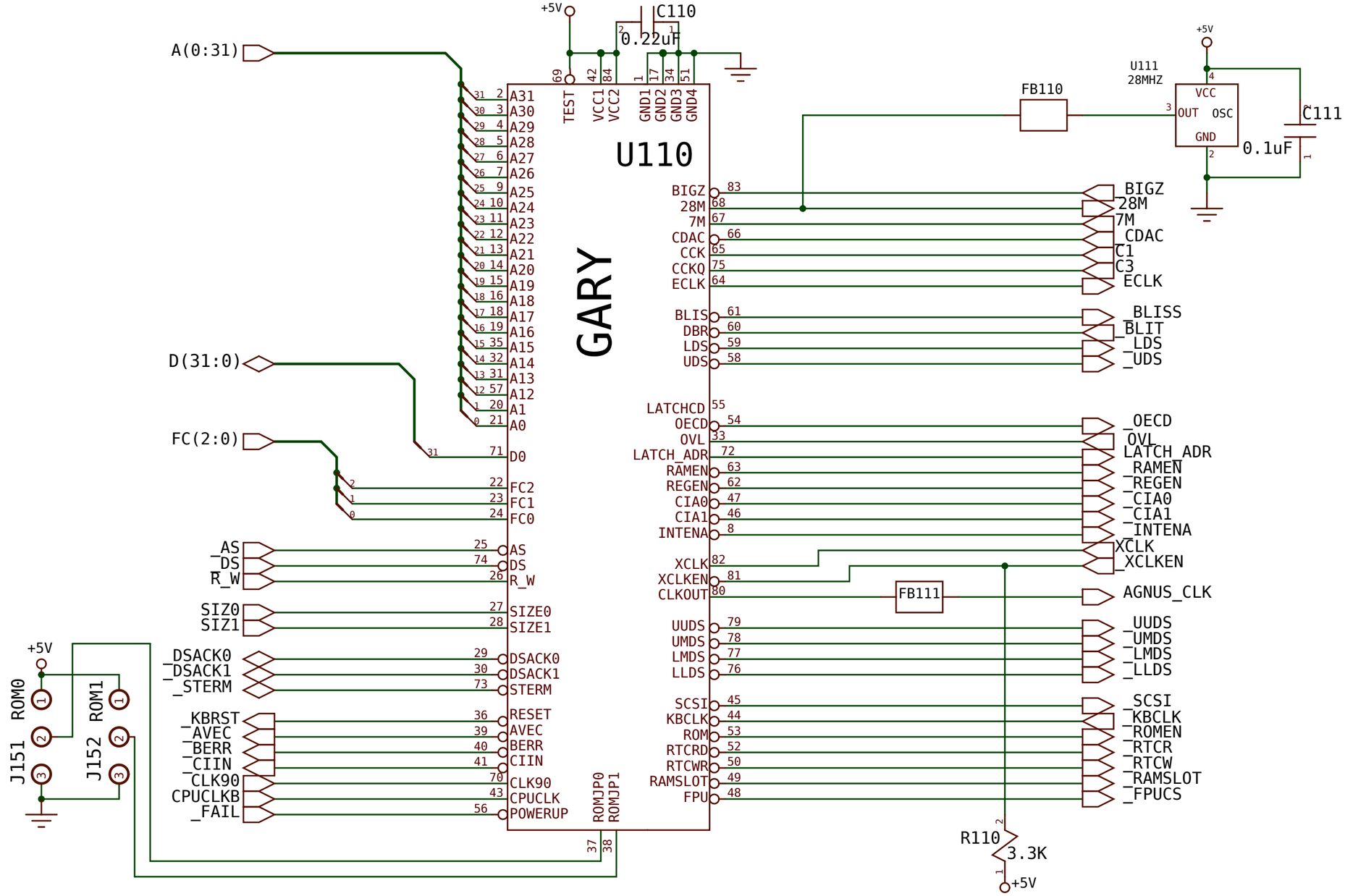
© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.

C.A.D. Generated
No manual changes may be made to this document

UNLESS OTHERWISE SPECIFIED	
DRAWN BY: DAVE HAYNIE	DATE 8/29/89
CHKD:	
ENGR: DBH	8/29/89
APPR:	
MATERIAL:	USED ON A3000
FINISH:	NEXT ASSY
PATH: ~/a3000/a3000 processor	

Commodore
SCHEMATIC
A3000
SIZE C | 313311 | REV C
SCALE NONE | SHEET 3 OF 18

© rebuild for www.amigawiki.org · for private use only



© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.

C.A.D. Generated
No manual changes may be made to this document

UNLESS OTHERWISE SPECIFIED
0.X ± 0.XX ± 0.XXX ± ∠'s

DRAWN BY: GREG BERLIN — DATE 12/15/88
CHKD:
ENGR: GCB 12/15/88
APPR:

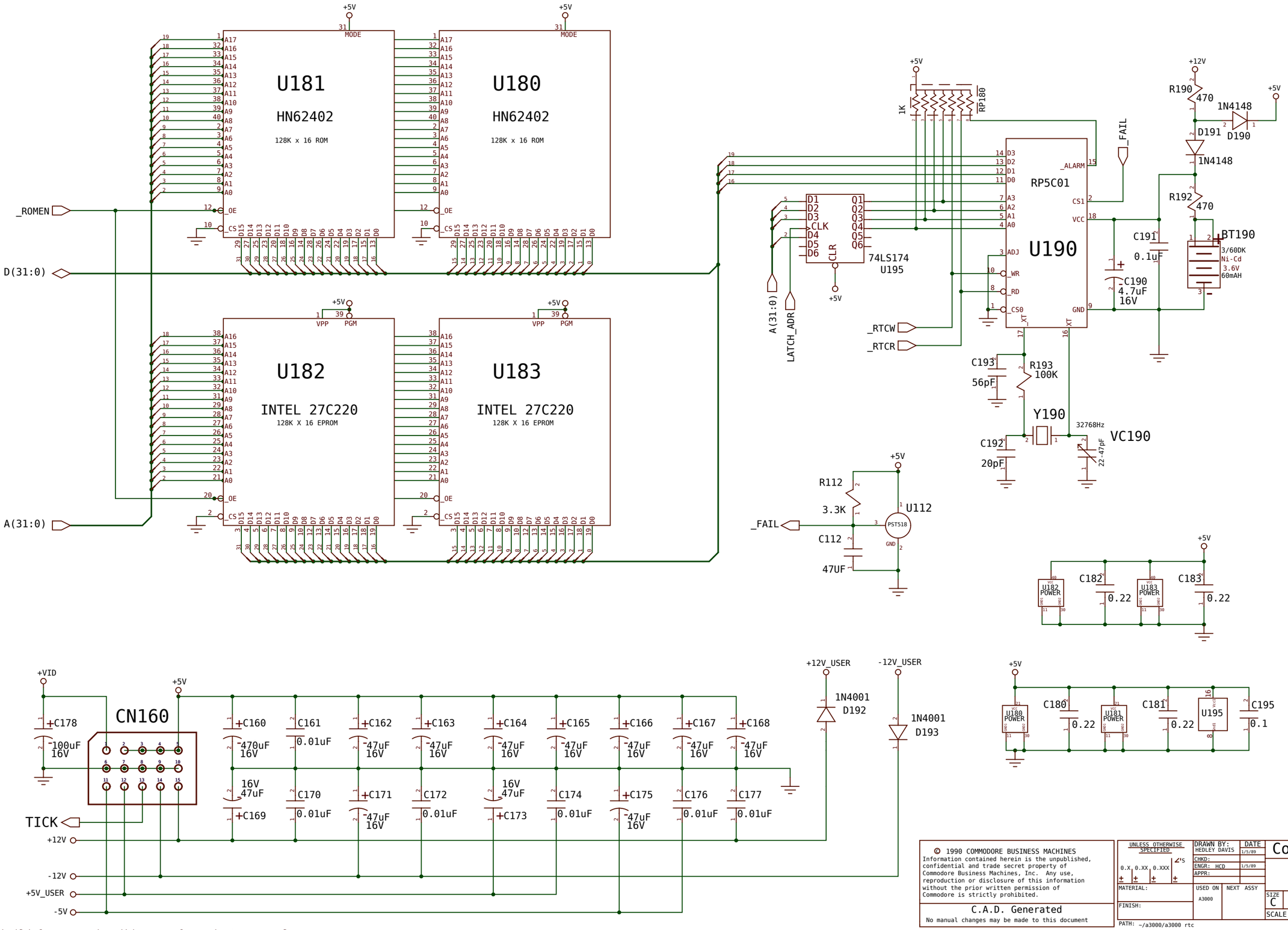
MATERIAL:
FINISH:
USED ON A3000
NEXT ASSY

Commodore
SCHEMATIC
A3000
SIZE C 313311 REV C
SCALE NONE SHEET 4 OF 18

PATH: ~/a3000/a3000 gary

Rev.1.38 (03.01.2014)

© rebuild for www.amigawiki.org · for private use only



© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.

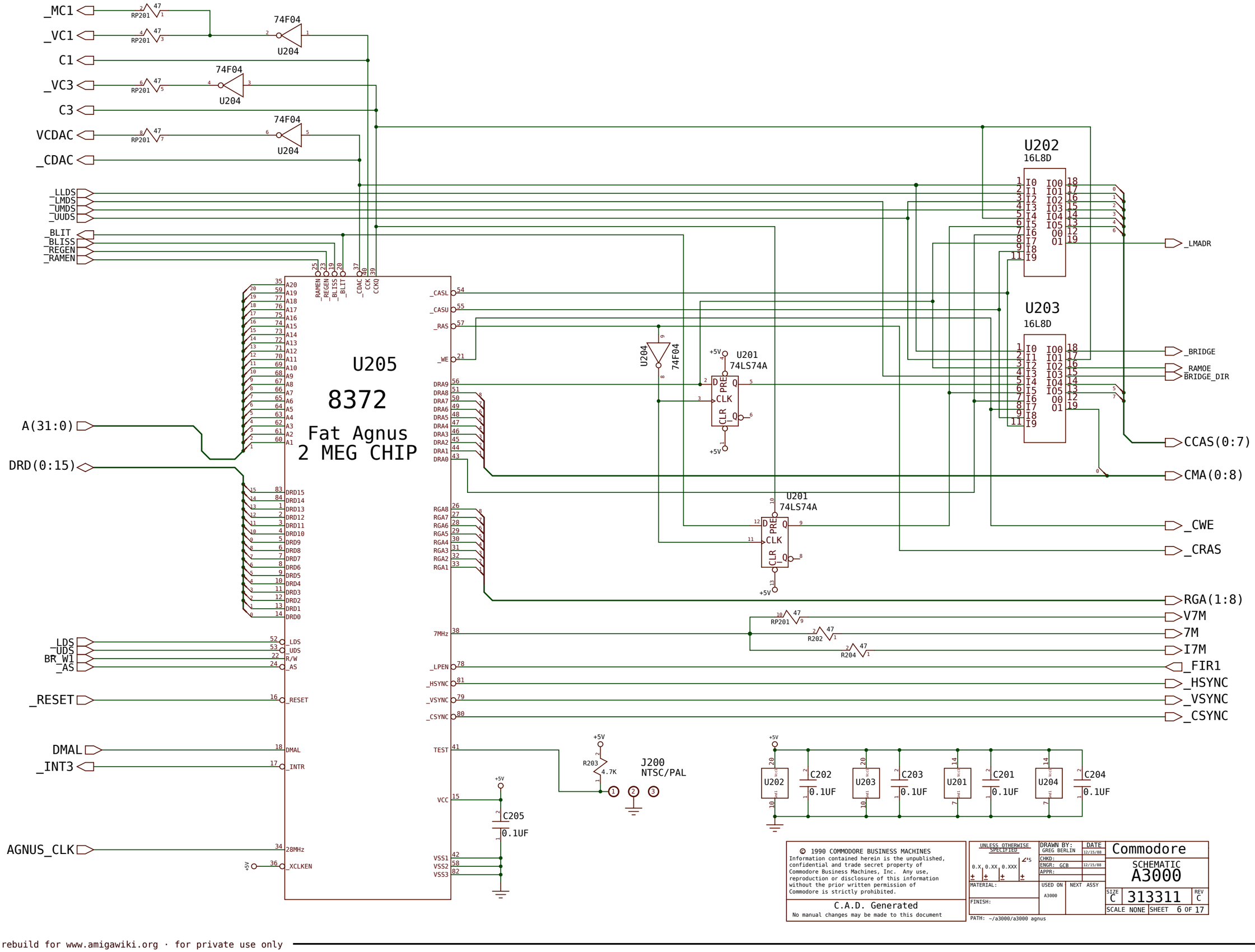
C.A.D. Generated
No manual changes may be made to this document

UNLESS OTHERWISE SPECIFIED	DRAWN BY: HEDLEY DAVIS	DATE 1/5/89	Commodore
0.X ± 0.XX ± 0.XXX ± ∠'S	CHKD:		SCHEMATIC A3000
	ENGR: HCD	1/5/89	
	APPR:		
MATERIAL:	USED ON A3000	NEXT ASSY	SIZE C 313311 REV C
FINISH:			SCALE NONE SHEET 5 OF 18

PATH: ~/a3000/a3000 rtc

Rev 1.3B (03.01.2014)

© rebuild for www.amigawiki.org · for private use only



© rebuild for www.amigawiki.org · for private use only

DRAB(0:8)

CCAS(0:7)

CMA(0:8)

U251 74F373

_LMADR

_RAMOE

_CRAS

_CWE

R_W

BR_W1

U253 74F646

U254 74F646

U204 74F04

_DSACK1

_OECD

DRD(0:15)

D(31:0)

_BRIDGE

BRIDGE_DIR

U255 74F646

U256 74F646

74F245 U257

74F245 U258

LUD(16:31)

U259 U260 U261 U262 U263 U264 U265 U266 U267 U268 U269 U270 U271 U272 U273 U274 256Kx4 DIP

RP251 RP252 RP253 RP254 RP255 RP256 47 470

C251 C252 C253 C254 C255 C256 C257 C258 0.1UF

C259 C260 C261 C262 C263 C264 C265 C266 C267 C268 C269 C270 C271 C272 C273 C274 0.33uF

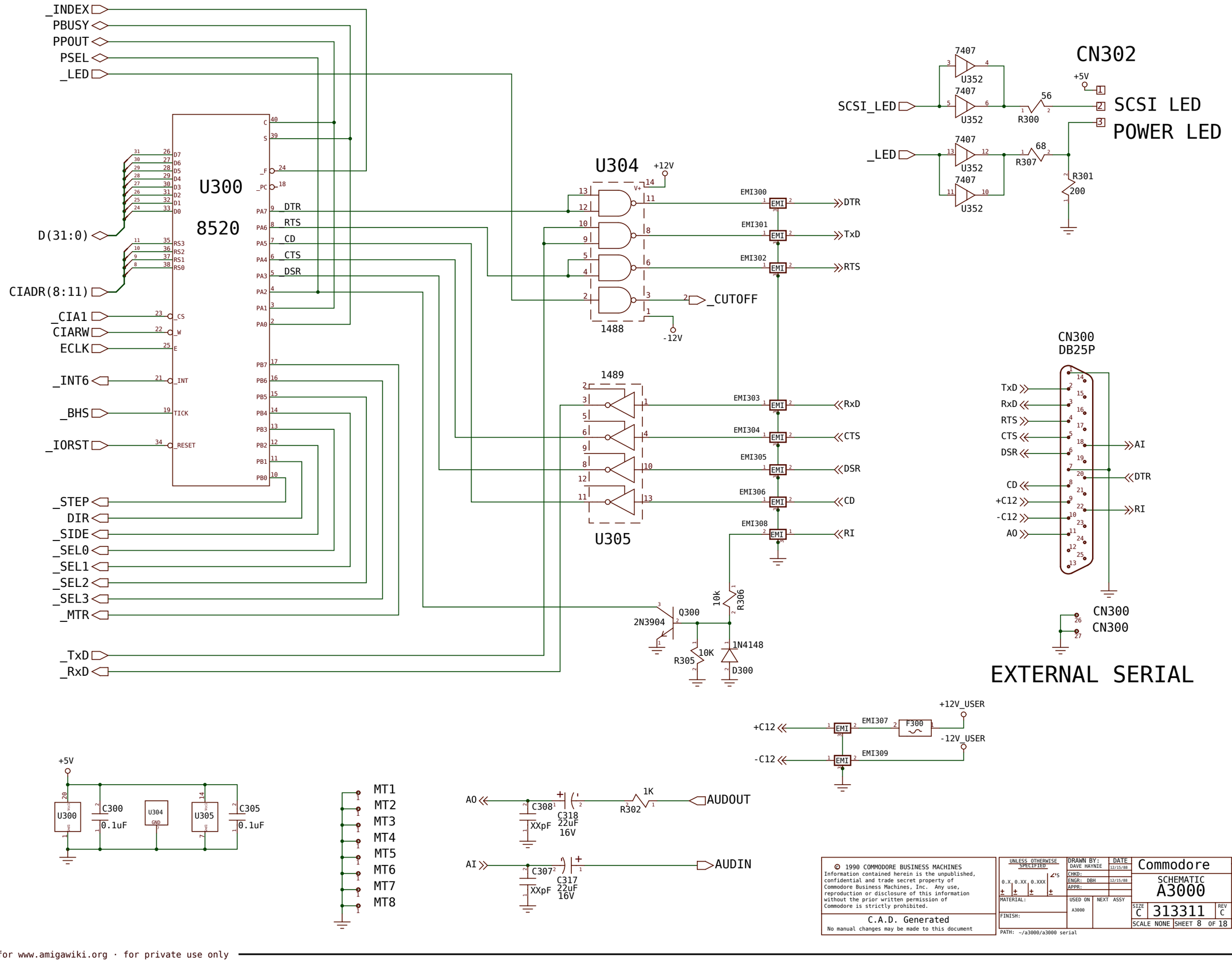
© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.

C.A.D. Generated
No manual changes may be made to this document

DRAWN BY:	GREG BERLIN
DATE	12/15/88
CHKD:	
ENGR:	GCB 12/15/88
APPR:	
MATERIAL:	
FINISH:	
USED ON	A3000
NEXT ASSY	
PATH:	~/a3000/a3000 chipram

Commodore
SCHEMATIC
A3000
SIZE C | 313311 | REV C
SCALE NONE | SHEET 7 OF 18

© rebuild for www.amigawiki.org · for private use only



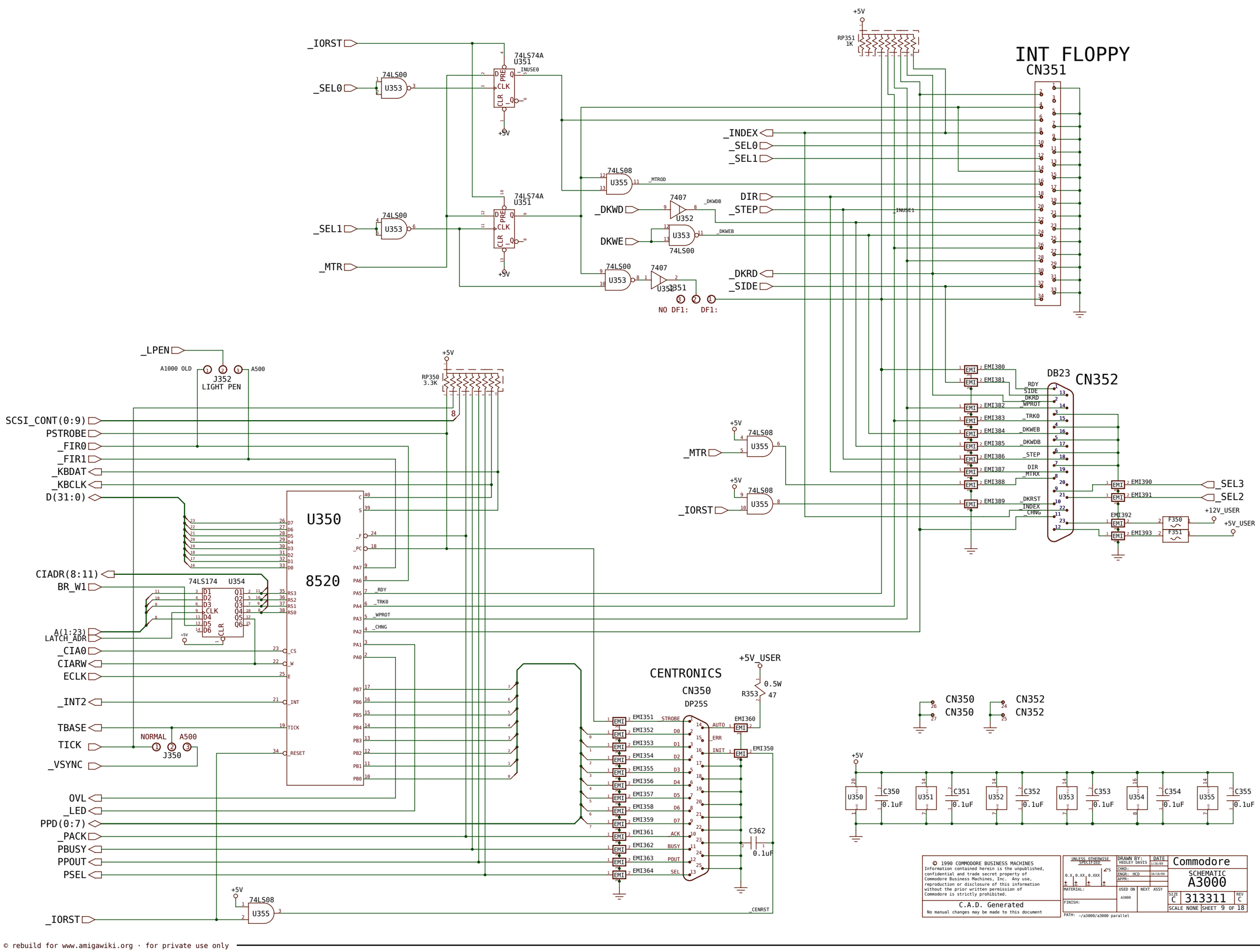
© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.
C.A.D. Generated
No manual changes may be made to this document

DRAWN BY:	DAVE HAYNIE
DATE	12/15/88
CHKD:	
ENGR:	DBH 12/15/88
APPR:	
MATERIAL:	
FINISH:	
USED ON	A3000
NEXT ASSY	

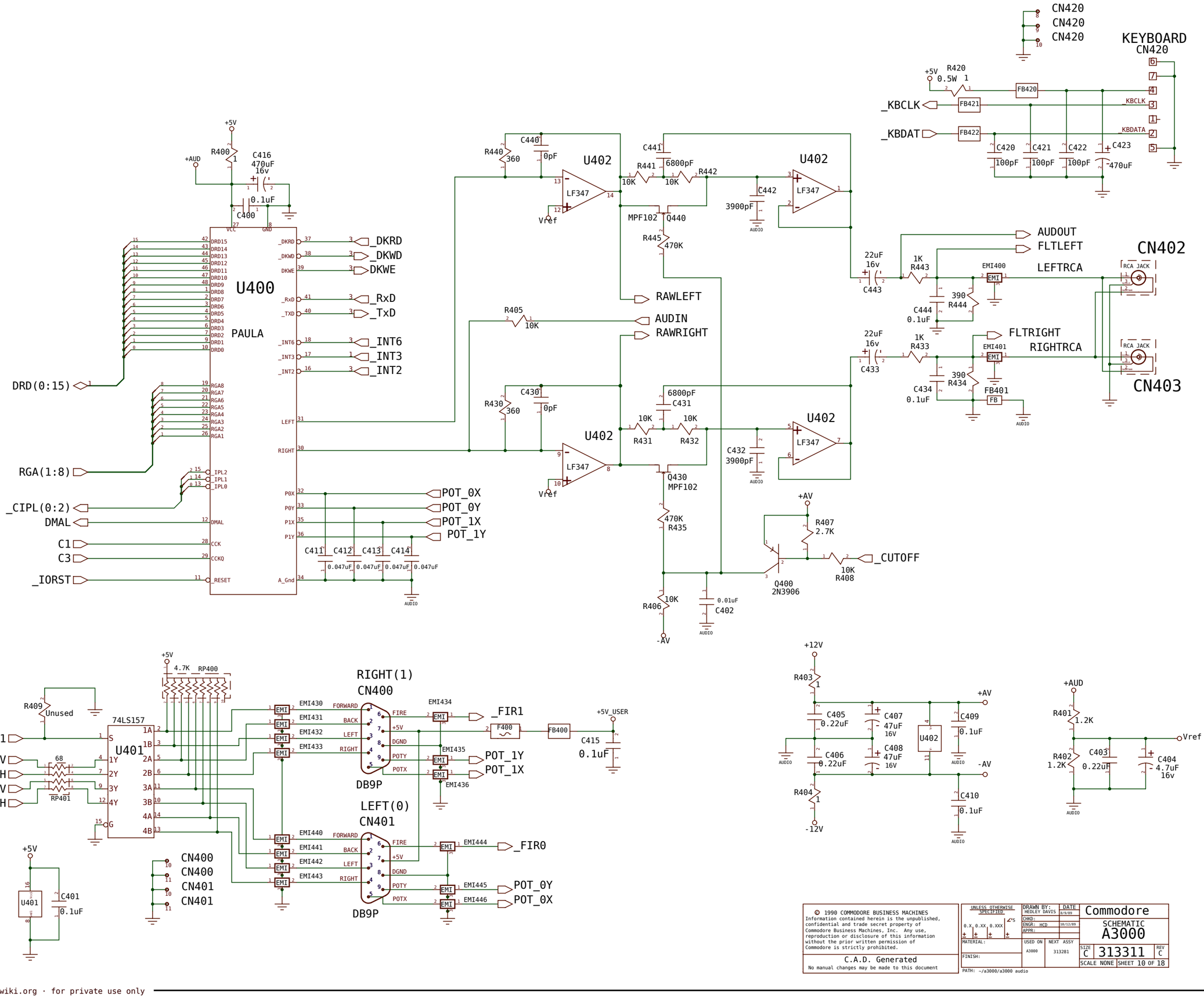
Commodore
SCHEMATIC
A3000
SIZE C | 313311 | REV C
SCALE NONE | SHEET 8 OF 18
PATH: ~/a3000/a3000 serial

Rev.1.3B (03.01.2014)

© rebuild for www.amigawiki.org · for private use only



© rebuild for www.amigawiki.org · for private use only



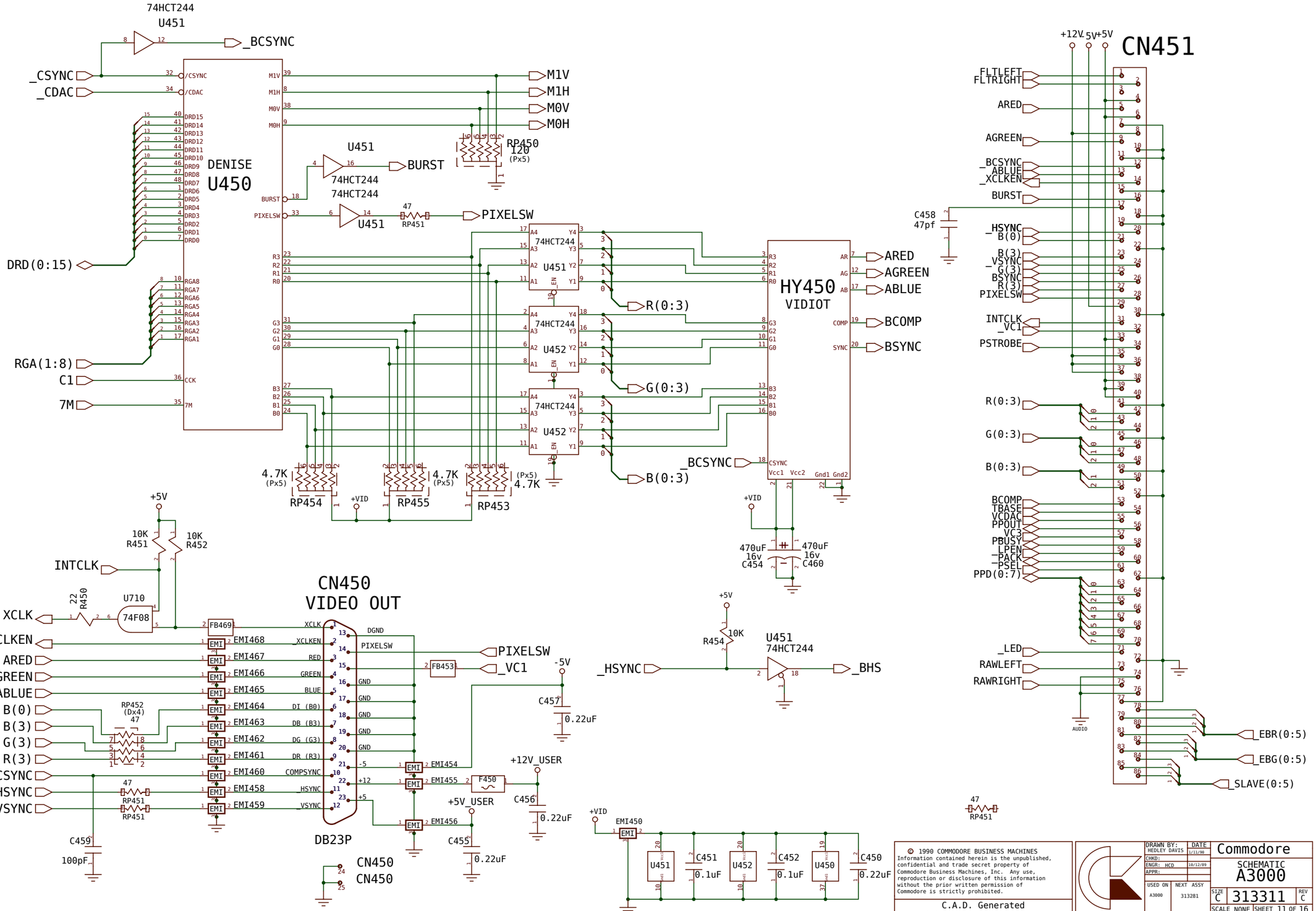
© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.
C.A.D. Generated
No manual changes may be made to this document

DRAWN BY:	HEDLEY DAVIS
DATE	8/9/89
CHKD:	
ENGR: HCD	10/12/89
APPR:	
USED ON	A3000
NEXT ASSY	313281
MATERIAL:	
FINISH:	
SIZE	C
REV	C
SCALE	NONE
SHEET	10 OF 18

Commodore
SCHEMATIC
A3000
313311

PATH: ~/a3000/a3000 audio

© rebuild for www.amigawiki.org · for private use only



Rev 1.38 (03.01.2014)
© rebuild for www.amigawiki.org · for private use only

HY480

VIDEO HYBRID

CN480

DB15-VGA

AMBER U478

NE564 U481

SW481

U470 U471 U472 U473 U474 U475 U476 U477 U479 U480

uPD42101C-2

OKI MSM514221RS-6

74ALS74A

74HC04

74HC74A

74F163A

© rebuild for www.amigawiki.org · for private use only

© 1991 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.
C.A.D. Generated
No manual changes may be made to this document

A3000 Display Enhancer Circuitry

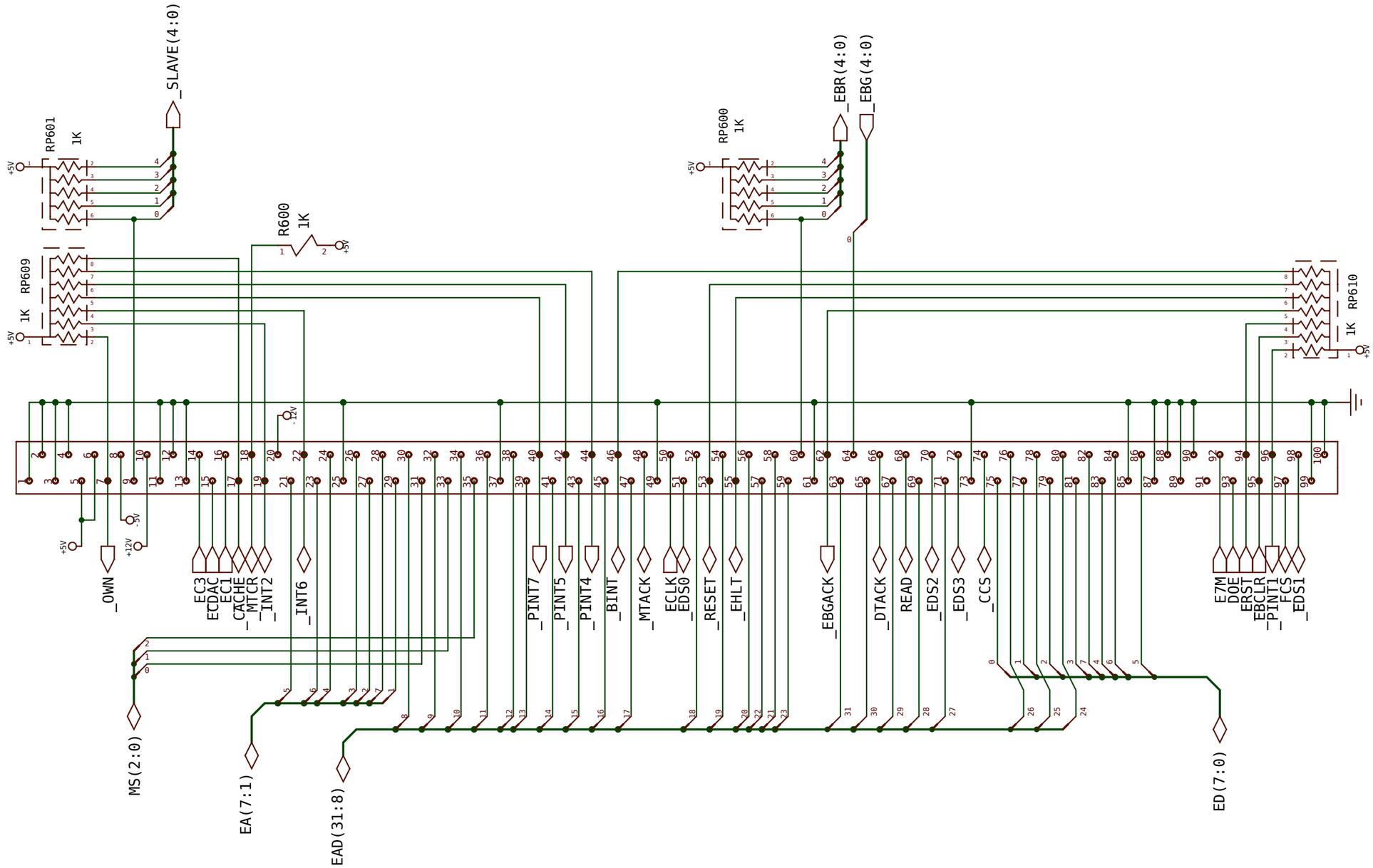
Commodore

SCHEMATIC A3000

SIZE C | 313311 | REV C

SCALE NONE | SHEET 12 OF 18

CN600



© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.

C.A.D. Generated
No manual changes may be made to this document

DRAWN BY: DAVE HAYNIE	DATE 8/29/89	Commodore
CHKD:		SCHEMATIC
ENGR: DBH	8/29/89	A3000
APPR:		
USED ON: A3000	NEXT ASSY	SIZE C · 313311 · REV C
		SCALE NONE · SHEET 13 OF 18

PATH: ~/a3000/a3000 exp_1500

Rev.1.38 (03.01.2014)

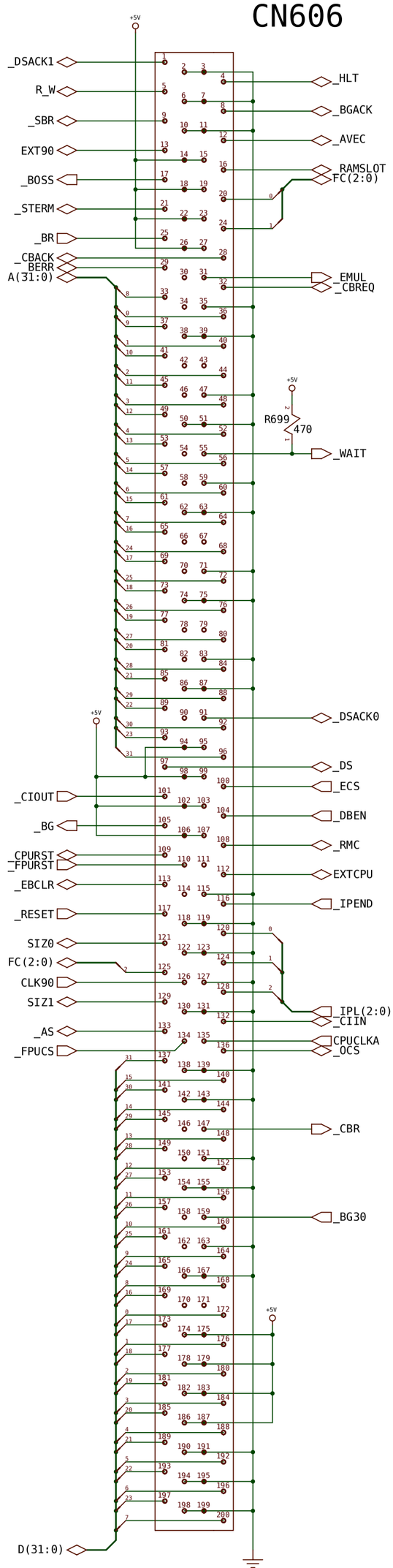
© rebuild for www.amigawiki.org · for private use only

© rebuild for www.amigawiki.org · for private use only

Rev.1.38 (03.01.2014)

Amiga 32 BIT LOCAL SLOT

CN606



© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, copyrighted property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.

C.A.D. Generated

No manual changes may be made to this document

PATH: ~/a3000/a3000 exp other

DRAWN BY: DAVE HAYNIE DATE 8/20/89
CHKD: DBH 8/29/89
APPR: 8/29/89
USED ON A3000 NEXT ASSY

Commodore
SCHEMATIC
A3000

SIZE C | 313311 | REV C

SCALE NONE SHEET 15 OF 18

FAT BUSTER
U700

A(31:0)
_BIGZ
_SLAVE(4:0)
_EBGACK
_EBCLR
_OWN
_EBR(4:0)
_EBG(4:0)
R_W
SIZ0
SIZ1
_AS
_DS
_DSACK0
_DSACK1
_STERM
_RMC
_SBR
_SBG
_WAIT
_CBREQ
_CBACK
_CIIN
_BR
_BG
_BGACK
_EDS3
_EDS2
_EDS1
_EDS0
READ
DOE
_DTACK
_CACHE
_MTCR
_MTACK
_CCS
_FCS
MS(2:0)
HLT
_BERR
_RESET
CPUCLK
CLK90
_CDAC
C7M
_BINT
_GND1
_GND2
_GND3
_GND4
D2P
_DBOE1
_DBOE0
_DB16
_AB0E0
_AB0E1
_AB0E2
_ABOE2
_ABOE1
_ABOE0
EAD(31:8)
FC(2:0)
_ADDRZ3
_MEMZ2
_IOZ2
EA(7:1)
DBR16
DBOE0
DBOE1
DBLT
D(31:0)
ED(7:0)
_IORST
_ERST
_FPURST
_CPURST
_KBRST
_EHLT
_BOSS
_CBR
_CIPL(0:2)
_PINT1
_PINT4
_PINT5
_PINT7
_INTENA
I7M
_IPL(0:2)
_EC3
_EC1
ECDAC
E7M
_CCS
7M
C1
C3
I7M
_BG30

U711 74F04
U705 74F646
U704 74F646
U703 74F646
U714 PAL16L8D
U702 74F245
U706 74F646
U709 74F245
U708 74F245
U715 74F245
U707 74F646
U716 74F245
U700 FAT BUSTER
U701 PAL16R4A
U710 74F08
U712 74F32
U713 7407
RP700 22
RP703 1K
RP702 1K
RP701 470
C700 0.22uF
C701–C716 0.22uF

© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.
C.A.D. Generated
No manual changes may be made to this document

DRAWN BY: DAVE HAYNIE DATE 8/29/89
CHKD:
ENGR: DBH 8/29/89
APPR:
USED ON A3000 NEXT ASSY

Commodore
SCHEMATIC
A3000
SIZE C 313311 REV C
SCALE NONE SHEET 16 OF 18
PATH: ~/a3000/a3000 exp_logic

Rev.1.38 (03.01.2014)

© rebuild for www.amigawiki.org · for private use only

WD33C93A

SUPER DMAC

+5V
74F74
U106
28M
R809
100
14M
C800
0.33uF
IORST
7407
U713
RP802
RP803
RP804
220/330
D800
1N4001
SCSI_LED
1K
R805
RP801
RP800
3.3Kx9_SIP
INTS
_DREQ
_DACK
_CSS
_IOW
_IOR
_IORST
A(1)
_INTRQ
_DRQ
_DACK
_CSS
_WE
_RE
RESET
CLK
A0
D0
D1
D2
D3
D4
D5
D6
D7
ALE
VSS1
VSS2
VCC
REQ
MSG
CD
IO
ATN
ACK
BSY
SEL
SD7
SD6
SD5
SD4
SD3
SD2
SD1
SD0
SDP
VSS3
VSS4
SCSI_CONT(0:9)
SCSI_DATA(0:7)
U800
_INT2
_SIZ1
R_W
_AS
_DS
_DSACK1
_DSACK0
_STERM
CPUCLKB
_SCSI
_IORST
_BERR
_SBR
_SBG
_BGACK
_INT
SIZE1
RW
_AS
_DS
_DSACK1
_DSACK0
_STERM
SCLK
_CS
_RESET
_BERR
_BR
_BG
_BGACK
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
NC0
NC1
NC2
NC3
NC4
NC5
NC6
NC7
_DREQ
_DACK
_CSS
_IOW
_IOR
_CSX0
_CSX1
_IORDY
INTA
INTB
INC_ADD
_DMAEN
A2
A3
A4
A5
A6
VCC1
VCC2
VSS1
VSS2
U802
DPMC
C801
0.33uF
D(31:0)
A(31:0)
EMI800
EMI801
EMI802
EMI803
EMI804
EMI805
EMI806
EMI807
EMI808
EMI809
EMI810
EMI811
EMI812
EMI813
EMI814
EMI815
EMI816
EMI817
CN802
50 PIN CONNECTOR
(INTERNAL SCSI CONNECTOR)
CN801
EXTERNAL SCSI CONNECTOR
DB25
CN801
CN801

© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.
C.A.D. Generated
No manual changes may be made to this document

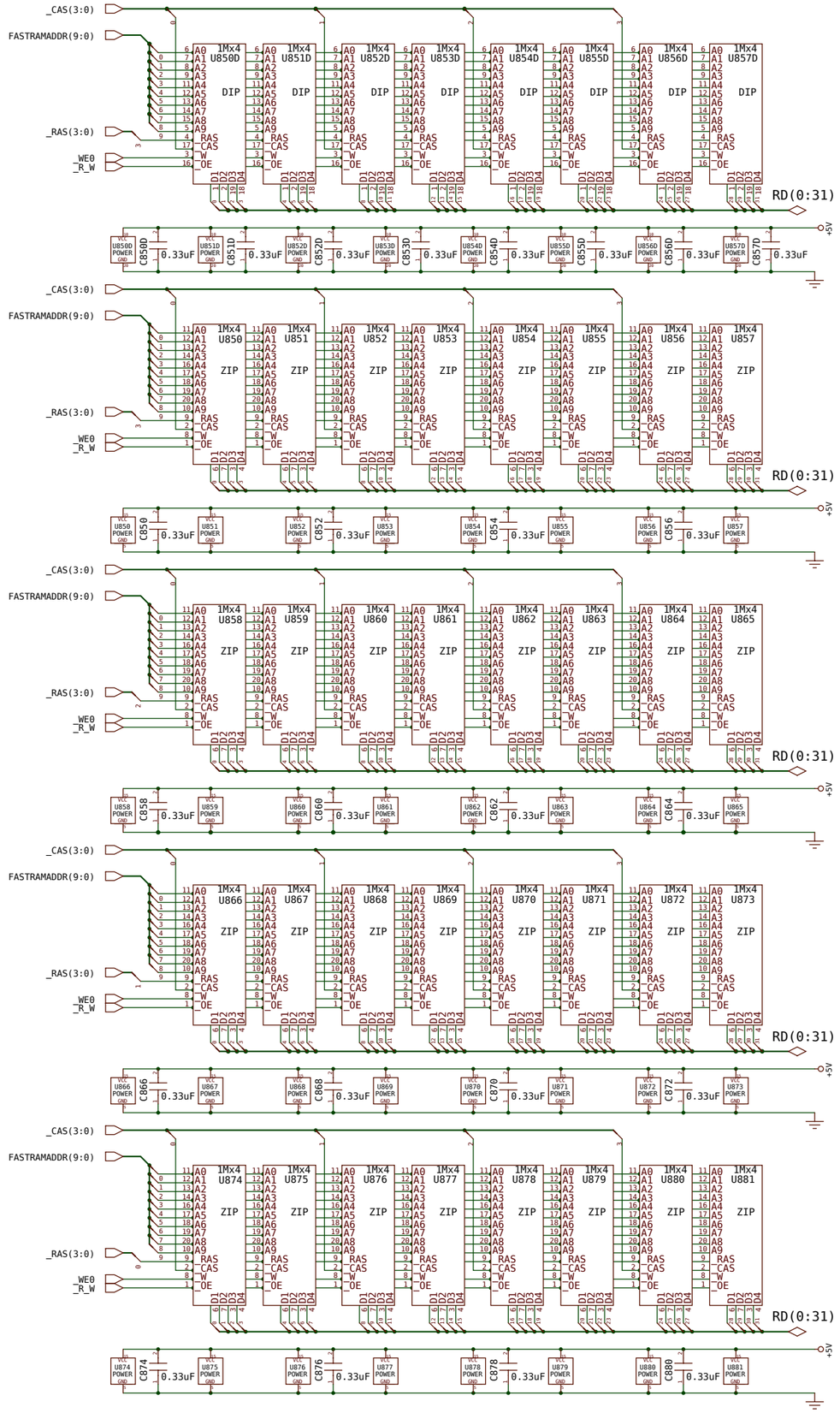
SCSI INTERFACE

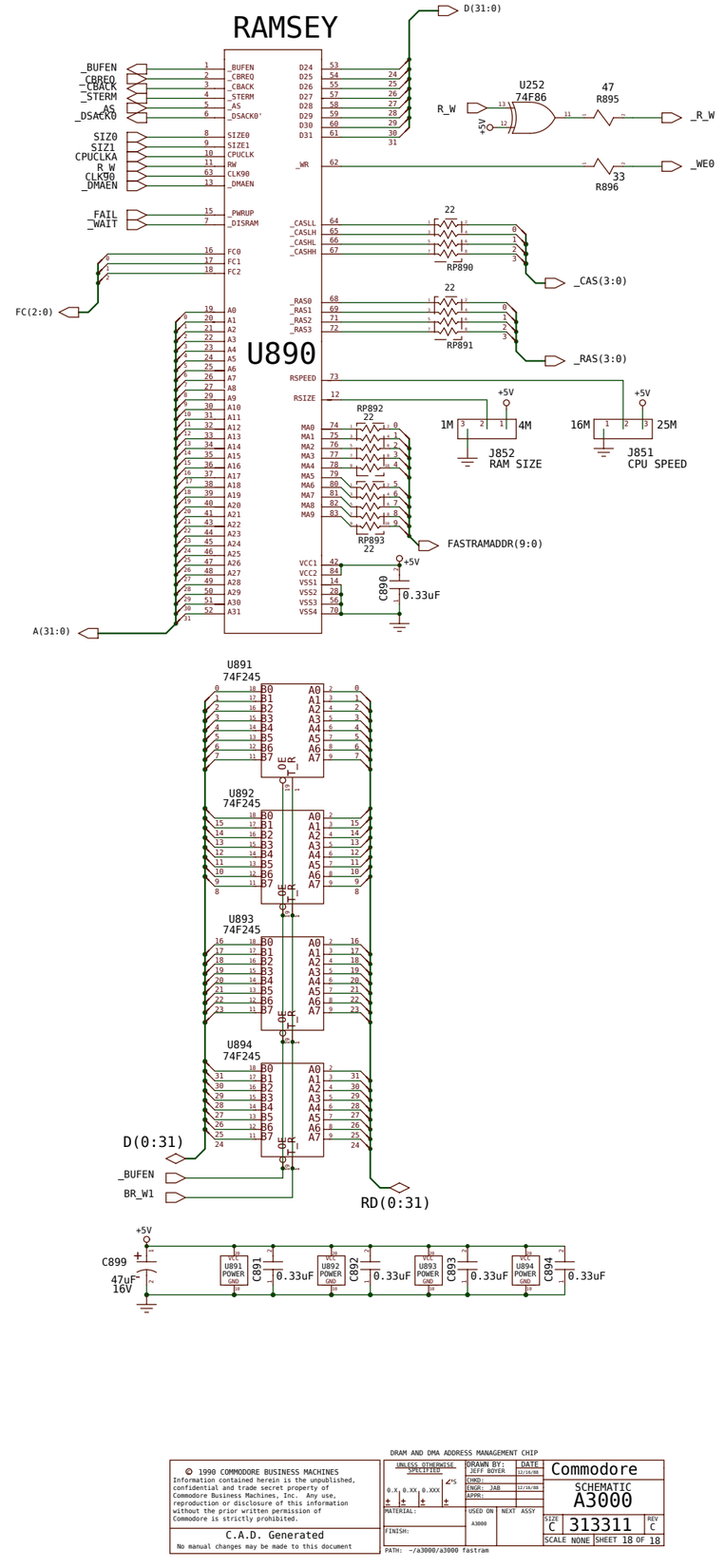
UNLESS OTHERWISE SPECIFIED	DRAWN BY: JEFF BOYER	DATE 12/15/88	Commodore
0.X ± 0.XX ± 0.XXX ± ∠'s	CHKD:		SCHEMATIC A3000
	ENGR: JAB	12/15/88	
	APPR:		
MATERIAL:	USED ON A3000	NEXT ASSY 313281	SIZE C 313311 REV C
FINISH:			SCALE NONE SHEET 17 OF 18

PATH: ~/a3000/a3000 scsi

Rev.1.38 (03.01.2014)

© rebuild for www.amigawiki.org · for private use only





DRAM AND DMA ADDRESS MANAGEMENT CHIP

© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.

C.A.D. Generated

No manual changes may be made to this document

UNLESS OTHERWISE SPECIFIED	DRAWN BY: JEFF BOYER	DATE 12/16/88	Commodore
0.X ±.1 0.XX ±.05 0.XXX ±.4 ∠ ±5	CHKD:		SCHEMATIC
	ENGR: JAB	12/16/88	A3000
	APPR:		
MATERIAL:	USED ON A3000	NEXT ASSY	SIZE C 313311 REV C
FINISH:			SCALE NONE SHEET 18 OF 18

PATH: ~/a3000/a3000 fastram

© rebuild for www.amigawiki.org · for private use only

EDGE1 CN600 CN601 CN602 CN603

C600 C601 C602 C603 220uF 16V +5V

470 R603

7407 U601 13 12

MS(2:0)

EA(23:0)

ED(0:15)

_OWN

EC3

ECDAC

EC1

_OVR

MTCR

_INT2

_INT6

_PINT7

_PINT5

_PINT4

_BINT

_MTACK

ECLK

_CINT

_RESET

_EHLT

_EBGACK

_DTACK

READ

_EDSL

_EDSH

_CCS

E7M

DOE

ERST

EBCLR

_PINT1

_FCS

_SCS

1K R602

7407 1 2 U601

7407 3 4 U601

7407 5 6 U601

7407 9 8 U601

U600

74HCT32 U600

1K RP611

470 R601

220/330 RP602

1K R600

220/330 RP603

220/330 RP604

220/330 RP605

220/330 RP606

220/330 RP607

220/330 RP608

7407 11 10 U601

U600 C606 0.1uF U601 C604 0.1uF

_EBG(0:5)

_EBR(0:5)

_SLAVE(0:5)

© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.

C.A.D. Generated
No manual changes may be made to this document

I'm back in the high life again

DRAWN BY: DAVIS,HAYNIE	DATE 1/17/91	Commodore
CHKD:		A3000
ENGR: HCD,DBH	1/17/91	DAUGHTER
APPR:		
USED ON A3000	NEXT ASSY	SIZE B 313251 REV D
		SCALE NONE SHEET 1 OF 2

PATH: ~A3000/A3000DAUGHTER SHEET1

Rev 1.3B (03.01.2014)

© rebuild for www.amigawiki.org · for private use only

IBM 8 BIT SLOTS

CN451

EDGE2

+12V +5V +5V +12V +5V +5V

FLTLEFT
FLTRIGHT
ARED
AGREEN
_BCSYNC
_ABLUE
_XCLKEN
BURST
_C4
_HSYNC
_B(0)
B(3)
_VSYNC
_G(3)
BSYNC
R(3)
PIXELSW
INTCLK
_VC1
PSTROBE

C458 47pF

CN452

R(0:3)
G(0:3)
B(0:3)
BCOMP
TBASE
VCDAC
PPOUT
VC3
PBUSY
LPEN
–PACK
–PSEL
PPD(0:7)
_LED
RAWLEFT
RAWRIGHT
_EBR(0:5)
_EBG(0:5)
_SLAVE(0:5)

AUDIO AUDIO

74F74 U1 (+5V, D, CLK, _PRE, _CLR, Q)

CN751

+12V +5V RP751 4.7K -5V -12V

CN752

RP751 4.7K

RP754 1K
RP755 1K
RP756 1K

C783–C776 1000pF

C752 0.22uF
C751 22uF 16V
C753 0.22uF
C754 0.22uF

74F74 U1

U1 POWER (VCC, GND)
C1 0.1uF

IBM 16 BIT EXTENSION SLOTS

RP753 1K
RP752 1K
RP751 4.7K +5V

CN754
CN755

C784–C799 1000pF

C849 0.22uF

ONE SCREAMING MACHINE...THAT'S AMIGA!

© 1990 COMMODORE BUSINESS MACHINES
Information contained herein is the unpublished, confidential and trade secret property of Commodore Business Machines, Inc. Any use, reproduction or disclosure of this information without the prior written permission of Commodore is strictly prohibited.

C.A.D. Generated
No manual changes may be made to this document

DRAWN BY: DAVIS,HAYNIE	DATE 6/2/89	Commodore
CHKD:		A3000
ENGR: HCD,DBH	4/20/89	DAUGHTER
APPR:		
USED ON A1500	NEXT ASSY	SIZE B · 313251 · REV D
		SCALE NONE · SHEET 2 OF 2

PATH: ~A3000/A3000DAUGHTER SHEET2

Rev.1.38 (03.01.2014)

© rebuild for www.amigawiki.org · for private use only