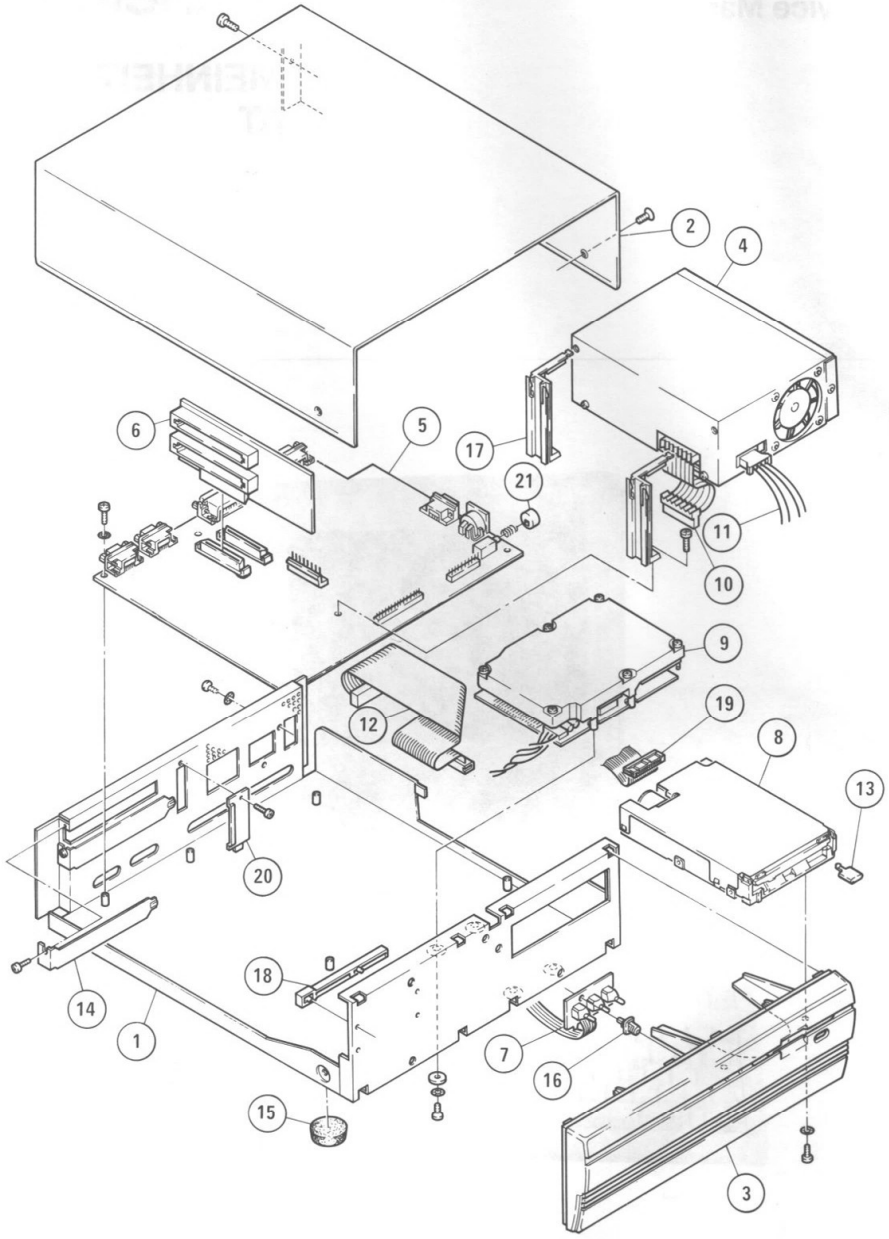
Kundendienst-Handbuch
Service Manual

Schneider

SYSTEMEINHEIT
EURO AT

Ident-Nr.: 43490

Exploded view



Ersatzteilliste für Euro AT
Parts List for Euro AT

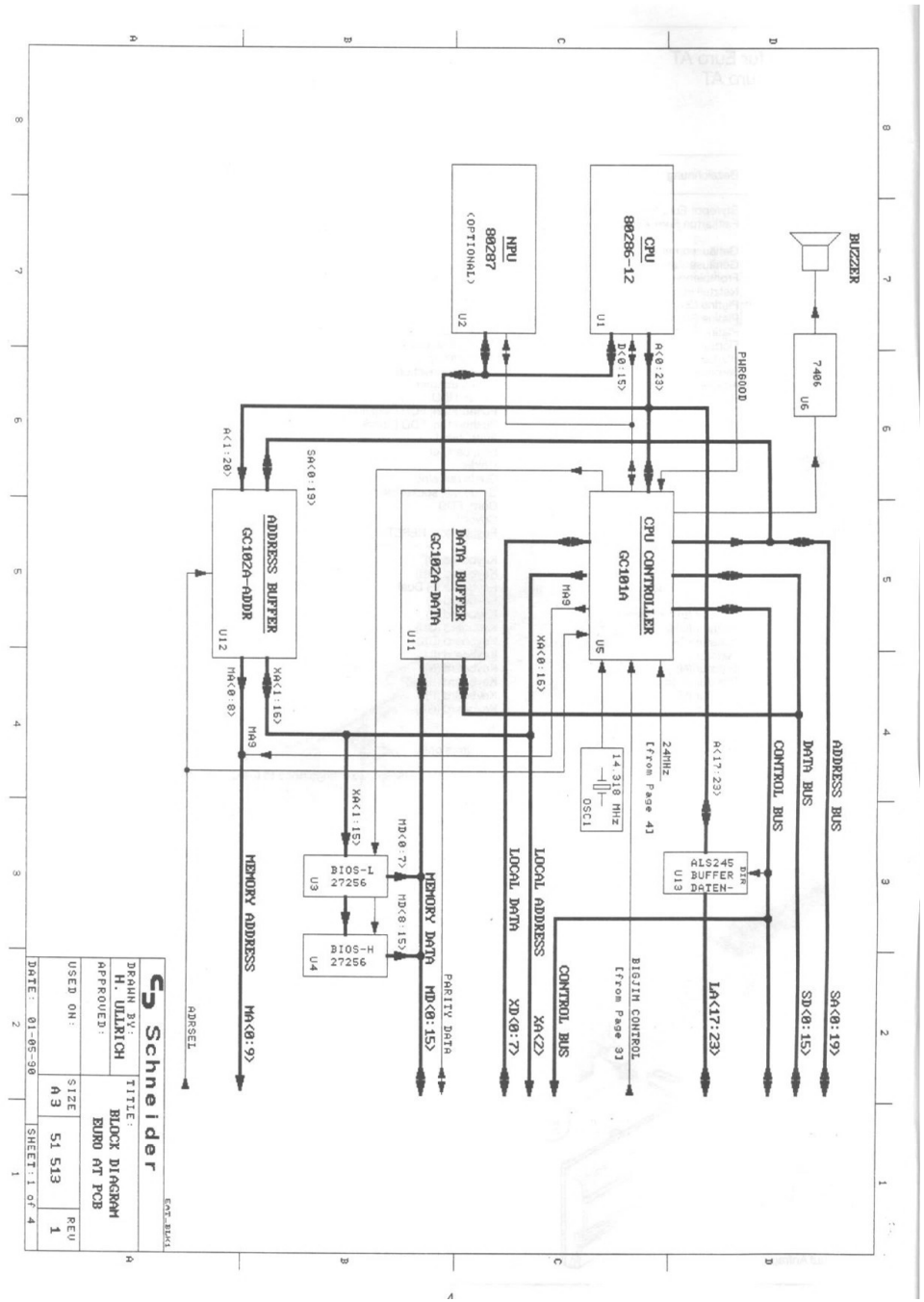
Best.-Nr. Part.-No.	Bezeichnung	Description	Zeich.-Pos. Ref.-No.	Preisgruppe
51 451 00	Styropor Euro XT/AT	Polyfoam		C 1
51 452 00	Faltkarton Euro XT/AT	Gift box		C 0
51 254 00	Gehäuseunterteil	Cabinet, bottom	1	D 4
51 257 00	Gehäuseoberteil	Cabinet, top	2	D 2
51 462 00	Frontblende	Front, mask	3	C 3
51 467 00	Netzteil Euro XT	Power supply	4	F 9
51 513 00	Platine CPU	P.C.B. CPU	5	*
51 620 00	Platine Steckplatz	P.C.B. slot	6	D 8
52 122 00	Platine LED	P.C.B. LED	7	C 2
50 021 00	Floppylaufwerk	Floppy disk drive	8	G 7
51 550 00	HD-Laufwerk	Hard disk drive	9	J 2
51 430 00	Verbindungskabel, Netz-CPU	Cabel, connection	10	B 3
51 458 00	Adapterkabel HD 4pol.	Cabel, adapter	11	B 4
51 444 00	HD-Kabel	Cabel, HDD	12	C 0
50 056 00	Druckknopf für FDD (Toshiba)	Pushbutton, FDD (Toshiba)	13	A 5
50 294 00	Druckknopf für FDD (Sony)	Pushbutton, FDD (Sony)	13	A 5
50 020 00	Blindblech	Plate, blind	14	A 7
51 456 00	Gehäusefuß	Leg, cabinet	15	A 4
51 457 00	Platinenhalter	Holder	16	A 3
51 262 00	Führungsschiene Steckplatz	Guide rail, slot	17	A 6
50 865 00	Führungsschiene Steckkarte	Guide rail, socket card	18	A 6
51 443 00	Kabelbaum FDD	Cord, FDD	19	B 6
51 266 00	Abdeckung	Cover	20	A 5
51 630 00	Druckknopf RESET	Pushbutton, RESET	21	A 6
51 750 00	Tastatur (D)	Keyboard (D)		F 6
51 751 00	Tastatur (GB)	Keyboard (GB)		F 6
51 752 00	Tastatur (F) Dual	Keyboard (F) Dual		F 6
51 753 00	Tastatur (F)	Keyboard (F)		F 6
51 754 00	Tastatur (E)	Keyboard (E)		F 6
51 755 00	Tastatur (CH)	Keyboard (CH)		F 6
51 756 00	Tastatur (DK)	Keyboard (DK)		F 6
51 757 00	Tastatur (I)	Keyboard (I)		F 6
51 758 00	Tastatur (N)	Keyboard (N)		F 6
51 759 00	Tastatur (S/SF)	Keyboard (S/SF)		F 6
51 760 00	Tastatur (P)	Keyboard (P)		F 6
51 761 00	Tastatur (GR)	Keyboard (GR)		F 6

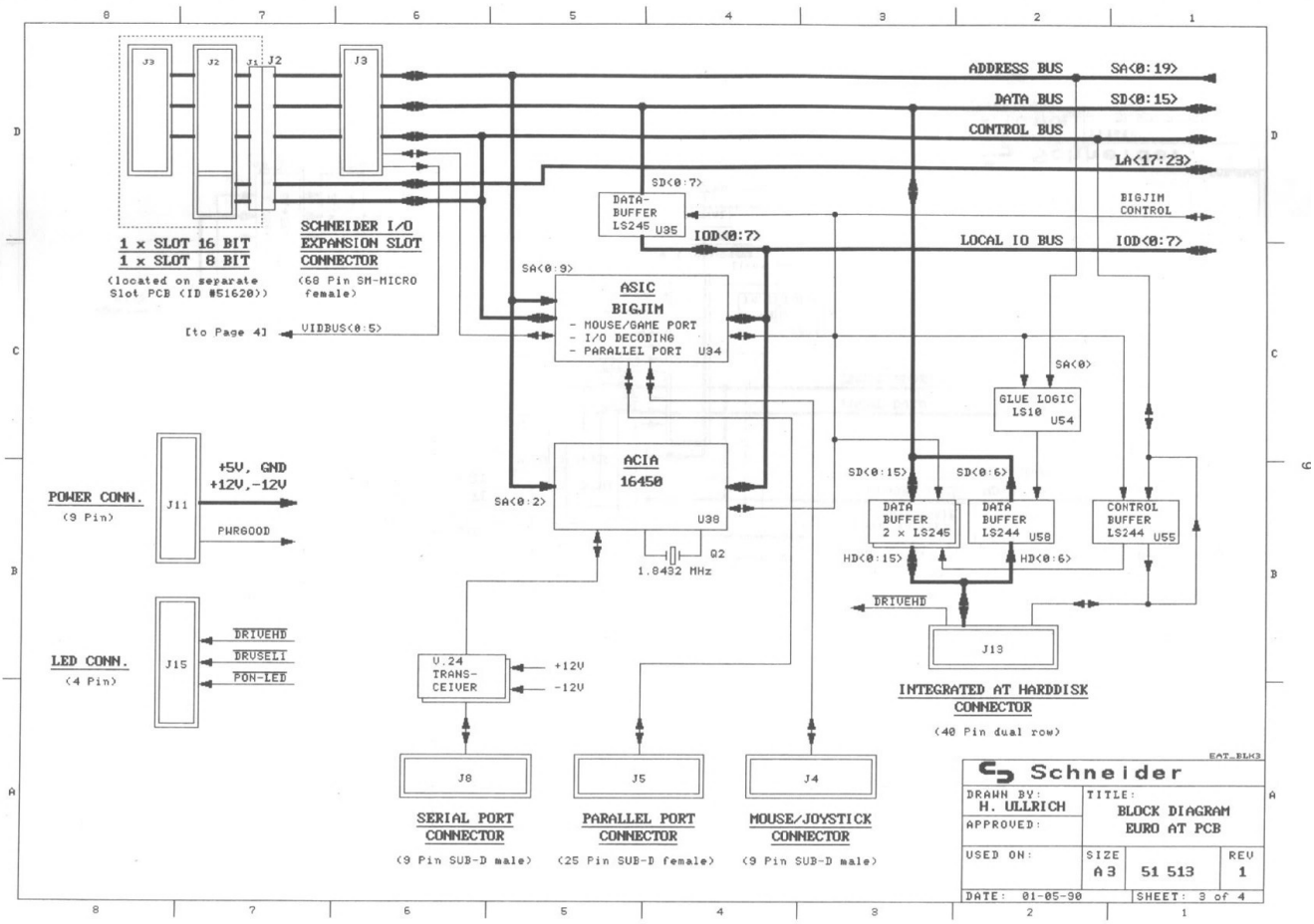
Note: All spare parts with countryindex are reserved for foreign distributors only.

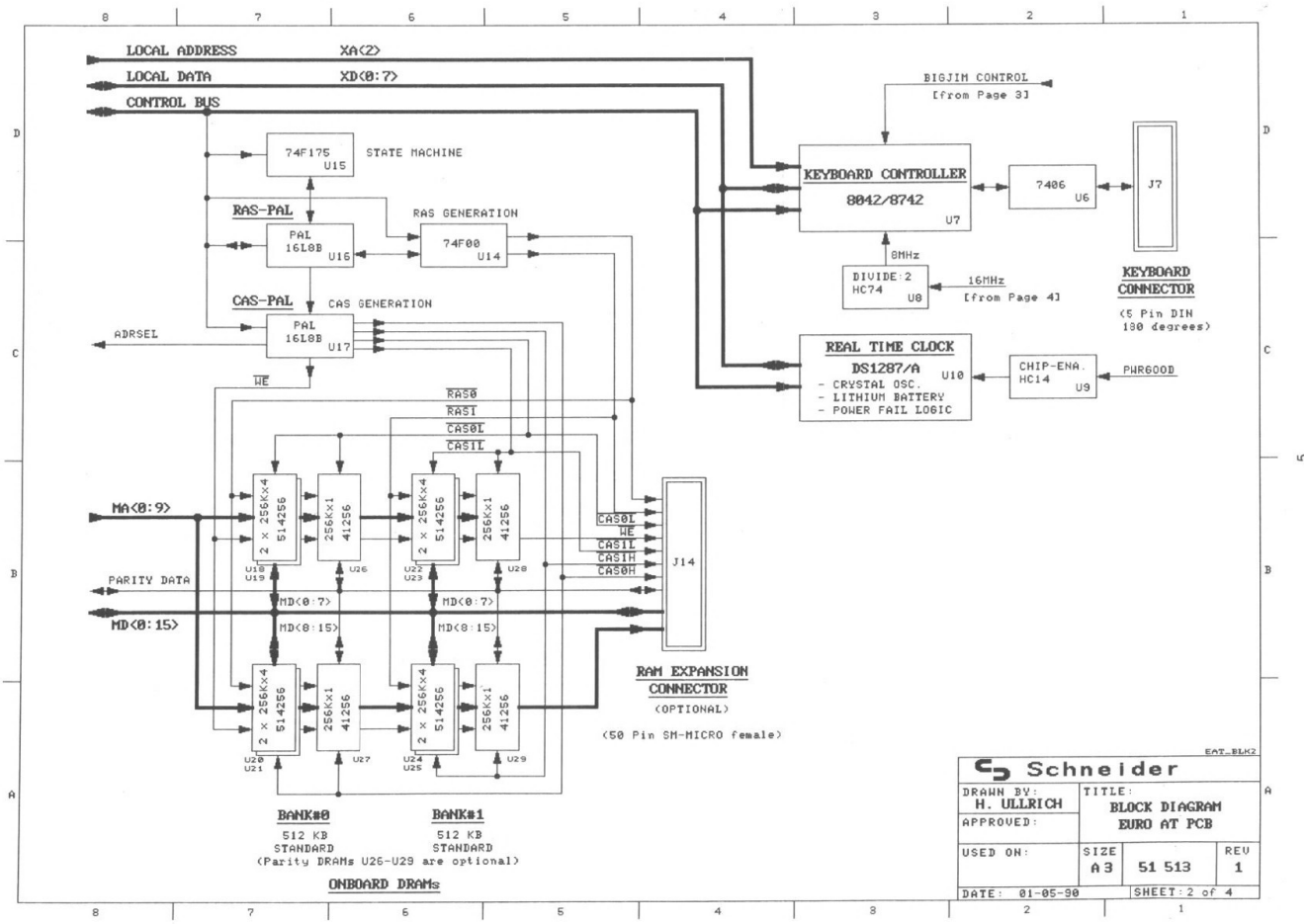
All 3.5″ and 5.25″ floppydisks must be replaced by new ones. Schneider passes no exchange price to the distributor or dealer.

* Preis auf Anfrage

* Please call for price




J3
J2
J1
J2
J3
ADDRESS BUS
SA<0:19>
DATA BUS
SD<0:15>
CONTROL BUS
LA<17:23>
SD<0:7>
DATA-
BUFFER
LS245 U35
BIGJIM
CONTROL
IOD<0:7>
LOCAL IO BUS
IOD<0:7>
1 x SLOT 16 BIT
1 x SLOT 8 BIT
(located on separate
Slot PCB (ID #51620))
SCHNEIDER I/O
EXPANSION SLOT
CONNECTOR
(68 Pin SM-MICRO
female)
SA<0:9>
ASIC
BIGJIM
- MOUSE/GAME PORT
- I/O DECODING
- PARALLEL PORT U34
[to Page 4]
VIDBUS<0:5>
SA<0>
GLUE LOGIC
LS10 U54
POWER CONN.
(9 Pin)
J11
+5V, GND
+12V,-12V
PWRGOOD
ACIA
16450
U30
SA<0:2>
SD<0:15>
SD<0:6>
DATA
BUFFER
2 x LS245
DATA
BUFFER
LS244 U58
CONTROL
BUFFER
LS244 U55
HD<0:15>
HD<0:6>
Q2
1.8432 MHz
DRIVEHD
J13
INTEGRATED AT HARDDISK
CONNECTOR
(40 Pin dual row)
LED CONN.
(4 Pin)
J15
DRIVEHD
DRVSELI
FDN-LED
V.24
TRANS-
CEIVER
+12V
-12V
J8
J5
J4
SERIAL PORT
CONNECTOR
(9 Pin SUB-D male)
PARALLEL PORT
CONNECTOR
(25 Pin SUB-D female)
MOUSE/JOYSTICK
CONNECTOR
(9 Pin SUB-D male)
EAT_BLK3
Schneider
DRAWN BY:
H. ULLRICH
TITLE:
BLOCK DIAGRAM
EURO AT PCB
APPROVED:
USED ON:
SIZE
A3
51 513
REV
1
DATE: 01-05-90
SHEET: 3 of 4


LOCAL ADDRESS
XA<2>
LOCAL DATA
XD<0:7>
CONTROL BUS
BIGJIM CONTROL
[from Page 3]
74F175
U15
STATE MACHINE
KEYBOARD CONTROLLER
8042/8742
U7
7406
U6
J7
RAS-PAL
PAL
16L8B
U16
RAS GENERATION
74F00
U14
8MHz
DIVIDE:2
HC74
U8
16MHz
[from Page 4]
KEYBOARD
CONNECTOR
(5 Pin DIN
180 degrees)
CAS-PAL
CAS GENERATION
PAL
16L8B
U17
ADRSEL
REAL TIME CLOCK
DS1287/A
U10
- CRYSTAL OSC.
- LITHIUM BATTERY
- POWER FAIL LOGIC
CHIP-ENA.
HC14
U9
PWRGOOD
WE
RAS0
RAS1
CAS0L
CAS1L
MA<0:9>
2 x 256Kx4
514256
256Kx1
41256
U18
U19
U26
U22
U23
U28
CAS0L
WE
CAS1L
CAS1H
CAS0H
J14
PARITY DATA
MD<0:7>
MD<0:15>
RAM EXPANSION
CONNECTOR
(OPTIONAL)
(50 Pin SM-MICRO female)
U20
U21
U27
U24
U25
U29
BANK#0
512 KB
STANDARD
(Parity DRAMs U26-U29 are optional)
BANK#1
512 KB
STANDARD
ONBOARD DRAMs
EAT_BLK2
Schneider
DRAWN BY:
H. ULLRICH
TITLE:
BLOCK DIAGRAM
EURO AT PCB
APPROVED:
USED ON:
SIZE
A3
51 513
REV
1
DATE: 01-05-90
SHEET: 2 of 4

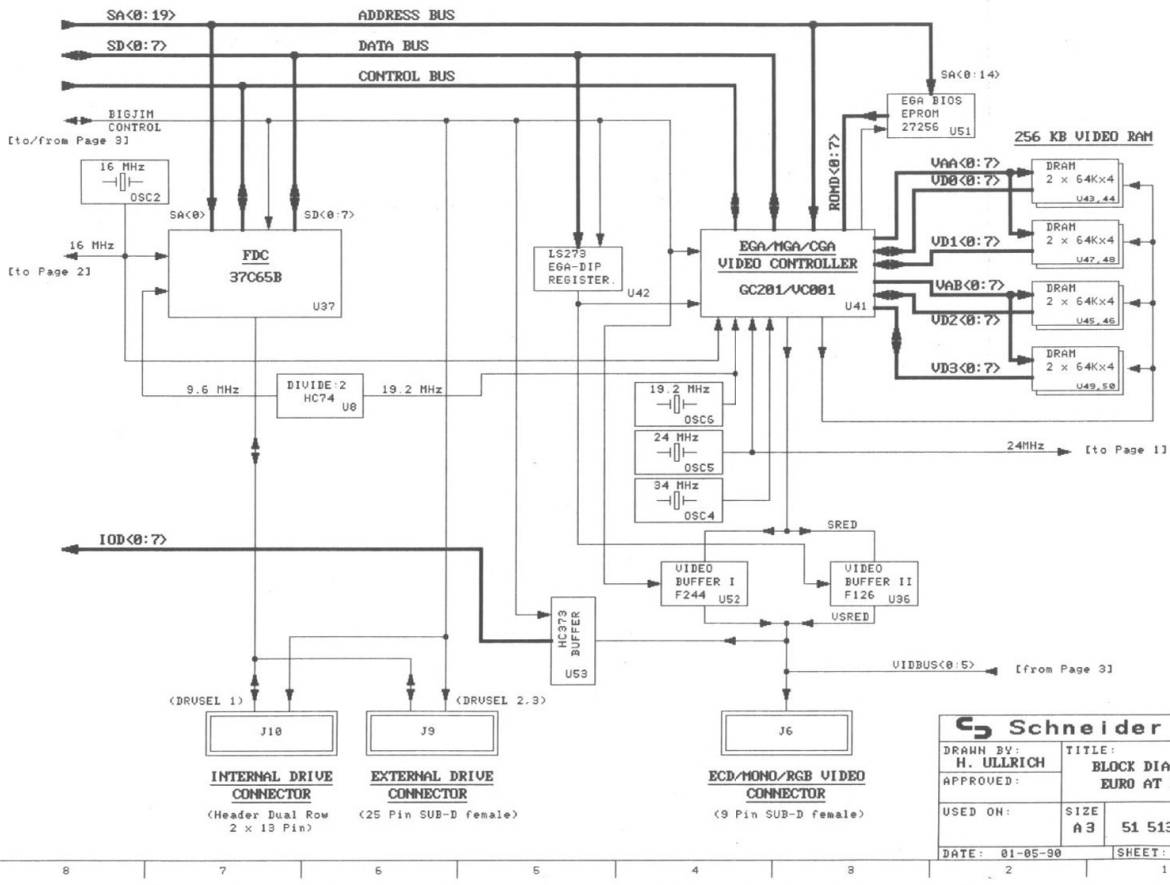
REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
5	PCB REVISION 1	12-07-89	
6	PCB REVISION 1A, OSC1 REPLACES Q1	12-07-89	K. WINZEK
7	PCB REV.1B, C202 NOT USED	01-12-90	K. WINZEK

DRAWING FILES:	CONTENTS:
EAT_71.DWG	THIS SHEET
EAT_72.DWG	CPU SECTION
EAT_73.DWG	BIOS EPROMS
EAT_74.DWG	GC 101 A
EAT_75.DWG	KEYBOARD / CLOCK
EAT_76.DWG	REAL TIME CLOCK / SPKR
EAT_77.DWG	ADDRESS / DATA BUFFERS
EAT_78.DWG	TIMING FOR MEMORY
EAT_79.DWG	MEMORY I
EAT_710.DWG	MEMORY II
EAT_711.DWG	BIGJIM
EAT_712.DWG	FLOPPY INTERFACE
EAT_713.DWG	SERIAL INTERFACE
EAT_714.DWG	VIDEO CONTROLLER
EAT_715.DWG	VIDEO MEMORY
EAT_716.DWG	VIDEO INTERFACE
EAT_717.DWG	AT HARD DISK INTERFACE
EAT_718.DWG	SLOT PCB CONNECTOR

DRAWING FILES:	CONTENTS:
EAT_719.DWG	SCHNEIDER EXTENSION CONNECTOR
EAT_720.DWG	ANALOG JOYSTICK / CONNECTORS I
EAT_721.DWG	CONNECTORS II
EAT_722.DWG	CONNECTORS III
EAT_723.DWG	CONNECTORS IV
EAT_724.DWG	BLOCK CAPS.

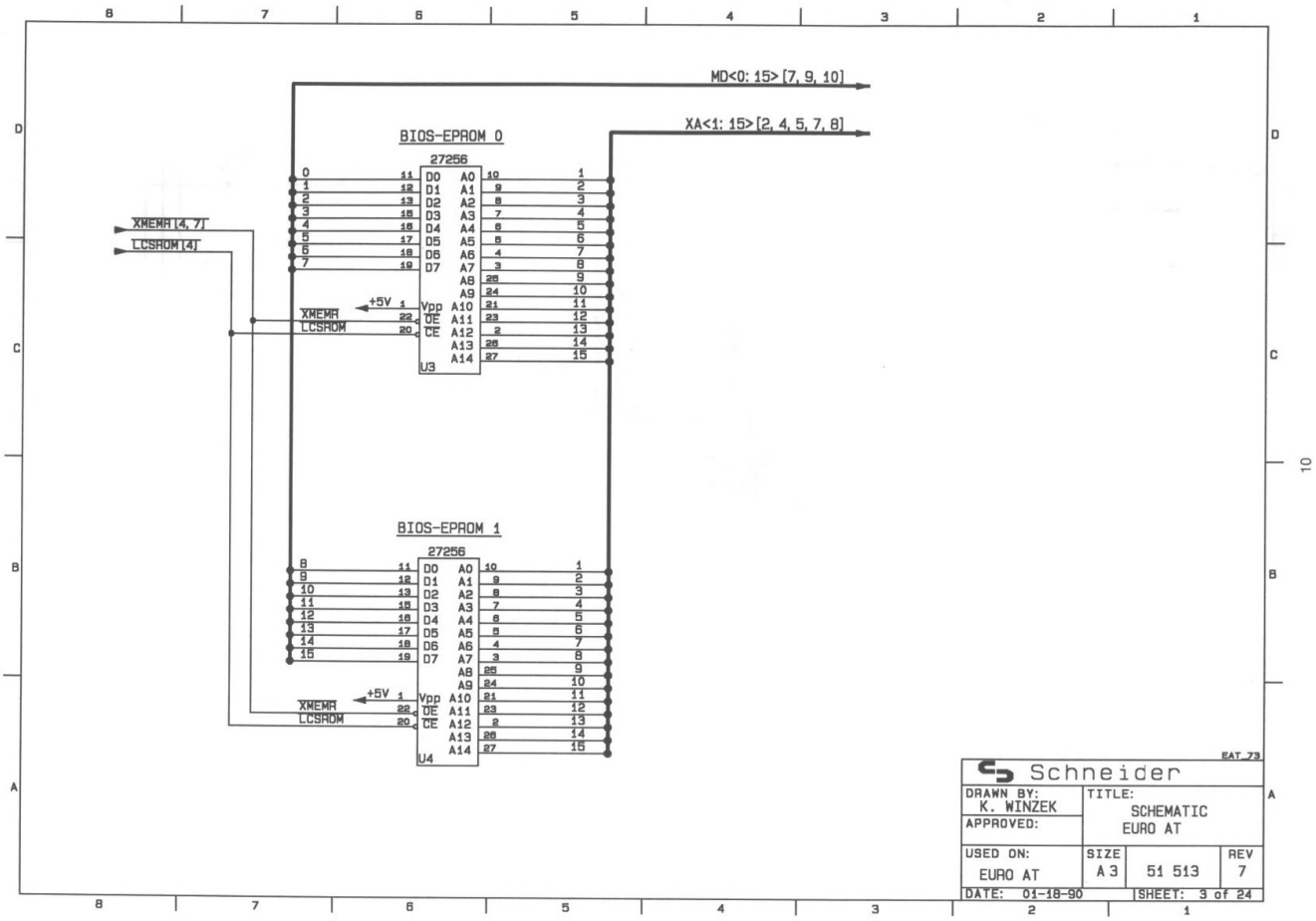
EAT_71

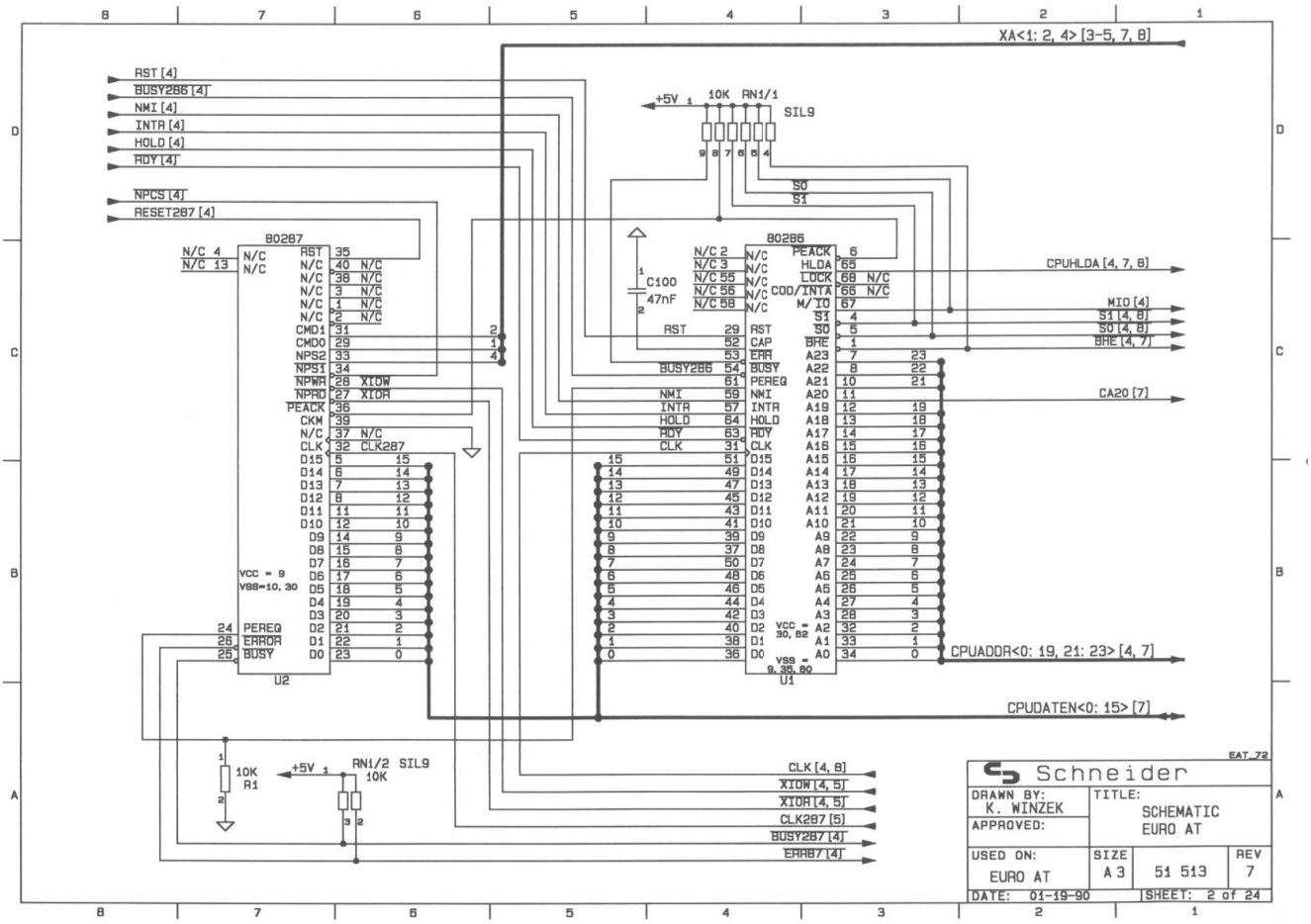
Schneider			
DRAWN BY: K. WINZEK	TITLE: SCHEMATIC EURO AT		
APPROVED:			
USED ON: EURO AT	SIZE A3	51 513	REV 7
DATE: 01-19-90	SHEET: 1 of 24		

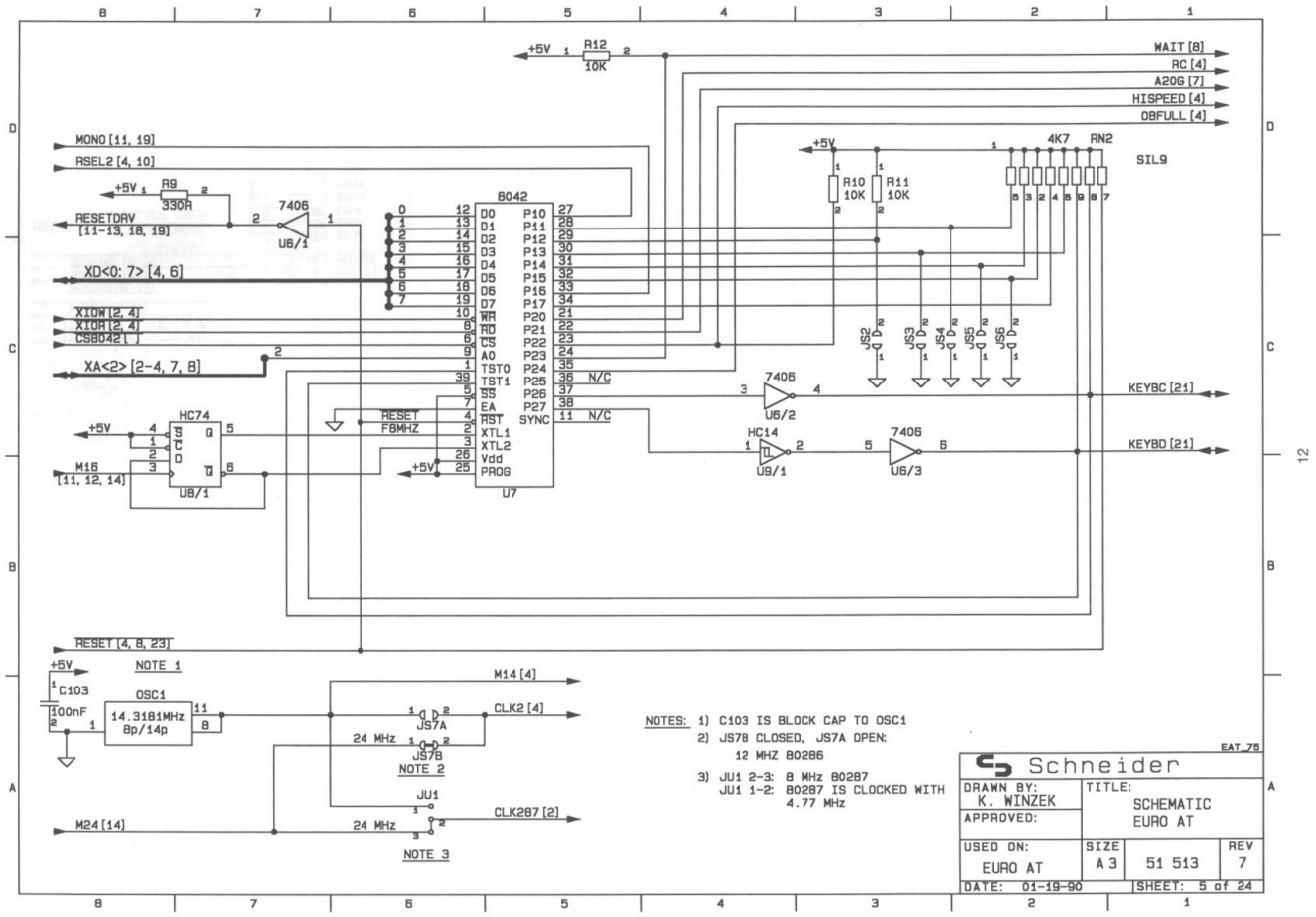


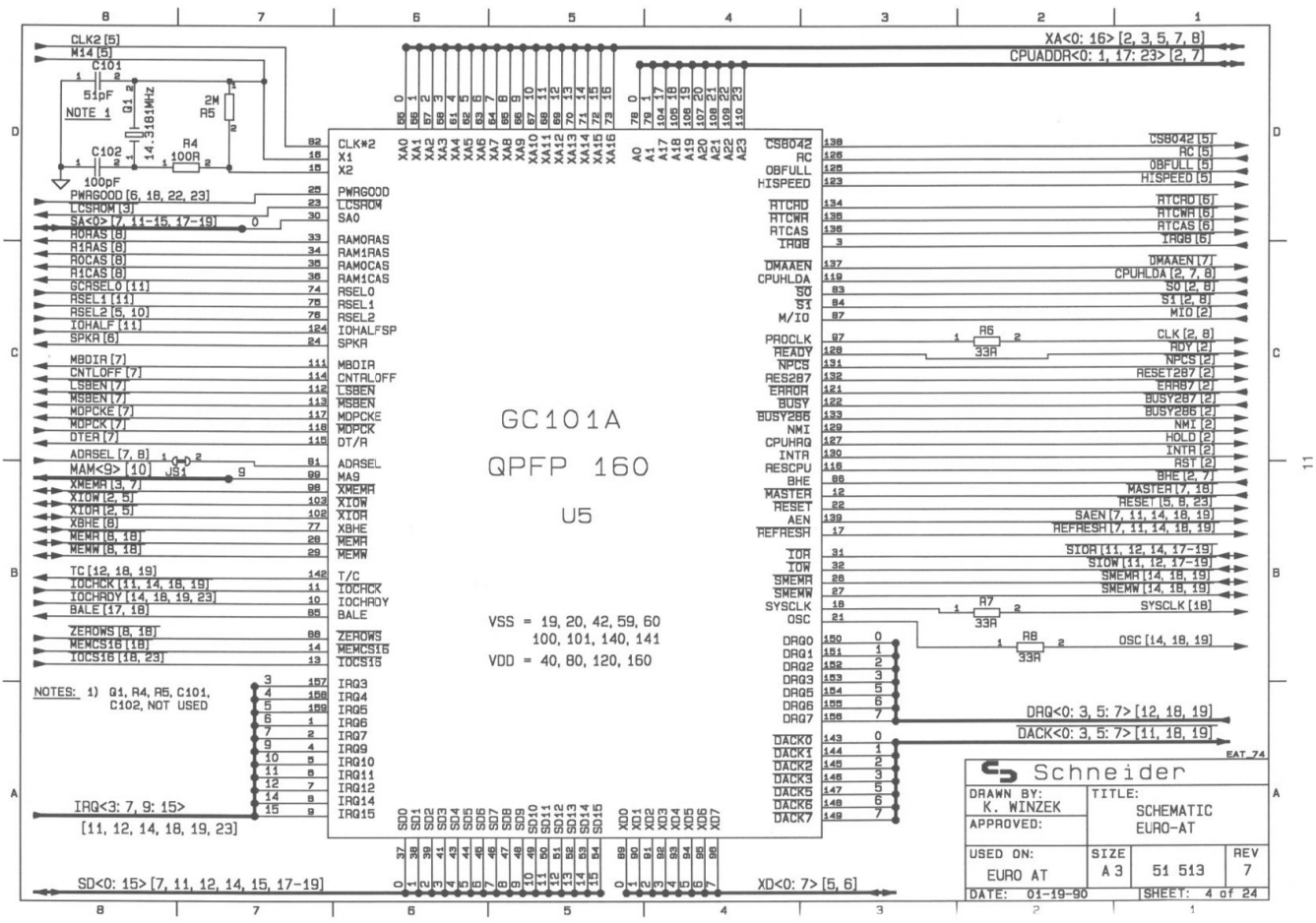
EAT_BLK4

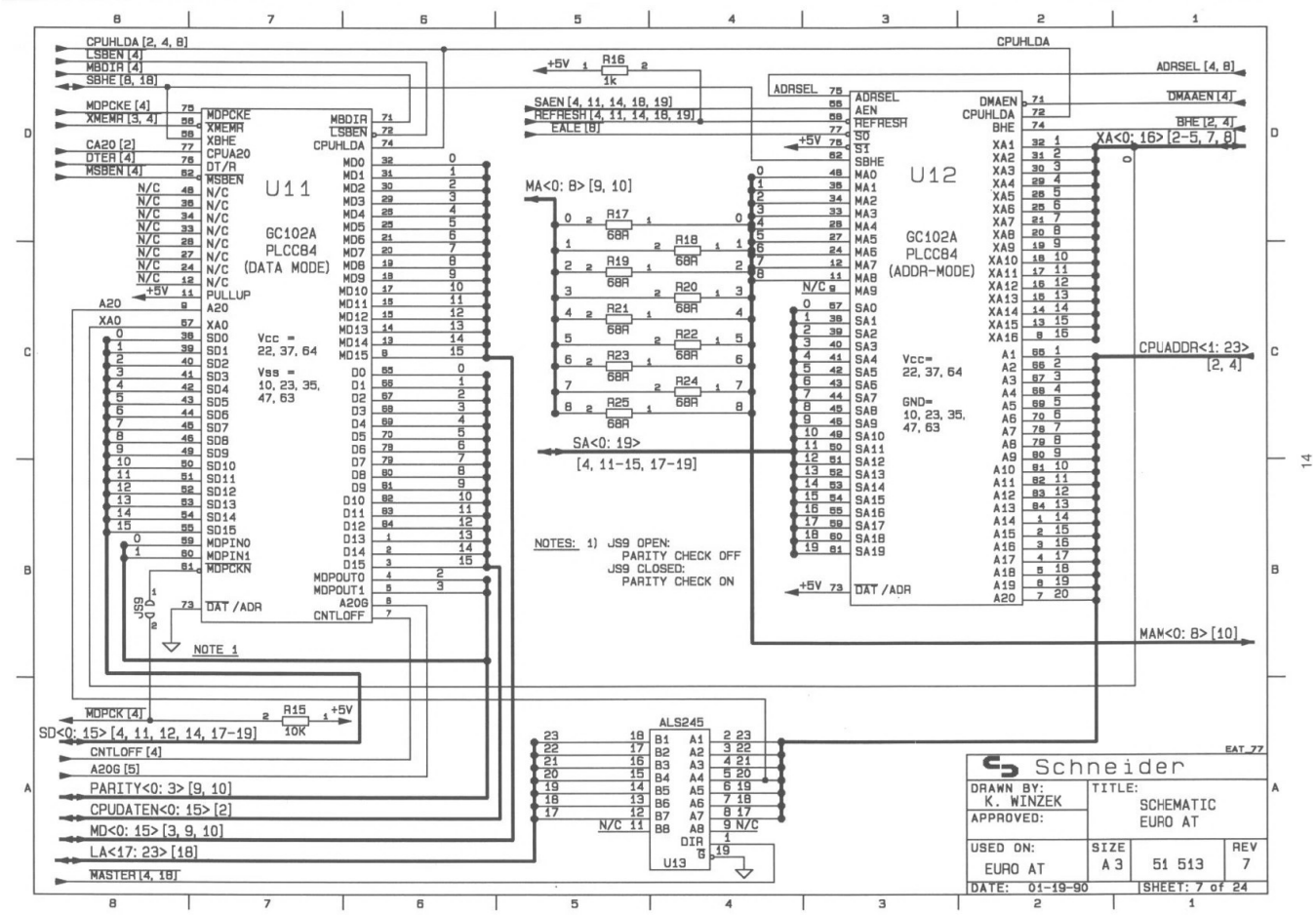
Schneider			
DRAWN BY: H. ULLRICH	TITLE: BLOCK DIAGRAM EURO AT PCB		
APPROVED:			
USED ON:	SIZE A3	51 513	REV 1
DATE: 01-05-90	SHEET: 4 of 4		

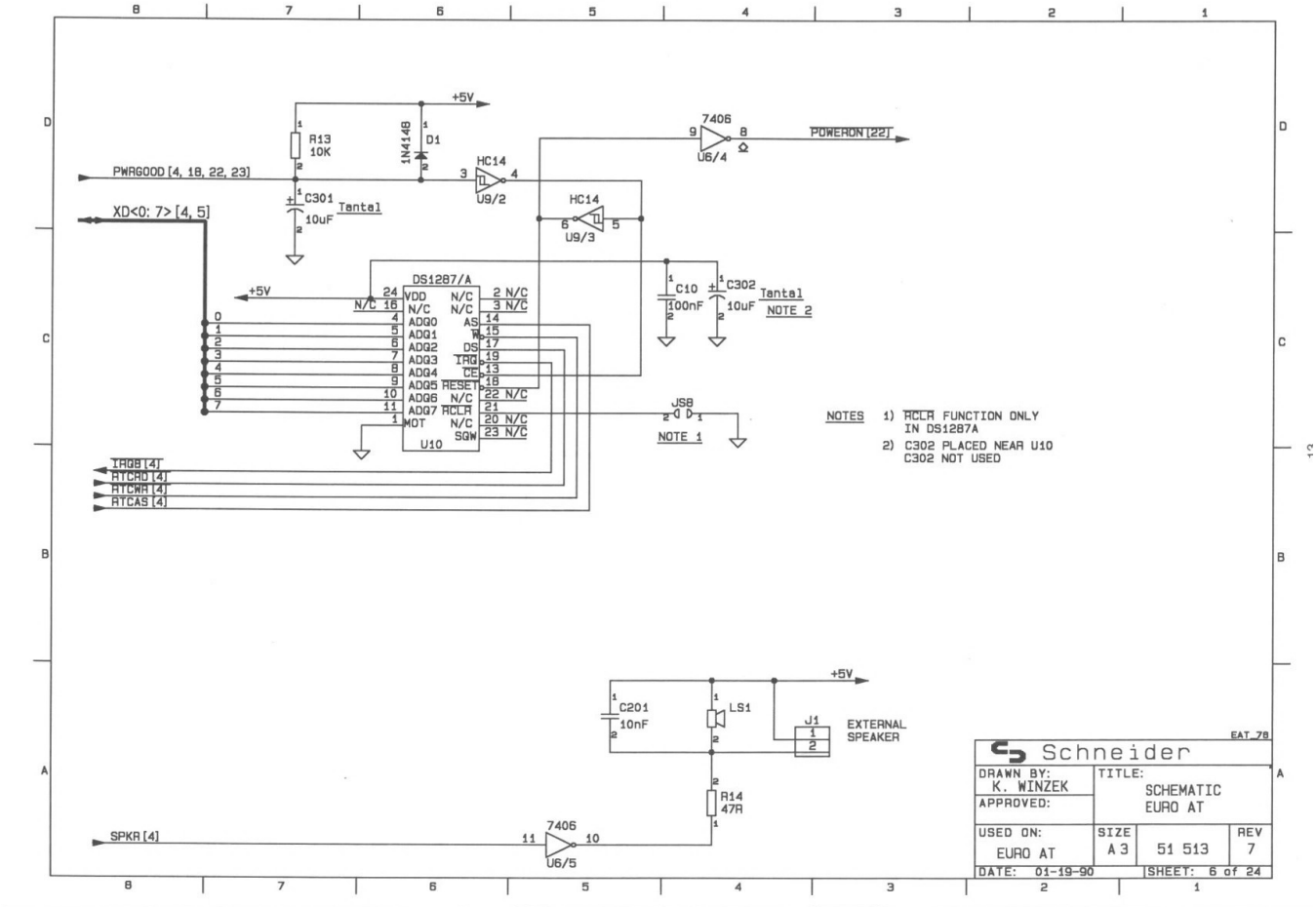

MD<0: 15> [7, 9, 10]
XA<1: 15> [2, 4, 5, 7, 8]
BIOS-EPROM 0
27256
XMEMA [4, 7]
LCSROM [4]
+5V
XMEMA
LCSROM
U3
BIOS-EPROM 1
U4
EAT_73
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-18-90
SHEET: 3 of 24

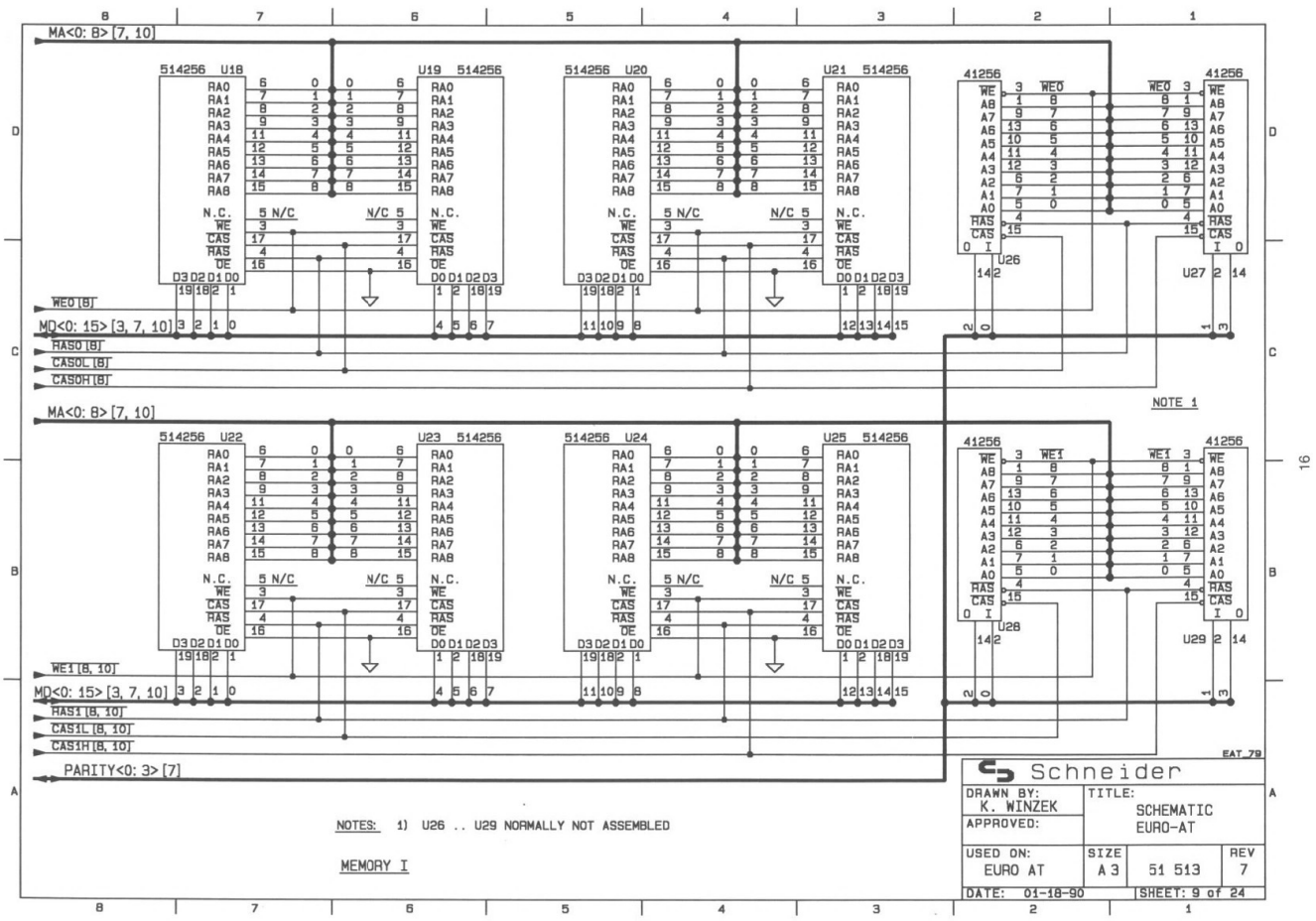

XA<1: 2, 4> [3-5, 7, 8]
RST [4]
BUSY286 [4]
NMI [4]
INTR [4]
HOLD [4]
RDY [4]
NPCS [4]
RESET287 [4]
+5V
10K RN1/1
SIL9
S0
S1
80287
U2
80286
U1
C100
47nF
CPUHLDA [4, 7, 8]
MIO [4]
S1 [4, 8]
S0 [4, 8]
BHE [4, 7]
CA20 [7]
CPUADDR<0: 19, 21: 23> [4, 7]
CPUDATEN<0: 15> [7]
10K
R1
RN1/2 SIL9
10K
CLK [4, 8]
XIOW [4, 5]
XIOR [4, 5]
CLK287 [5]
BUSY287 [4]
ERR87 [4]
EAT_72
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-19-90
SHEET: 2 of 24

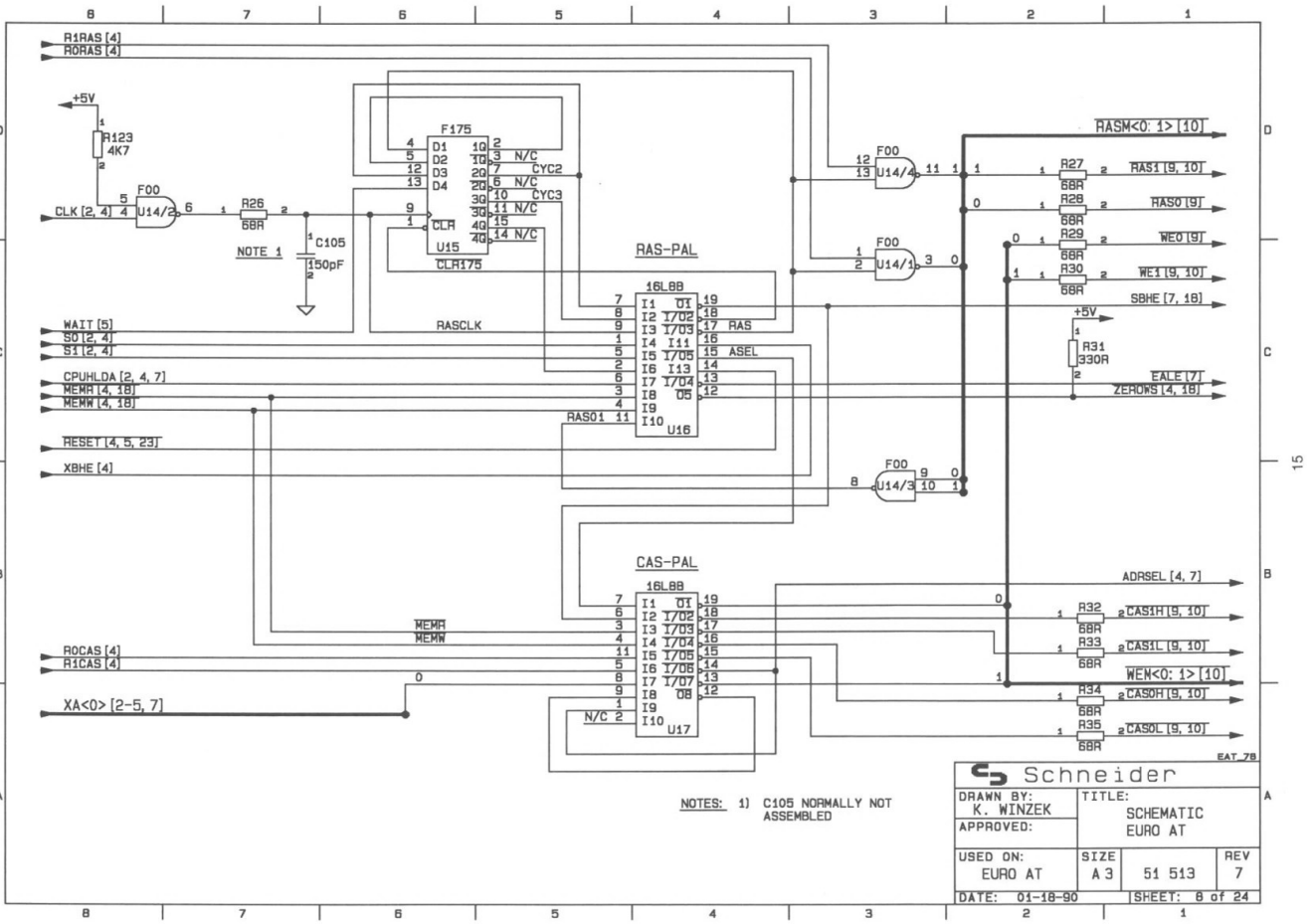

WAIT [8]
RC [4]
A20G [7]
HISPEED [4]
OBFULL [4]
MONO [11, 19]
RSEL2 [4, 10]
RESETDRV [11-13, 18, 19]
XD<0: 7> [4, 6]
XIOW [2, 4]
XIOR [2, 4]
CS8042 [ ]
XA<2> [2-4, 7, 8]
RESET [4, 8, 23]
M16 [11, 12, 14]
M14 [4]
M24 [14]
CLK2 [4]
CLK287 [2]
KEYBC [21]
KEYBD [21]
8042
7406
HC74
HC14
4K7 RN2
SIL9
R9 330R
R10 10K
R11 10K
R12 10K
U6/1
U6/2
U6/3
U7
U8/1
U9/1
JS2
JS3
JS4
JS5
JS6
JS7A
JS7B
JU1
OSC1
14.3181MHz 8p/14p
C103 100nF
NOTE 1
NOTE 2
NOTE 3
NOTES: 1) C103 IS BLOCK CAP TO OSC1
2) JS7A CLOSED, JS7A OPEN: 12 MHZ 80286
3) JU1 2-3: 8 MHz 80287
JU1 1-2: 80287 IS CLOCKED WITH 4.77 MHz
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-19-90
SHEET: 5 of 24
EAT_75

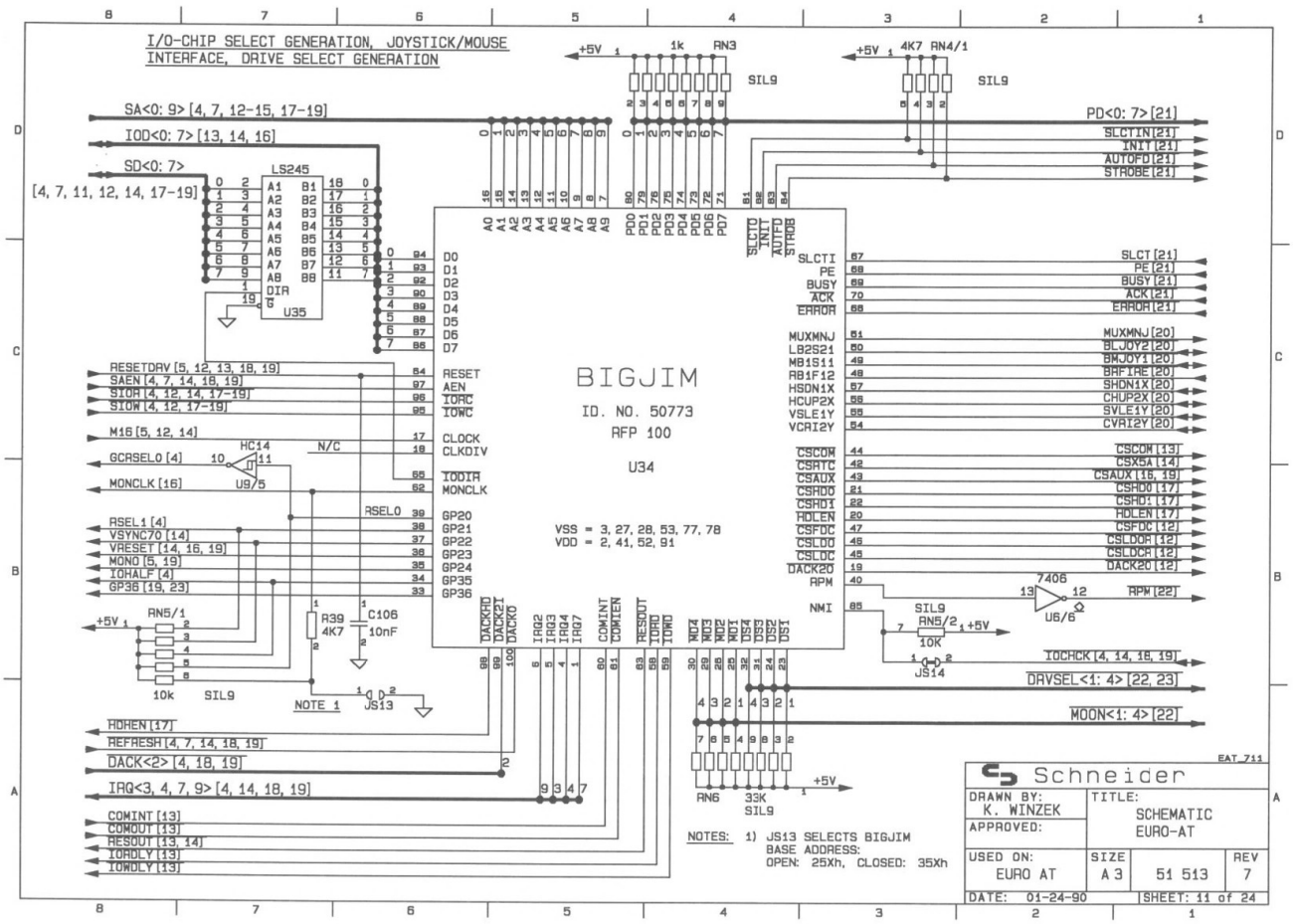

GC101A
QPFP 160
U5
VSS = 19, 20, 42, 59, 60
100, 101, 140, 141
VDD = 40, 80, 120, 160
CLK2 [5]
M14 [5]
XA<0: 16> [2, 3, 5, 7, 8]
CPUADDR<0: 1, 17: 23> [2, 7]
C101 51pF
C102 100pF
Q1 14.3181MHz
R4 100R
R5 2M
R6 33R
R7 33R
R8 33R
JS1
NOTE 1
NOTES: 1) Q1, R4, R5, C101, C102, NOT USED
PWRGOOD [6, 18, 22, 23]
LCSROM [3]
SA<0> [7, 11-15, 17-19]
HORAS [8]
R1RAS [8]
HOCAS [8]
R1CAS [8]
GCRSEL0 [11]
RSEL1 [11]
RSEL2 [5, 10]
IOHALF [11]
SPKR [6]
MBDIR [7]
CNTLOFF [7]
LSBEN [7]
MSBEN [7]
MDPCKE [7]
MDPCK [7]
DTER [7]
ADRSEL [7, 8]
MAM<9> [10]
XMEMR [3, 7]
XIOW [2, 5]
XIOR [2, 5]
XBHE [8]
MEMR [8, 18]
MEMW [8, 18]
TC [12, 18, 19]
IOCHCK [11, 14, 18, 19]
IOCHRDY [14, 18, 19, 23]
BALE [17, 18]
ZEROWS [8, 18]
MEMCS16 [18]
IOCS16 [18, 23]
IRQ<3: 7, 9: 15> [11, 12, 14, 18, 19, 23]
SD<0: 15> [7, 11, 12, 14, 15, 17-19]
XD<0: 7> [5, 6]
CS8042 [5]
RC [5]
OBFULL [5]
HISPEED [5]
RTCRD [6]
RTCWR [6]
RTCAS [6]
IRQ8 [6]
DMAAEN [7]
CPUHLDA [2, 7, 8]
S0 [2, 8]
S1 [2, 8]
M/IO [2]
CLK [2, 8]
RDY [2]
NPCS [2]
RESET287 [2]
ERR87 [2]
BUSY287 [2]
BUSY286 [2]
NMI [2]
HOLD [2]
INTR [2]
RST [2]
BHE [2, 7]
MASTER [7, 18]
RESET [5, 8, 23]
SAEN [7, 11, 14, 18, 19]
REFRESH [7, 11, 14, 18, 19]
SIOR [11, 12, 14, 17-19]
SIOW [11, 12, 17-19]
SMEMR [14, 18, 19]
SMEMW [14, 18, 19]
SYSCLK [18]
OSC [14, 18, 19]
DRQ<0: 3, 5: 7> [12, 18, 19]
DACK<0: 3, 5: 7> [11, 18, 19]
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO-AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-19-90
SHEET: 4 of 24
EAT_74

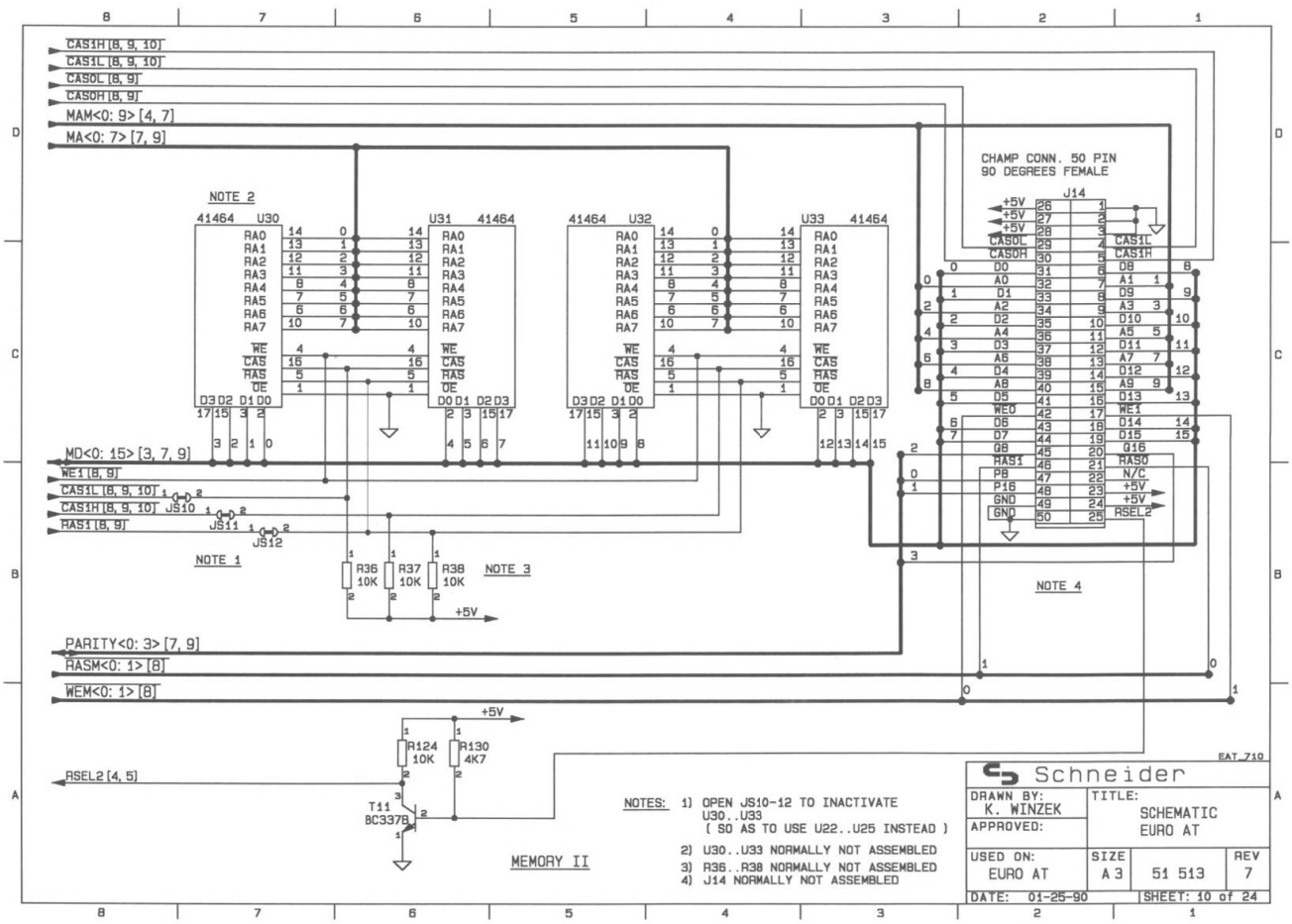

CPUHLDA [2, 4, 8]
LSBEN [4]
MBDIR [4]
SBHE [8, 18]
MDPCKE [4]
XMEMR [3, 4]
CA20 [2]
DTER [4]
MSBEN [4]
U11
GC102A
PLCC84
(DATA MODE)
Vcc = 22, 37, 64
Vss = 10, 23, 35, 47, 63
A20
XA0
SD<0: 15> [4, 11, 12, 14, 17-19]
MDPCK [4]
R15 10K
CNTLOFF [4]
A20G [5]
PARITY<0: 3> [9, 10]
CPUDATEN<0: 15> [2]
MD<0: 15> [3, 9, 10]
LA<17: 23> [18]
MASTER [4, 18]
NOTE 1
JS9
R16 1k
SAEN [4, 11, 14, 18, 19]
REFRESH [4, 11, 14, 18, 19]
EALE [8]
MA<0: 8> [9, 10]
R17 68R
R18 68R
R19 68R
R20 68R
R21 68R
R22 68R
R23 68R
R24 68R
R25 68R
SA<0: 19>
[4, 11-15, 17-19]
NOTES: 1) JS9 OPEN:
PARITY CHECK OFF
JS9 CLOSED:
PARITY CHECK ON
ALS245
U13
U12
GC102A
PLCC84
(ADDR-MODE)
Vcc= 22, 37, 64
GND= 10, 23, 35, 47, 63
ADRSEL [4, 8]
DMAAEN [4]
BHE [2, 4]
XA<0: 16> [2-5, 7, 8]
CPUADDR<1: 23> [2, 4]
MAM<0: 8> [10]
Schneider
EAT_77
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-19-90
SHEET: 7 of 24

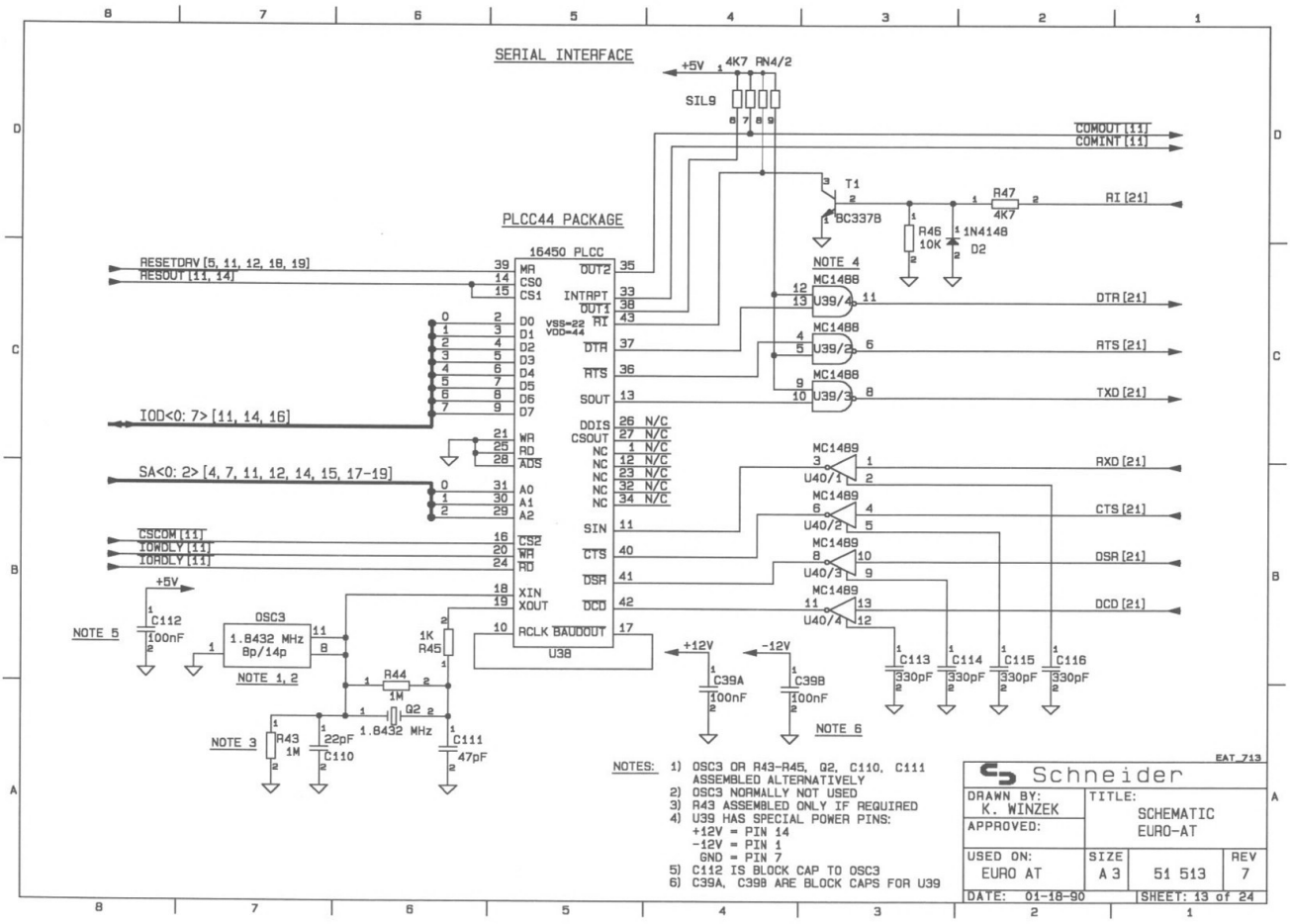

+5V
R13 10K
1N4148 D1
PWRGOOD [4, 18, 22, 23]
XD<0: 7> [4, 5]
C301 10uF Tantal
HC14
U9/2
U9/3
7406
U6/4
POWERON [22]
DS1287/A
U10
C10 100nF
C302 10uF Tantal NOTE 2
JS8
NOTE 1
NOTES 1) HCLR FUNCTION ONLY IN DS1287A
2) C302 PLACED NEAR U10 C302 NOT USED
IRQB [4]
RTCRD [4]
RTCWR [4]
RTCAS [4]
C201 10nF
LS1
J1
EXTERNAL SPEAKER
R14 47R
SPKR [4]
U6/5
Schneider
EAT_78
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-19-90
SHEET: 6 of 24

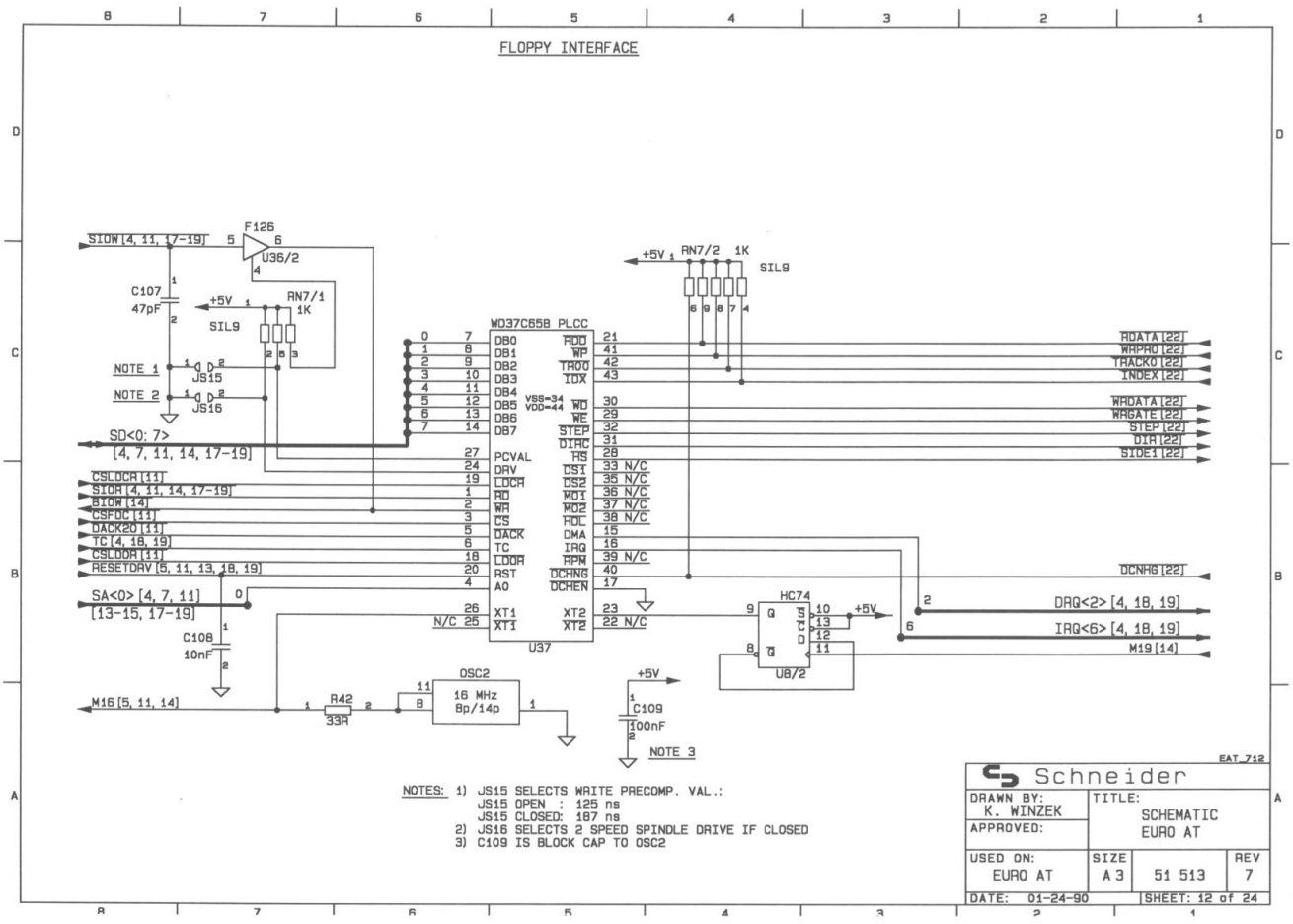

MA<0: 8> [7, 10]
514256 U18
U19 514256
514256 U20
U21 514256
41256
WE0 [8]
MD<0: 15> [3, 7, 10]
RAS0 [8]
CAS0L [8]
CAS0H [8]
U26
U27
NOTE 1
MA<0: 8> [7, 10]
514256 U22
U23 514256
514256 U24
U25 514256
WE1 [8, 10]
MD<0: 15> [3, 7, 10]
RAS1 [8, 10]
CAS1L [8, 10]
CAS1H [8, 10]
U28
U29
PARITY<0: 3> [7]
EAT 79
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO-AT
USED ON: EURO AT
SIZE A 3
51 513
REV 7
DATE: 01-18-90
SHEET: 9 of 24
NOTES: 1) U26 .. U29 NORMALLY NOT ASSEMBLED
MEMORY I

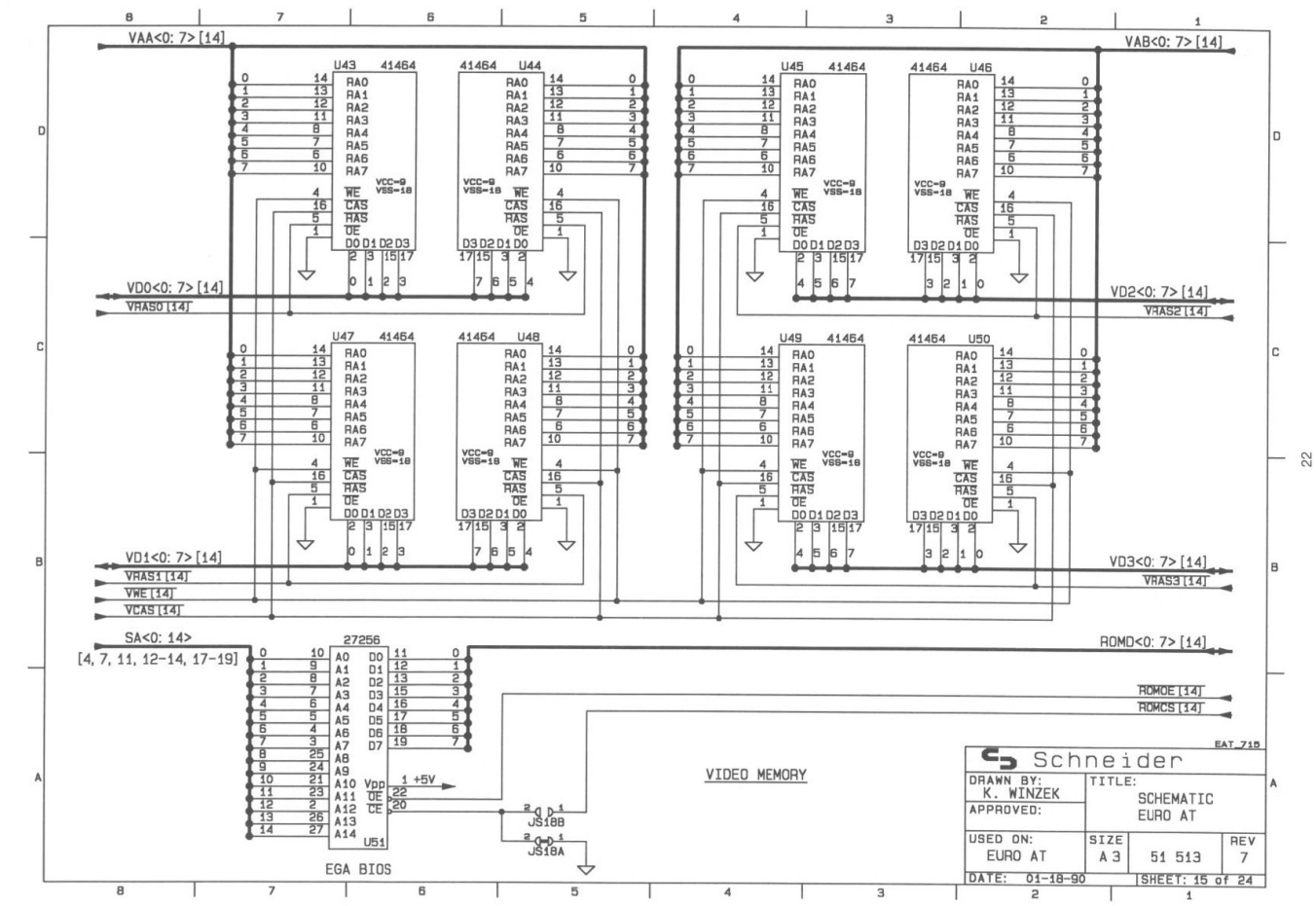

R1RAS [4]
R0RAS [4]
+5V
R123 4K7
F175
F00
CLK [2, 4, 4]
R26 68R
C105 150pF
NOTE 1
CLR175
RAS-PAL
16L88
RASCLK
WAIT [5]
S0 [2, 4]
S1 [2, 4]
CPUHLDA [2, 4, 7]
MEMR [4, 18]
MEMW [4, 18]
RESET [4, 5, 23]
XBHE [4]
RAS01 11
U16
RASM<0: 1> [10]
R27 68R
R28 68R
R29 68R
R30 68R
R31 330R
MAS1 [9, 10]
MAS0 [9]
WE0 [9]
WE1 [9, 10]
SBHE [7, 18]
EALE [7]
ZEROWS [4, 18]
CAS-PAL
ADRSEL [4, 7]
R32 68R
R33 68R
R34 68R
R35 68R
CAS1H [9, 10]
CAS1L [9, 10]
WEN<0: 1> [10]
CAS0H [9, 10]
CAS0L [9, 10]
ROCAS [4]
R1CAS [4]
XA<0> [2-5, 7]
U17
EAT 78
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A 3
51 513
REV 7
DATE: 01-18-90
SHEET: 8 of 24
NOTES: 1) C105 NORMALLY NOT ASSEMBLED

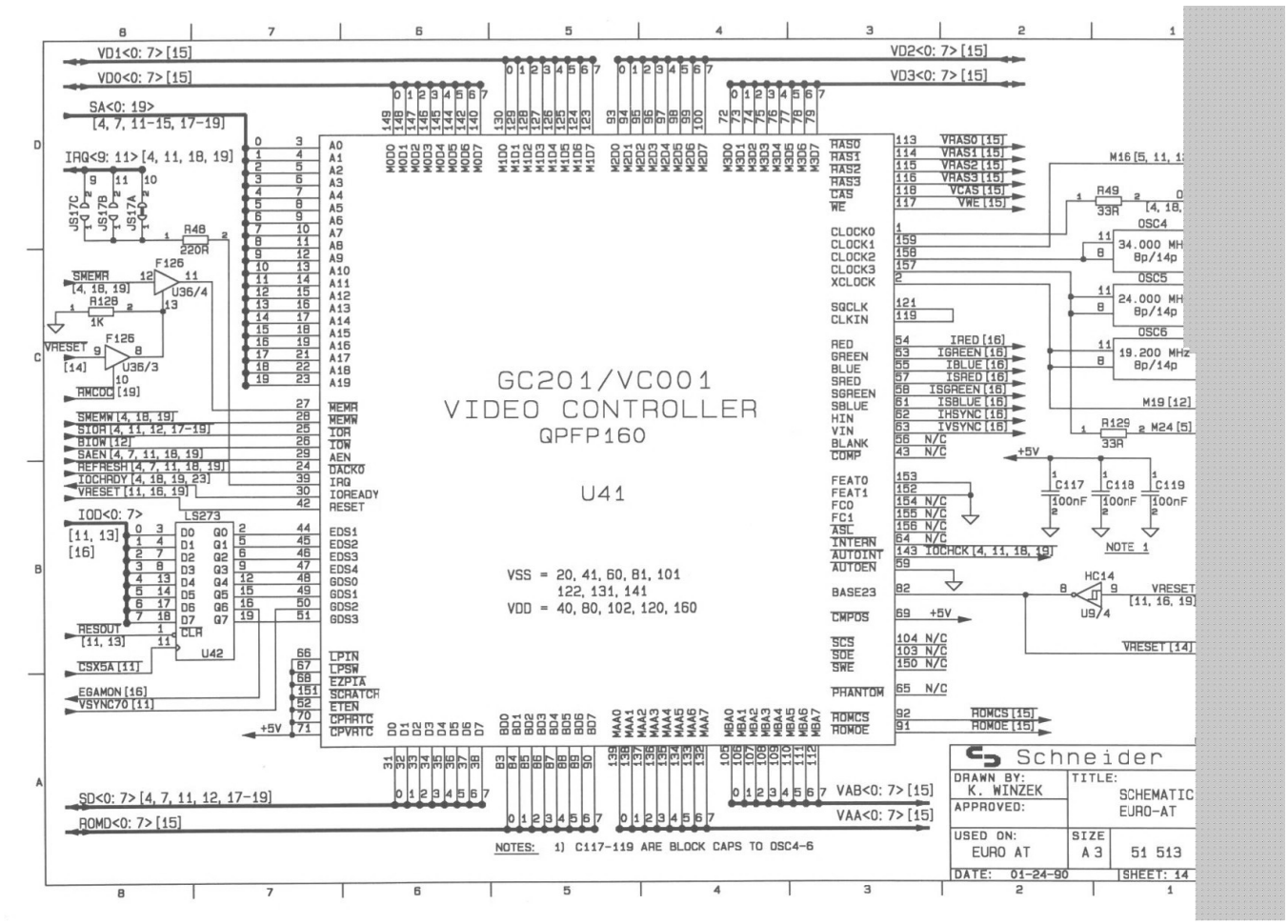

I/O-CHIP SELECT GENERATION, JOYSTICK/MOUSE INTERFACE, DRIVE SELECT GENERATION
BIGJIM
ID. NO. 50773
RFP 100
U34
VSS = 3, 27, 28, 53, 77, 78
VDD = 2, 41, 52, 91
NOTES: 1) JS13 SELECTS BIGJIM BASE ADDRESS: OPEN: 25Xh, CLOSED: 35Xh
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO-AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-24-90
SHEET: 11 of 24

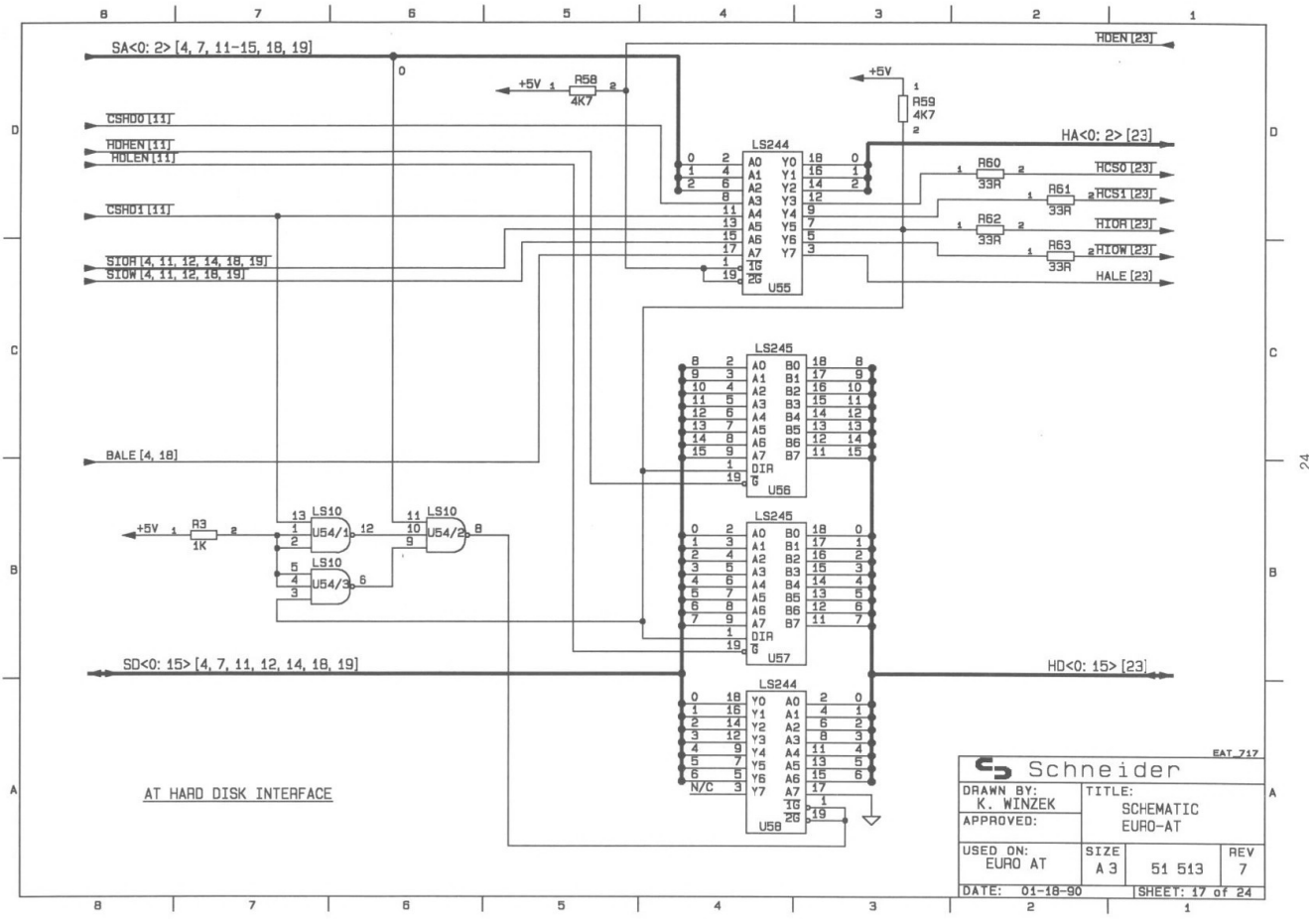

CHAMP CONN. 50 PIN 90 DEGREES FEMALE
MEMORY II
NOTES: 1) OPEN JS10-12 TO INACTIVATE U30..U33 (SO AS TO USE U22..U25 INSTEAD)
2) U30..U33 NORMALLY NOT ASSEMBLED
3) R36..R38 NORMALLY NOT ASSEMBLED
4) J14 NORMALLY NOT ASSEMBLED
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-25-90
SHEET: 10 of 24

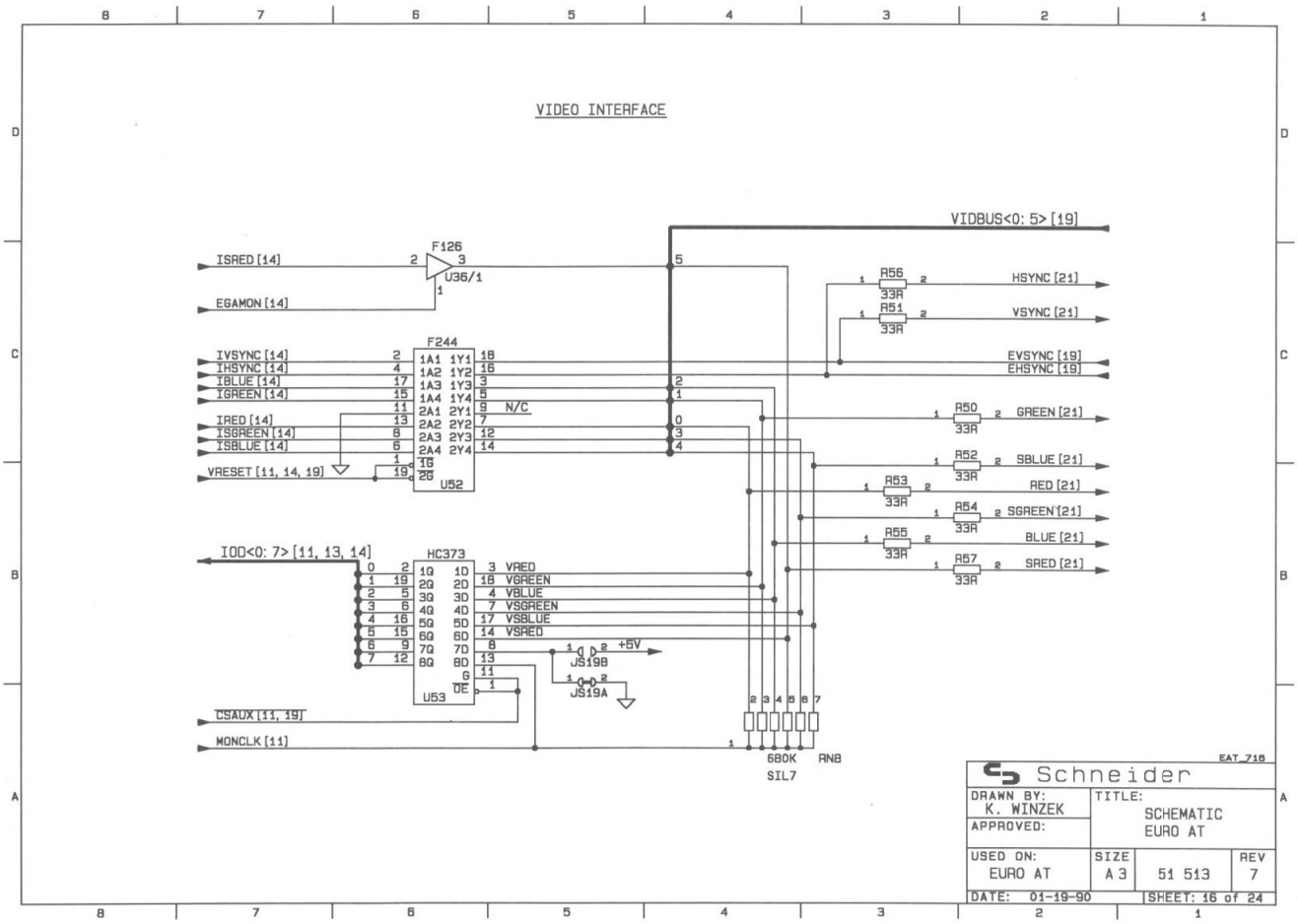

SERIAL INTERFACE
PLCC44 PACKAGE
16450 PLCC
+5V
4K7 RN4/2
SIL9
COMOUT [11]
COMINT [11]
T1
BC337B
R47
4K7
RI [21]
R46
10K
1N4148
D2
NOTE 4
MC1488
U39/4
U39/2
U39/3
DTR [21]
RTS [21]
TXD [21]
RESETDRV [5, 11, 12, 18, 19]
RESOUT [11, 14]
IOD<0: 7> [11, 14, 16]
SA<0: 2> [4, 7, 11, 12, 14, 15, 17-19]
CSCOM [11]
IOWDLY [11]
IORDLY [11]
MR
CS0
CS1
INTRPT
OUT1
OUT2
RI
DTR
RTS
SOUT
DDIS
CSOUT
D0
D1
D2
D3
D4
D5
D6
D7
WR
RD
ADS
A0
A1
A2
CS2
CTS
DSR
DCD
SIN
XIN
XOUT
RCLK
BAUDOUT
VSS=22
VDD=44
MC1489
U40/1
U40/2
U40/3
U40/4
RXD [21]
CTS [21]
DSR [21]
DCD [21]
C112
100nF
NOTE 5
OSC3
1.8432 MHz
8p/14p
NOTE 1, 2
1K
R45
R44
1M
Q2
1.8432 MHz
NOTE 3
R43
1M
22pF
C110
C111
47pF
U38
+12V
-12V
C39A
C39B
100nF
NOTE 6
C113
C114
C115
C116
330pF
NOTES: 1) OSC3 OR R43-R45, Q2, C110, C111 ASSEMBLED ALTERNATIVELY
2) OSC3 NORMALLY NOT USED
3) R43 ASSEMBLED ONLY IF REQUIRED
4) U39 HAS SPECIAL POWER PINS:
+12V = PIN 14
-12V = PIN 1
GND = PIN 7
5) C112 IS BLOCK CAP TO OSC3
6) C39A, C39B ARE BLOCK CAPS FOR U39
EAT_713
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO-AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-18-90
SHEET: 13 of 24

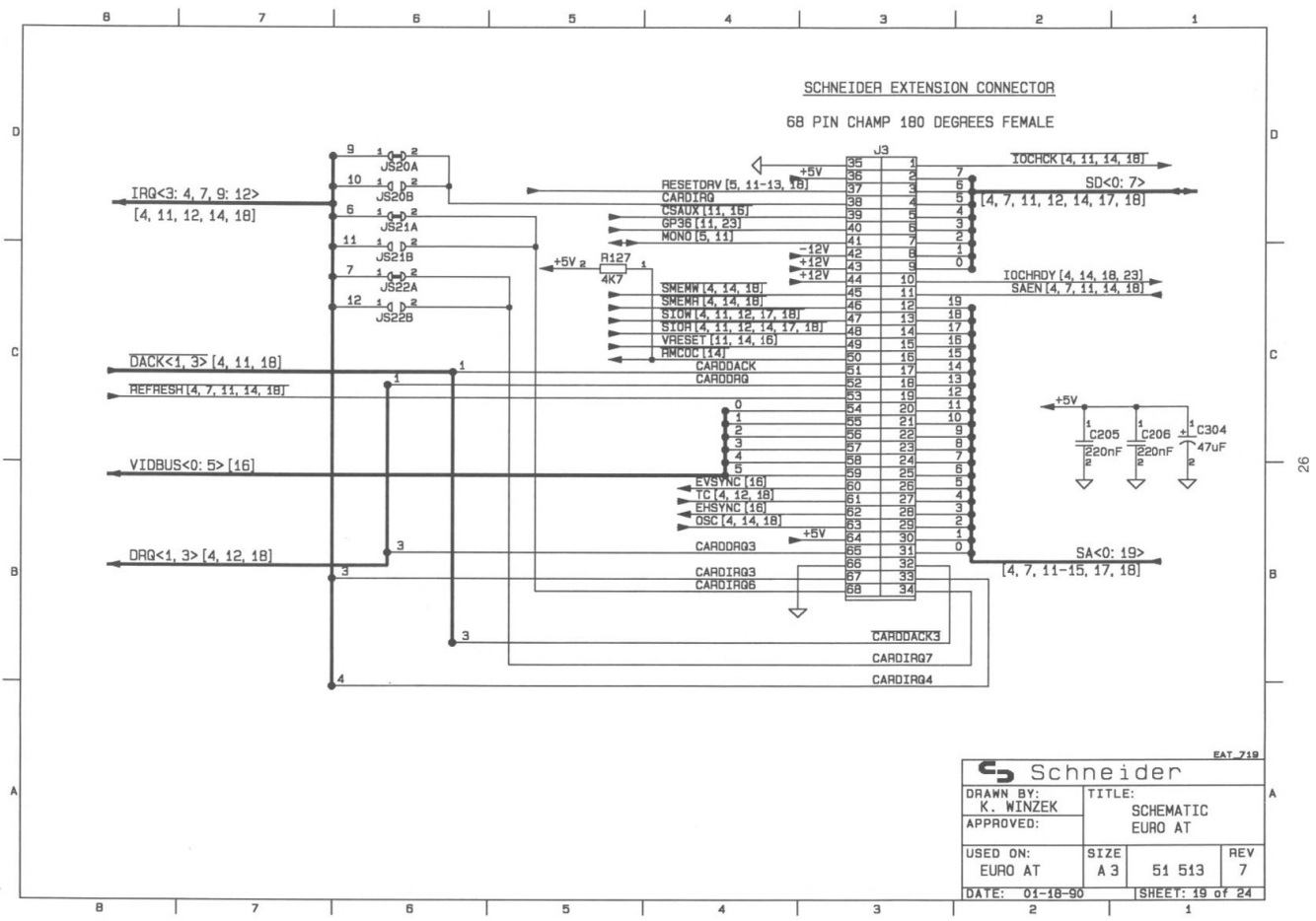

FLOPPY INTERFACE
WD37C65B PLCC
F126
U36/2
SIOW [4, 11, 17-19]
C107
47pF
+5V
RN7/1
1K
SIL9
NOTE 1
NOTE 2
JS15
JS16
SD<0: 7>
[4, 7, 11, 14, 17-19]
CSLOCR [11]
SIOR [4, 11, 14, 17-19]
BIOW [14]
CSFOC [11]
DACK2D [11]
TC [4, 18, 19]
CSLOOR [11]
RESETDRV [5, 11, 13, 18, 19]
SA<0> [4, 7, 11]
[13-15, 17-19]
C108
10nF
M16 [5, 11, 14]
R42
33R
OSC2
16 MHz
8p/14p
C109
100nF
NOTE 3
RN7/2
1K
HC74
U8/2
U37
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
PCVAL
DRV
LOCR
RD
WR
CS
DACK
TC
LOOR
RST
A0
XT1
XT2
RDD
WP
TR00
IDX
WD
WE
STEP
DIRC
HS
DS1
DS2
MO1
MO2
HDL
DMA
IRQ
MFM
DCHNG
DCHEN
VSS=34
VDD=44
N/C
HDATA [22]
WRPRO [22]
TRACK0 [22]
INDEX [22]
WRDATA [22]
WRGATE [22]
STEP [22]
DIR [22]
SIDE1 [22]
DCNHG [22]
DRQ<2> [4, 18, 19]
IRQ<6> [4, 18, 19]
M19 [14]
NOTES: 1) JS15 SELECTS WRITE PRECOMP. VAL.:
JS15 OPEN : 125 ns
JS15 CLOSED: 187 ns
2) JS16 SELECTS 2 SPEED SPINDLE DRIVE IF CLOSED
3) C109 IS BLOCK CAP TO OSC2
EAT_712
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-24-90
SHEET: 12 of 24

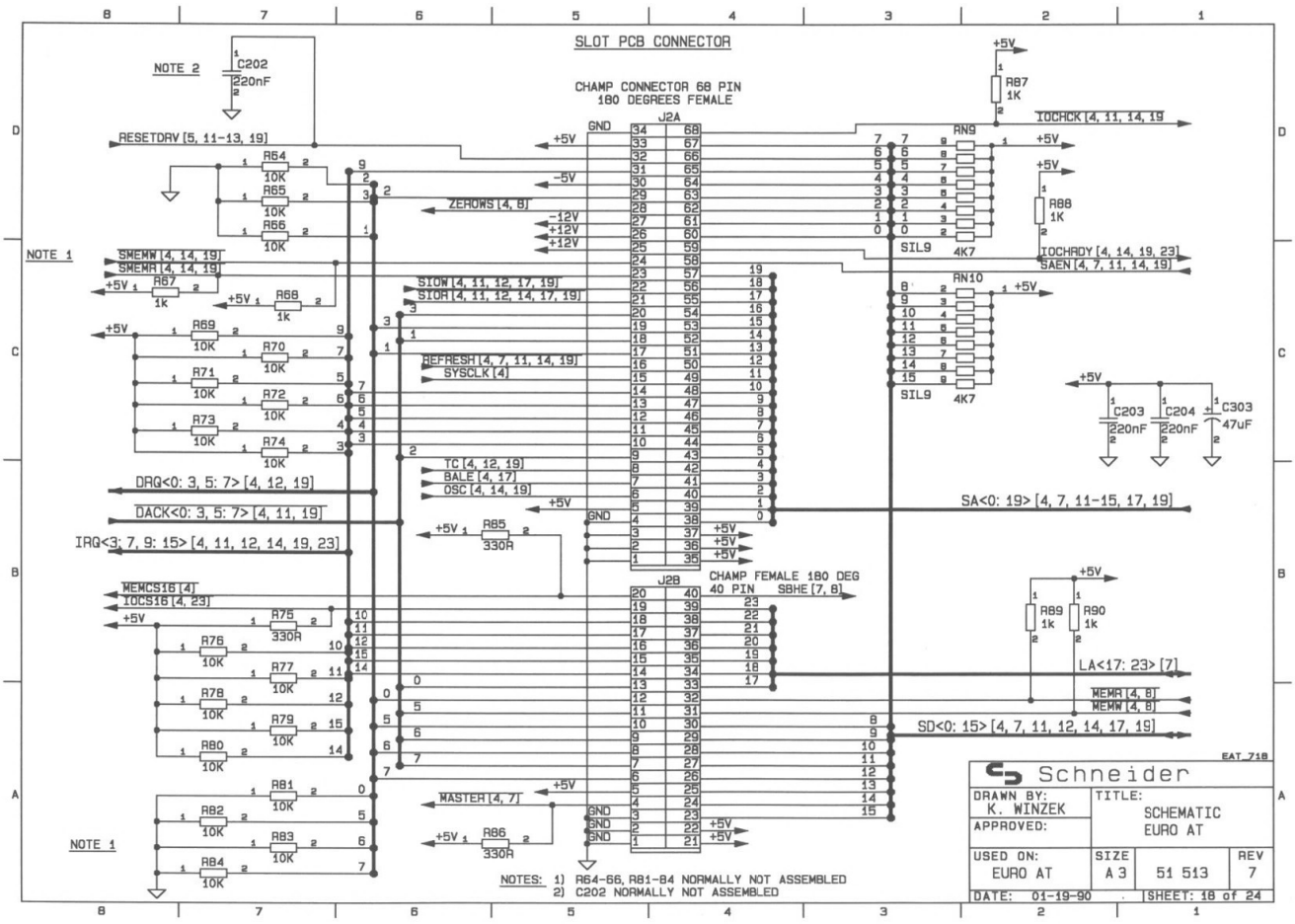

VAA<0: 7> [14]
VAB<0: 7> [14]
VD0<0: 7> [14]
VRAS0 [14]
VD2<0: 7> [14]
VRAS2 [14]
VD1<0: 7> [14]
VRAS1 [14]
VWE [14]
VCAS [14]
VD3<0: 7> [14]
VRAS3 [14]
SA<0: 14>
[4, 7, 11, 12-14, 17-19]
ROMD<0: 7> [14]
ROMOE [14]
ROMCS [14]
U43 41464
U44 41464
U45 41464
U46 41464
U47 41464
U48 41464
U49 41464
U50 41464
27256
U51
EGA BIOS
JS18B
JS18A
VIDEO MEMORY
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-18-90
SHEET: 15 of 24

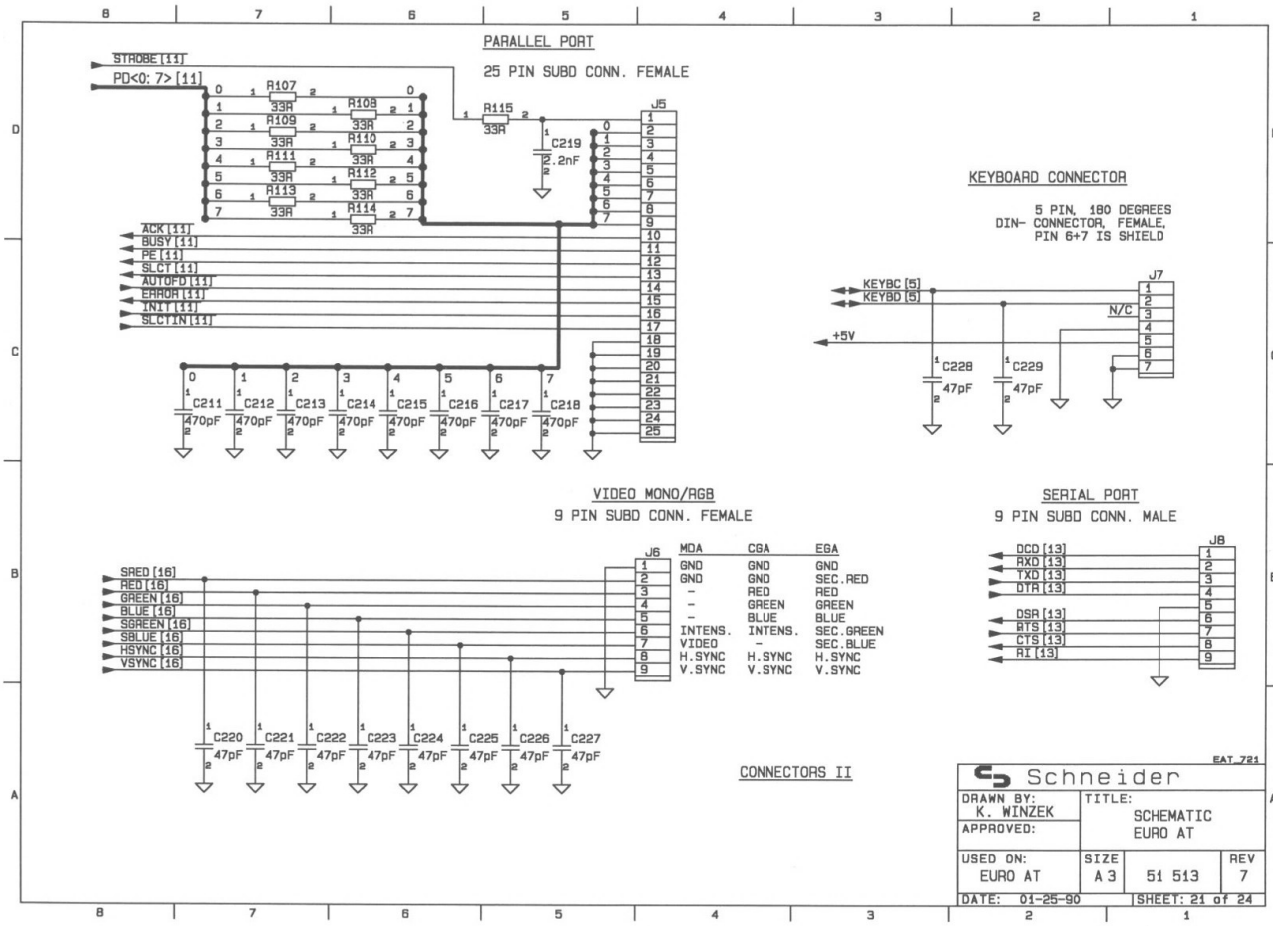

VD1<0: 7> [15]
VD0<0: 7> [15]
VD2<0: 7> [15]
VD3<0: 7> [15]
SA<0: 19>
[4, 7, 11-15, 17-19]
IRQ<9: 11> [4, 11, 18, 19]
GC201/VC001
VIDEO CONTROLLER
QPFP160
U41
VSS = 20, 41, 60, 81, 101
122, 131, 141
VDD = 40, 80, 102, 120, 160
IOD<0: 7>
[11, 13]
[16]
LS273
U42
SD<0: 7> [4, 7, 11, 12, 17-19]
ROMD<0: 7> [15]
VAB<0: 7> [15]
VAA<0: 7> [15]
VRASO [15]
VRAS1 [15]
VRAS2 [15]
VRAS3 [15]
VCAS [15]
VWE [15]
M16 [5, 11, 1
R49 33R
[4, 18,
OSC4
34.000 MH
8p/14p
OSC5
24.000 MH
8p/14p
OSC6
19.200 MHz
8p/14p
IRED [16]
IGREEN [16]
IBLUE [16]
ISRED [16]
ISGREEN [16]
ISBLUE [16]
IHSYNC [16]
IVSYNC [16]
M19 [12]
R129 33R
M24 [5]
+5V
C117 100nF
C118 100nF
C119 100nF
NOTE 1
IOCHCK [4, 11, 18, 19]
HC14
U9/4
VRESET [11, 16, 19]
VRESET [14]
ROMCS [15]
ROMOE [15]
NOTES: 1) C117-119 ARE BLOCK CAPS TO OSC4-6
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO-AT
USED ON: EURO AT
SIZE A3
51 513
DATE: 01-24-90
SHEET: 14

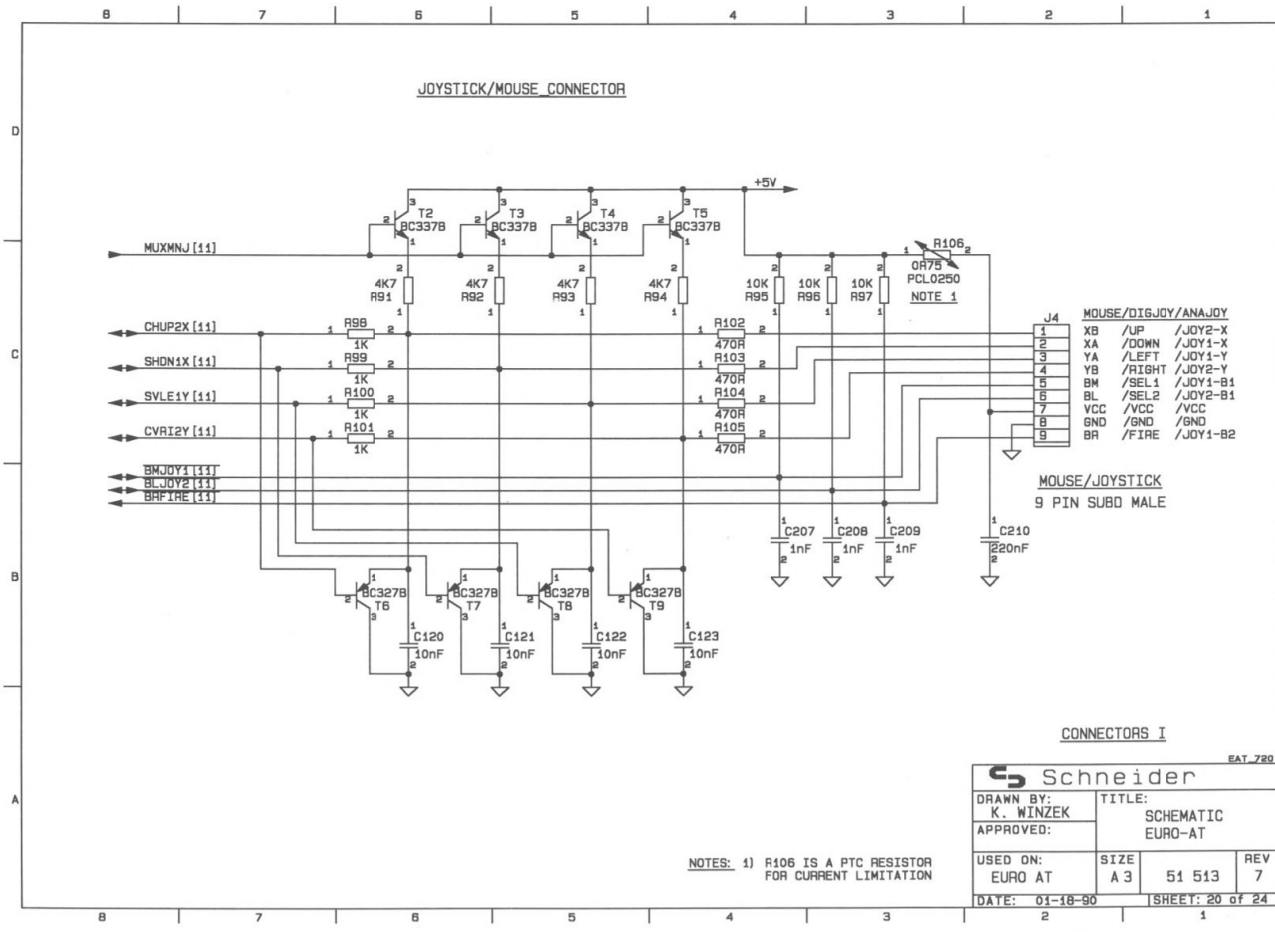

SA<0: 2> [4, 7, 11-15, 18, 19]
HDEN [23]
CSHD0 [11]
HDREN [11]
HDLEN [11]
CSHD1 [11]
SIOR [4, 11, 12, 14, 18, 19]
SIOW [4, 11, 12, 18, 19]
BALE [4, 18]
SD<0: 15> [4, 7, 11, 12, 14, 18, 19]
HA<0: 2> [23]
HCS0 [23]
HCS1 [23]
HIOR [23]
HIOW [23]
HALE [23]
HD<0: 15> [23]
+5V
R58 4K7
R59 4K7
R60 33R
R61 33R
R62 33R
R63 33R
R3 1K
LS244
LS245
LS10
U54/1
U54/2
U54/3
U55
U56
U57
U58
N/C
AT HARD DISK INTERFACE
EAT_717
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO-AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-18-90
SHEET: 17 of 24

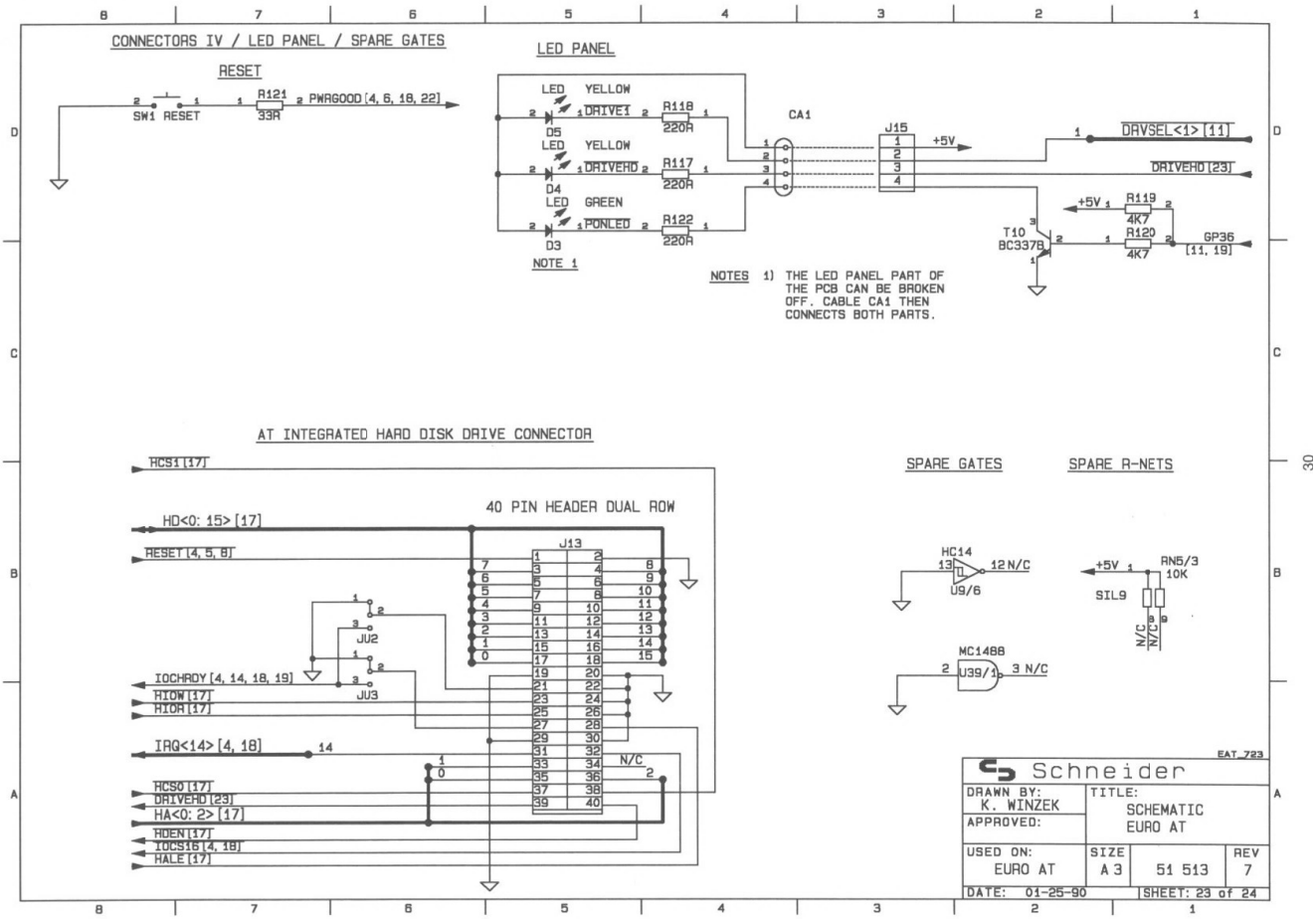

VIDEO INTERFACE
VIDBUS<0: 5> [19]
ISRED [14]
EGAMON [14]
IVSYNC [14]
IHSYNC [14]
IBLUE [14]
IGREEN [14]
IRED [14]
ISGREEN [14]
ISBLUE [14]
VRESET [11, 14, 19]
IOD<0: 7> [11, 13, 14]
CSAUX [11, 19]
MONCLK [11]
F126
U36/1
F244
U52
HC373
U53
JS19B
JS19A
+5V
N/C
VRED
VGREEN
VBLUE
VSGREEN
VSBLUE
VSRED
R56 33R
R51 33R
R50 33R
R52 33R
R53 33R
R54 33R
R55 33R
R57 33R
HSYNC [21]
VSYNC [21]
EVSYNC [19]
EHSYNC [19]
GREEN [21]
SBLUE [21]
RED [21]
SGREEN [21]
BLUE [21]
SRED [21]
680K
RN8
SIL7
EAT_718
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-19-90
SHEET: 16 of 24

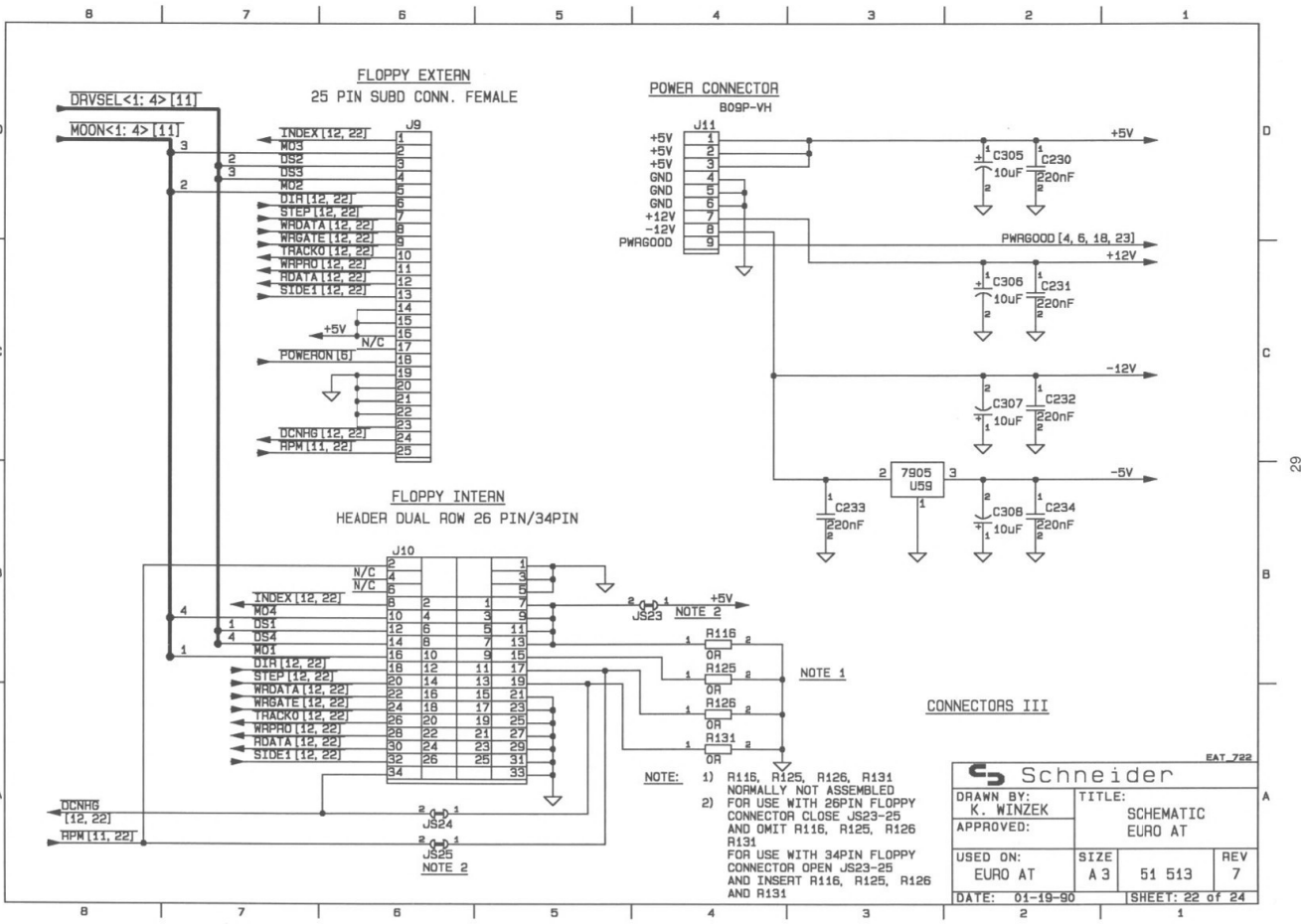

SCHNEIDER EXTENSION CONNECTOR
68 PIN CHAMP 180 DEGREES FEMALE
J3
JS20A
JS20B
JS21A
JS21B
JS22A
JS22B
IRQ<3: 4, 7, 9: 12>
[4, 11, 12, 14, 18]
DACK<1, 3> [4, 11, 18]
REFRESH [4, 7, 11, 14, 18]
VIDBUS<0: 5> [16]
DRQ<1, 3> [4, 12, 18]
RESETDRV [5, 11-13, 18]
CARDIRQ
CSAUX [11, 16]
GP36 [11, 23]
MONO [5, 11]
R127
4K7
SMEMW [4, 14, 18]
SMEMR [4, 14, 18]
SIOW [4, 11, 12, 17, 18]
SIOR [4, 11, 12, 14, 17, 18]
VRESET [11, 14, 16]
AMCOC [14]
CARDDACK
CARDDRQ
EVSYNC [16]
TC [4, 12, 18]
EHSYNC [16]
OSC [4, 14, 18]
CARDDRQ3
CARDIRQ3
CARDIRQ6
CARDDACK3
CARDIRQ7
CARDIRQ4
IOCHCK [4, 11, 14, 18]
SD<0: 7>
[4, 7, 11, 12, 14, 17, 18]
IOCHRDY [4, 14, 18, 23]
SAEN [4, 7, 11, 14, 18]
SA<0: 19>
[4, 7, 11-15, 17, 18]
C205
220nF
C206
220nF
C304
47uF
EAT_719
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-18-90
SHEET: 19 of 24


SLOT PCB CONNECTOR
CHAMP CONNECTOR 68 PIN
180 DEGREES FEMALE
J2A
J2B
NOTE 2
C202
220nF
RESETDRV [5, 11-13, 19]
R64
10K
R65
10K
R66
10K
ZEROWS [4, 8]
NOTE 1
SMEMW [4, 14, 19]
SMEMR [4, 14, 19]
R67
1k
R68
1k
SIOW [4, 11, 12, 17, 19]
SIOR [4, 11, 12, 14, 17, 19]
R69
10K
R70
10K
R71
10K
R72
10K
R73
10K
R74
10K
REFRESH [4, 7, 11, 14, 19]
SYSCLK [4]
TC [4, 12, 19]
BALE [4, 17]
OSC [4, 14, 19]
DRQ<0: 3, 5: 7> [4, 12, 19]
DACK<0: 3, 5: 7> [4, 11, 19]
IRQ<3: 7, 9: 15> [4, 11, 12, 14, 19, 23]
R85
330R
WEMCS16 [4]
IOCS16 [4, 23]
R75
330R
R76
10K
R77
10K
R78
10K
R79
10K
R80
10K
R81
10K
R82
10K
R83
10K
R84
10K
MASTER [4, 7]
R86
330R
CHAMP FEMALE 180 DEG
40 PIN SBHE [7, 8]
R87
1K
RN9
SIL9
4K7
IOCHCK [4, 11, 14, 19]
R88
1K
IOCHRDY [4, 14, 19, 23]
SAEN [4, 7, 11, 14, 19]
RN10
SIL9
4K7
C203
220nF
C204
220nF
C303
47uF
SA<0: 19> [4, 7, 11-15, 17, 19]
R89
1k
R90
1k
LA<17: 23> [7]
MEMR [4, 8]
MEMW [4, 8]
SD<0: 15> [4, 7, 11, 12, 14, 17, 19]
NOTES: 1) R64-66, R81-84 NORMALLY NOT ASSEMBLED
2) C202 NORMALLY NOT ASSEMBLED
EAT_718
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-19-90
SHEET: 18 of 24


PARALLEL PORT
25 PIN SUBD CONN. FEMALE
STROBE [11]
PD<0:7> [11]
ACK [11]
BUSY [11]
PE [11]
SLCT [11]
AUTOFD [11]
ERROR [11]
INIT [11]
SLCTIN [11]
KEYBOARD CONNECTOR
5 PIN, 180 DEGREES
DIN- CONNECTOR, FEMALE,
PIN 6+7 IS SHIELD
KEYBC [5]
KEYBD [5]
+5V
N/C
VIDEO MONO/RGB
9 PIN SUBD CONN. FEMALE
SRED [16]
RED [16]
GREEN [16]
BLUE [16]
SGREEN [16]
SBLUE [16]
HSYNC [16]
VSYNC [16]
MDA CGA EGA
GND GND GND
GND GND SEC.RED
- RED RED
- GREEN GREEN
- BLUE BLUE
INTENS. INTENS. SEC.GREEN
VIDEO - SEC.BLUE
H.SYNC H.SYNC H.SYNC
V.SYNC V.SYNC V.SYNC
SERIAL PORT
9 PIN SUBD CONN. MALE
DCD [13]
RXD [13]
TXD [13]
DTR [13]
DSR [13]
RTS [13]
CTS [13]
RI [13]
CONNECTORS II
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-25-90
SHEET: 21 of 24
EAT_721


JOYSTICK/MOUSE_CONNECTOR
+5V
MUXMNJ [11]
CHUP2X [11]
SHDN1X [11]
SVLE1Y [11]
CVRI2Y [11]
BMJOY1 [11]
BLJOY2 [11]
BAFIRE [11]
MOUSE/DIGJOY/ANAJOY
XB /UP /JOY2-X
XA /DOWN /JOY1-X
YA /LEFT /JOY1-Y
YB /RIGHT /JOY2-Y
BM /SEL1 /JOY1-B1
BL /SEL2 /JOY2-B1
VCC /VCC /VCC
GND /GND /GND
BA /FIRE /JOY1-B2
MOUSE/JOYSTICK
9 PIN SUBD MALE
CONNECTORS I
NOTES: 1) R106 IS A PTC RESISTOR FOR CURRENT LIMITATION
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO-AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-18-90
SHEET: 20 of 24
EAT_720


CONNECTORS IV / LED PANEL / SPARE GATES
RESET
SW1 RESET
R121
33R
PWRGOOD [4, 6, 18, 22]
LED PANEL
LED YELLOW
DRIVE1
D5
R118
220R
LED YELLOW
DRIVEHD
D4
R117
220R
LED GREEN
PONLED
D3
R122
220R
NOTE 1
CA1
J15
+5V
DRVSEL<1> [11]
DRIVEHD [23]
R119
4K7
R120
4K7
T10
BC337B
GP36
[11, 19]
NOTES 1) THE LED PANEL PART OF THE PCB CAN BE BROKEN OFF. CABLE CA1 THEN CONNECTS BOTH PARTS.
AT INTEGRATED HARD DISK DRIVE CONNECTOR
HCS1 [17]
HD<0: 15> [17]
RESET [4, 5, 8]
40 PIN HEADER DUAL ROW
J13
JU2
JU3
IOCHRDY [4, 14, 18, 19]
HIOW [17]
HIOR [17]
IRQ<14> [4, 18]
14
N/C
HCS0 [17]
DRIVEHD [23]
HA<0: 2> [17]
HDEN [17]
IOCS16 [4, 18]
HALE [17]
SPARE GATES
HC14
12 N/C
U9/6
MC1488
3 N/C
U39/1
SPARE R-NETS
RN5/3
10K
SIL9
N/C
N/C
EAT 723
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-25-90
SHEET: 23 of 24


FLOPPY EXTERN
25 PIN SUBD CONN. FEMALE
DRVSEL<1: 4> [11]
MOON<1: 4> [11]
J9
INDEX [12, 22]
MO3
DS2
DS3
MO2
DIR [12, 22]
STEP [12, 22]
WRDATA [12, 22]
WRGATE [12, 22]
TRACK0 [12, 22]
WRPRO [12, 22]
RDATA [12, 22]
SIDE1 [12, 22]
+5V
N/C
POWERON [5]
DCNRG [12, 22]
RPM [11, 22]
POWER CONNECTOR
B09P-VH
J11
+5V
+5V
+5V
GND
GND
GND
+12V
-12V
PWRGOOD
C305
10uF
C230
220nF
PWRGOOD [4, 6, 18, 23]
+12V
C306
10uF
C231
220nF
-12V
C307
10uF
C232
220nF
7905
U59
-5V
C233
220nF
C308
10uF
C234
220nF
FLOPPY INTERN
HEADER DUAL ROW 26 PIN/34PIN
J10
N/C
N/C
INDEX [12, 22]
MO4
DS1
DS4
MO1
DIR [12, 22]
STEP [12, 22]
WRDATA [12, 22]
WRGATE [12, 22]
TRACK0 [12, 22]
WRPRO [12, 22]
RDATA [12, 22]
SIDE1 [12, 22]
JS23
NOTE 2
+5V
R116
0R
R125
0R
R126
0R
R131
0R
NOTE 1
CONNECTORS III
DCNRG [12, 22]
RPM [11, 22]
JS24
JS25
NOTE 2
NOTE: 1) R116, R125, R126, R131 NORMALLY NOT ASSEMBLED FOR USE WITH 26PIN FLOPPY CONNECTOR CLOSE JS23-25 AND OMIT R116, R125, R126 R131
FOR USE WITH 34PIN FLOPPY CONNECTOR OPEN JS23-25 AND INSERT R116, R125, R126 AND R131
EAT 722
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC EURO AT
USED ON: EURO AT
SIZE A3
51 513
REV 7
DATE: 01-19-90
SHEET: 22 of 24

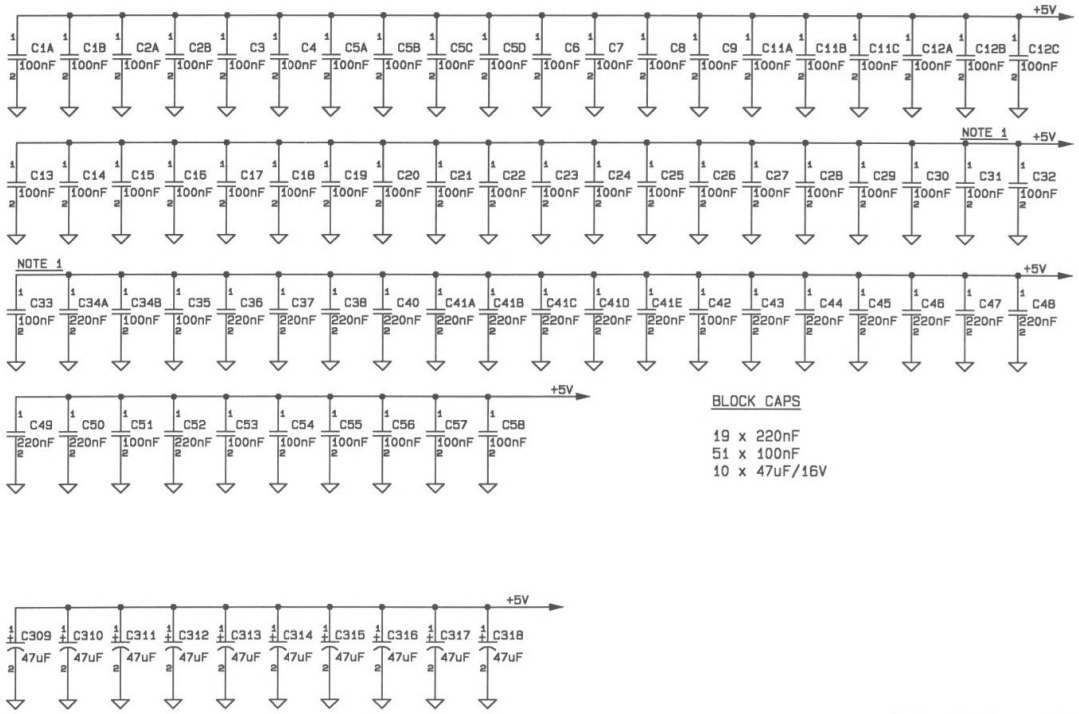
REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
0	FIRST DRAWING	07-31-89	
1	PREPRODUCTION RELEASE	11-23-89	K. WINZEK
2	NEW C207	01-12-90	K. WINZEK

DRAWING FILES:	CONTENTS:
SLT_21	THIS SHEET
SLT_22	SLOT PCB CONNECTOR
SLT_23	SLOT I
SLT_24	SLOT II

SLT_21

Schneider

DRAWN BY: K. WINZEK	TITLE: SCHEMATIC SLOTS EURO AT		
APPROVED:			
USED ON: EuroAT	SIZE A 3	51 620	REV 2
DATE: 01-29-90		SHEET: 1 of 4	



BLOCK CAPS

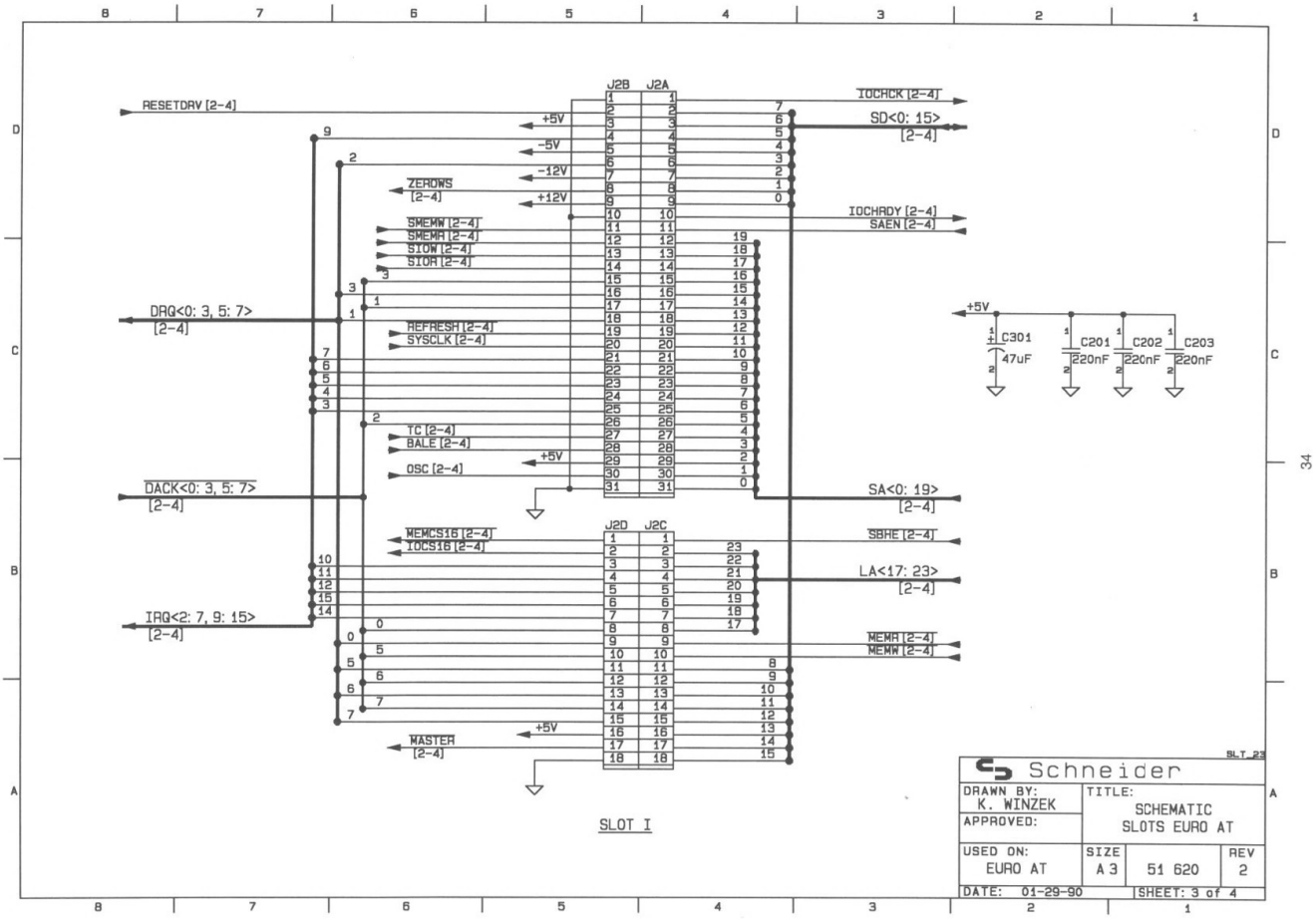
19 x 220nF
51 x 100nF
10 x 47uF/16V

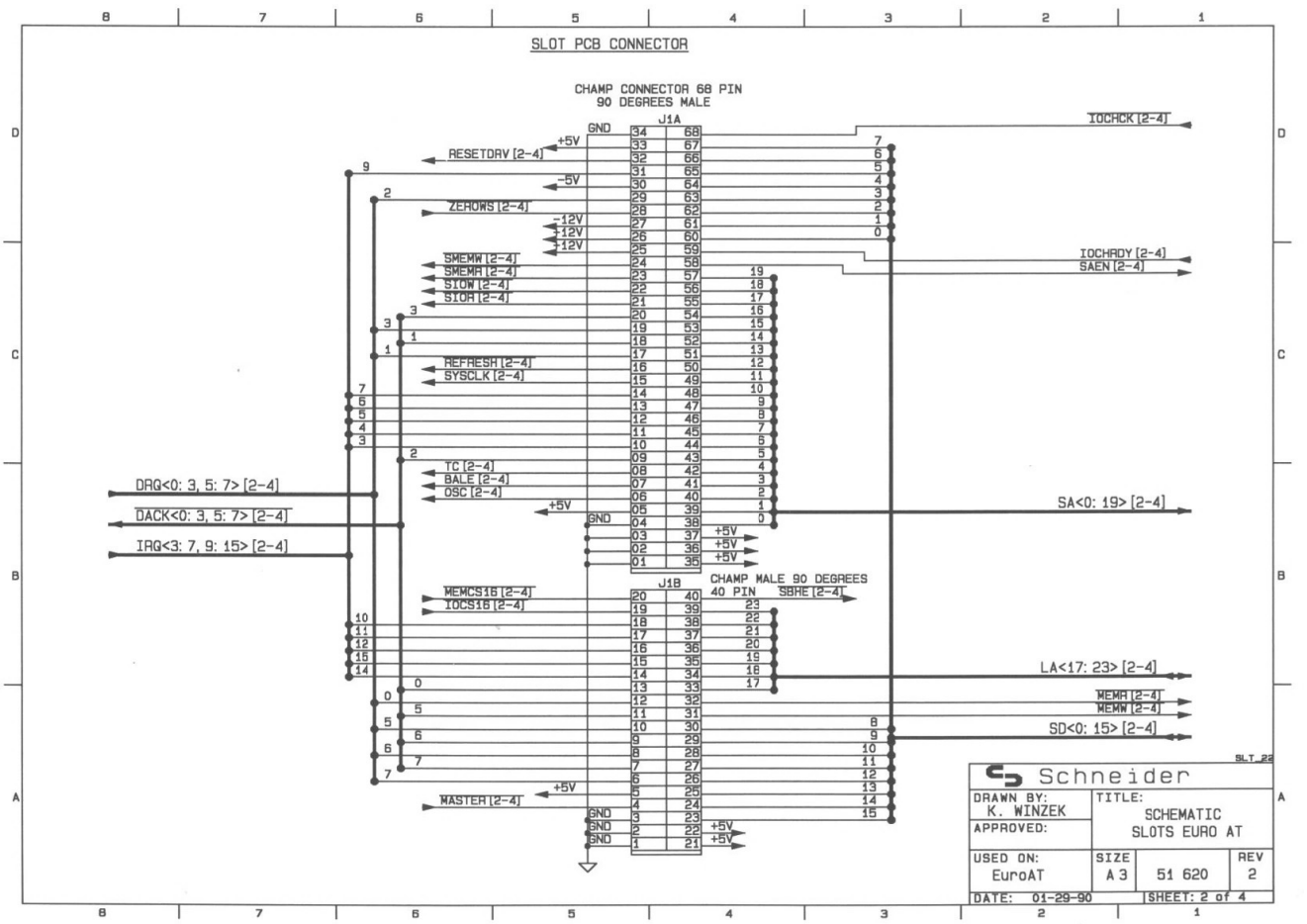
NOTES: 1) C30..C33 NORMALLY NOT ASSEMBLED

EAT_724

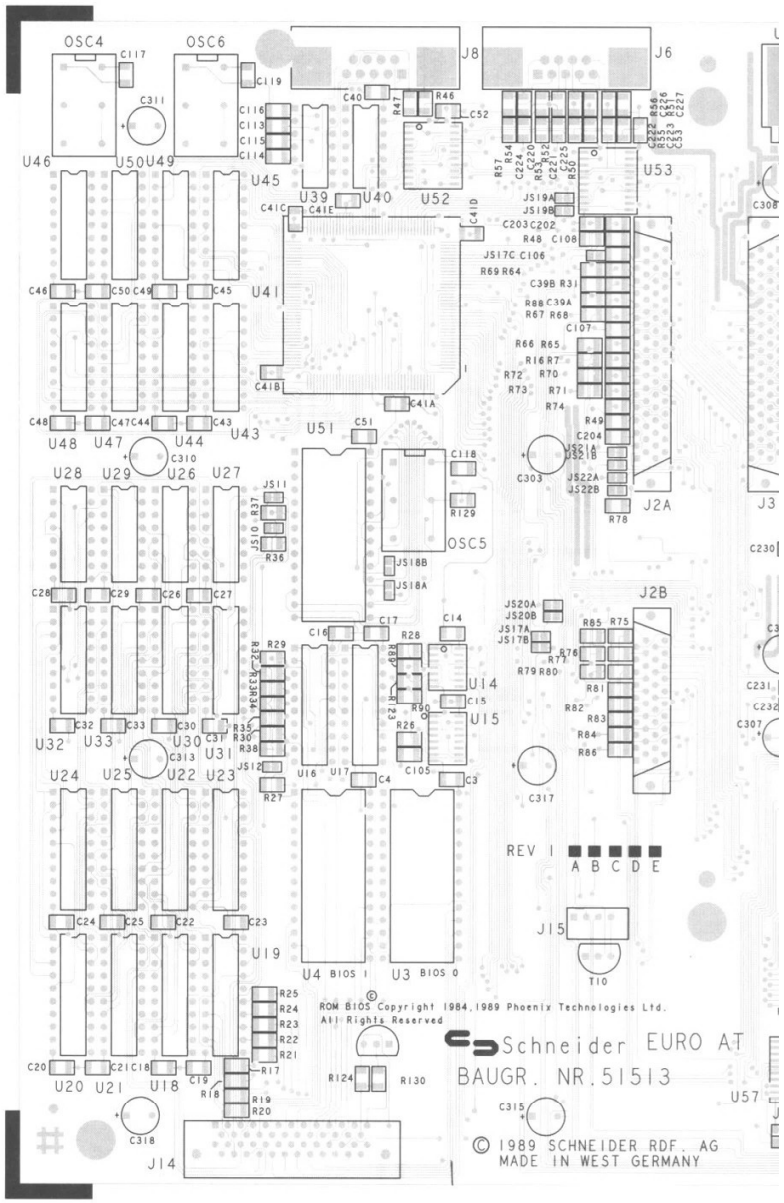
Schneider

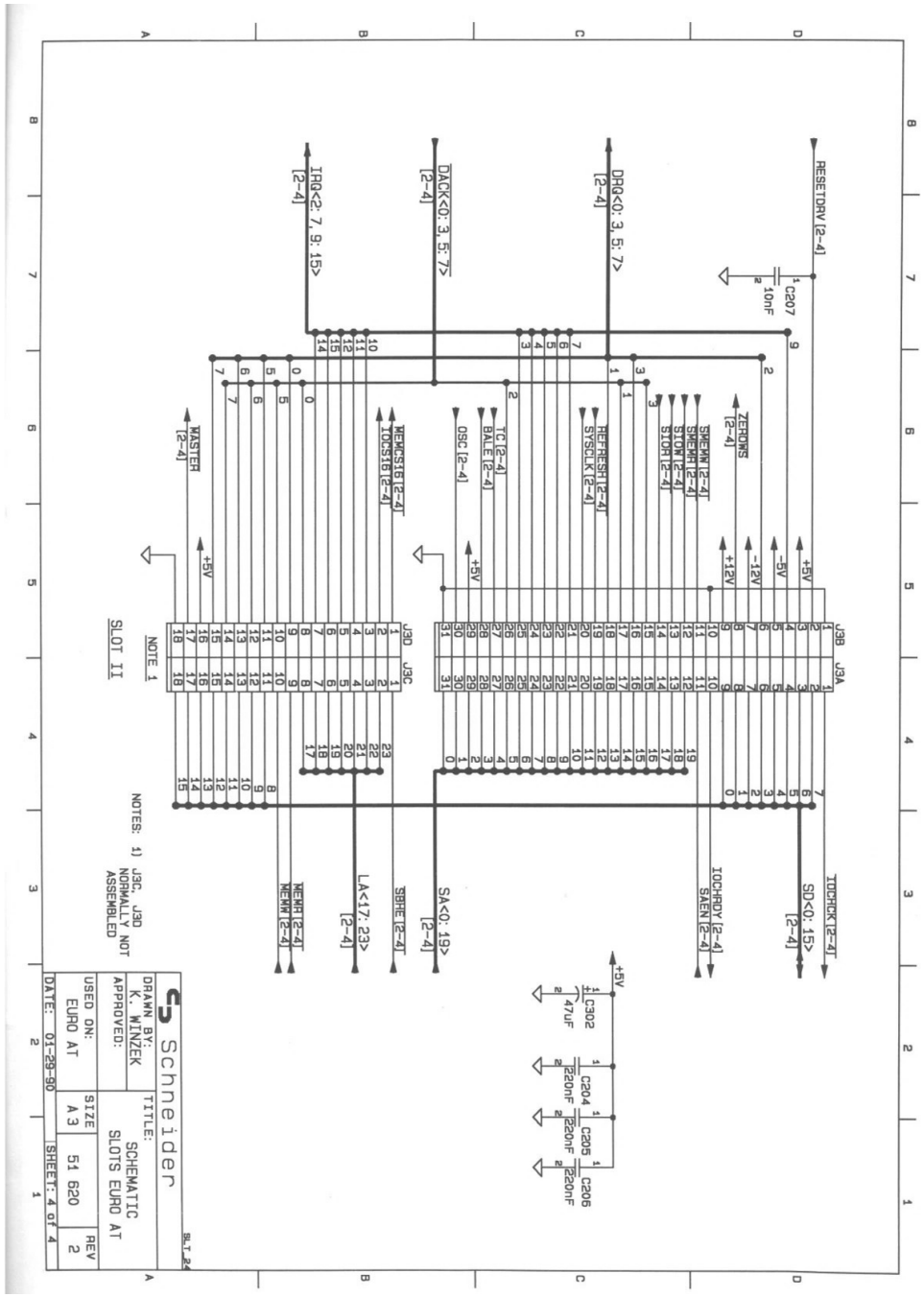
DRAWN BY: K. WINZEK	TITLE: SCHEMATIC EURO AT		
APPROVED:			
USED ON: EURO AT	SIZE A 3	51 513	REV 7
DATE: 01-19-90		SHEET: 24 of 24	

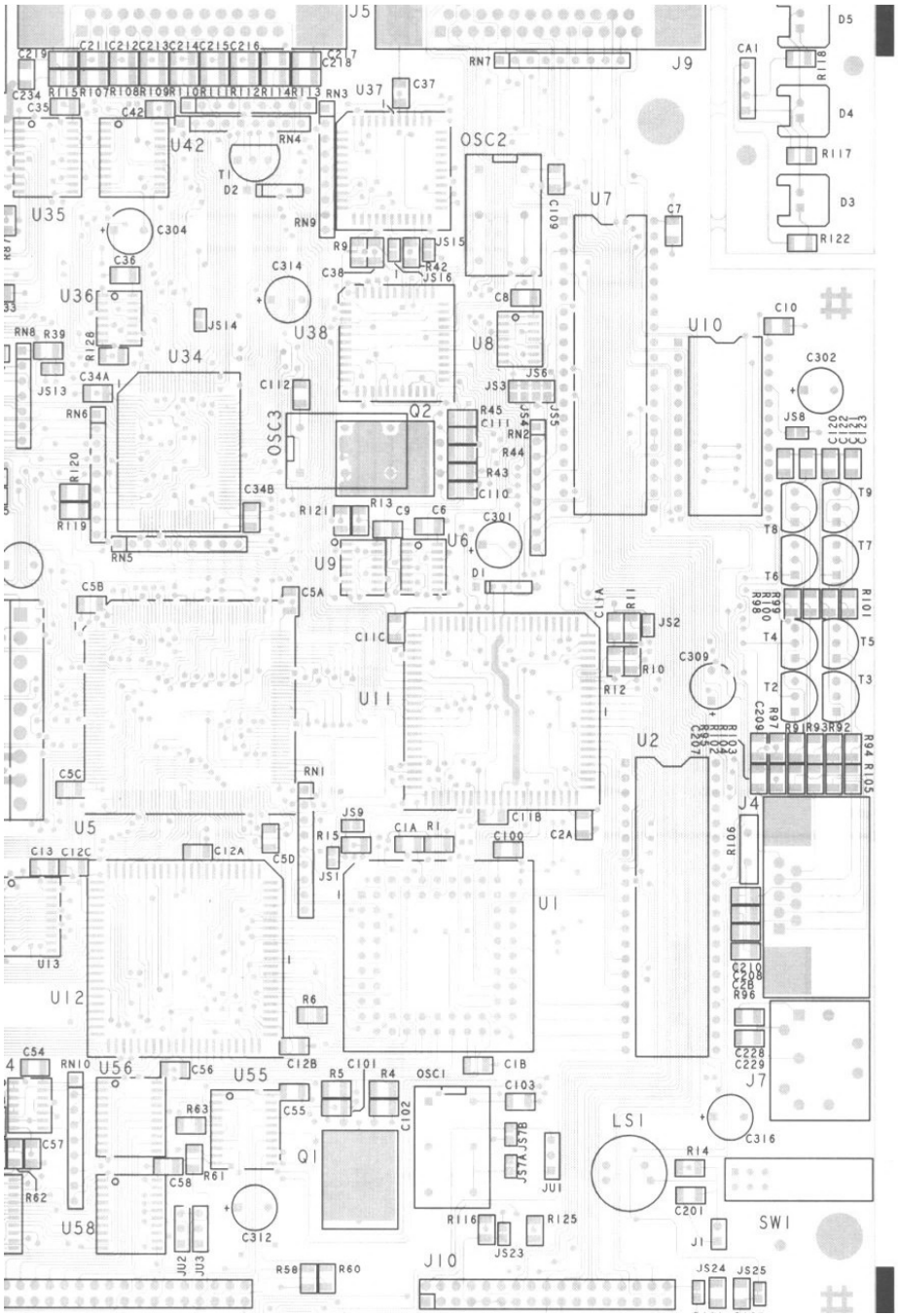

J2B J2A
J2D J2C
RESETDRV [2-4]
+5V
-5V
-12V
+12V
ZEROWS [2-4]
SMEMW [2-4]
SMEMR [2-4]
SIOW [2-4]
SIOR [2-4]
DRQ<0: 3, 5: 7> [2-4]
REFRESH [2-4]
SYSCLK [2-4]
TC [2-4]
BALE [2-4]
OSC [2-4]
DACK<0: 3, 5: 7> [2-4]
MEMCS16 [2-4]
IOCS16 [2-4]
IRQ<2: 7, 9: 15> [2-4]
MASTER [2-4]
IOCHCK [2-4]
SD<0: 15> [2-4]
IOCHRDY [2-4]
SAEN [2-4]
SA<0: 19> [2-4]
SBHE [2-4]
LA<17: 23> [2-4]
MEMR [2-4]
MEMW [2-4]
C301 47uF
C201 220nF
C202 220nF
C203 220nF
SLOT I
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC SLOTS EURO AT
USED ON: EURO AT
SIZE A 3
51 620
REV 2
DATE: 01-29-90
SHEET: 3 of 4
SLT 23


SLOT PCB CONNECTOR
CHAMP CONNECTOR 68 PIN
90 DEGREES MALE
J1A
J1B
CHAMP MALE 90 DEGREES
40 PIN
GND
+5V
-5V
-12V
+12V
RESETDRV [2-4]
ZEROWS [2-4]
SMEMW [2-4]
SMEMR [2-4]
SIOW [2-4]
SIOR [2-4]
REFRESH [2-4]
SYSCLK [2-4]
TC [2-4]
BALE [2-4]
OSC [2-4]
DRQ<0: 3, 5: 7> [2-4]
DACK<0: 3, 5: 7> [2-4]
IRQ<3: 7, 9: 15> [2-4]
MEMCS16 [2-4]
IOCS16 [2-4]
MASTER [2-4]
IOCHCK [2-4]
IOCHRDY [2-4]
SAEN [2-4]
SA<0: 19> [2-4]
SBHE [2-4]
LA<17: 23> [2-4]
MEMR [2-4]
MEMW [2-4]
SD<0: 15> [2-4]
Schneider
DRAWN BY: K. WINZEK
APPROVED:
TITLE: SCHEMATIC SLOTS EURO AT
USED ON: EuroAT
SIZE A 3
51 620
REV 2
DATE: 01-29-90
SHEET: 2 of 4
SLT 22

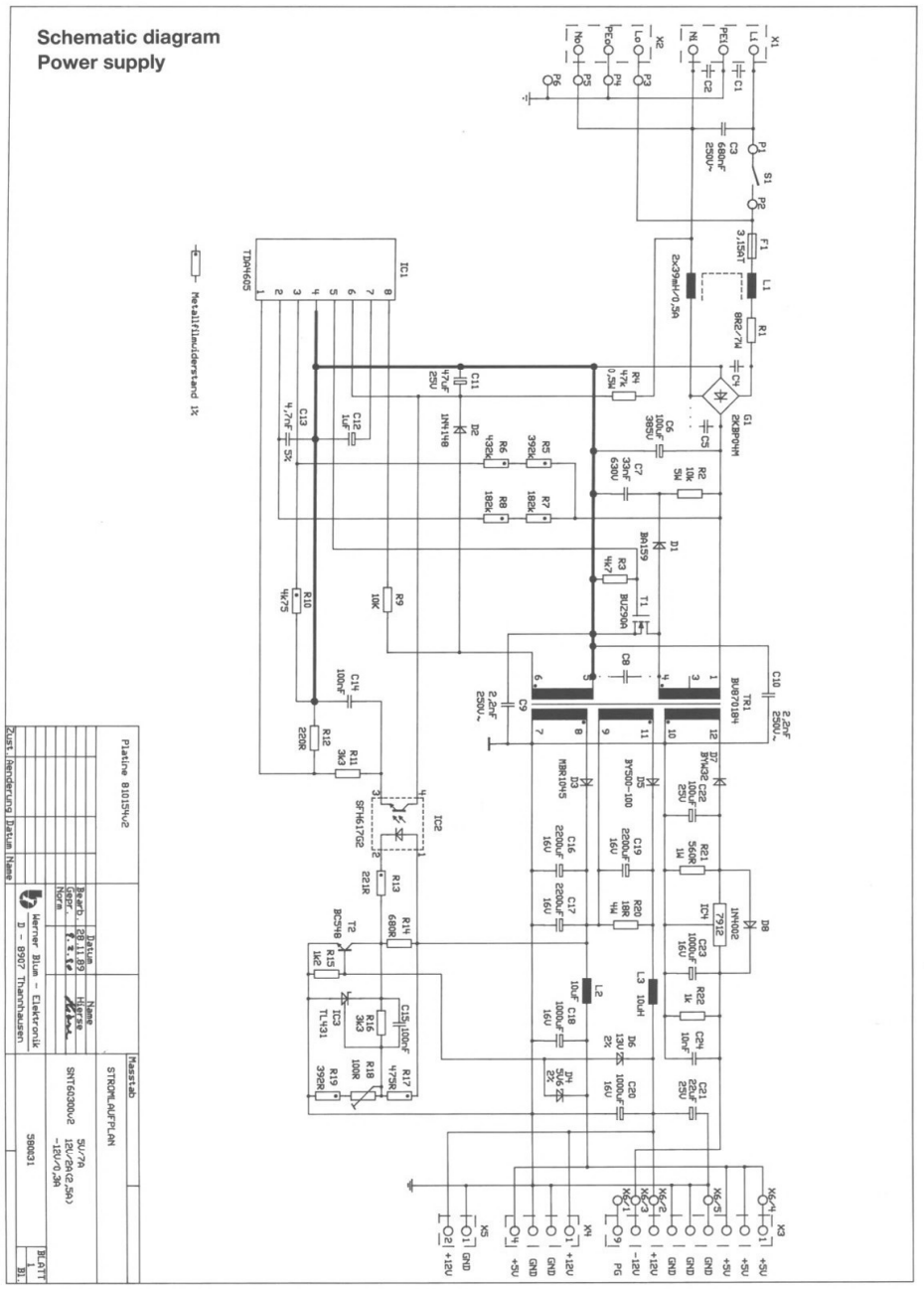
Component side



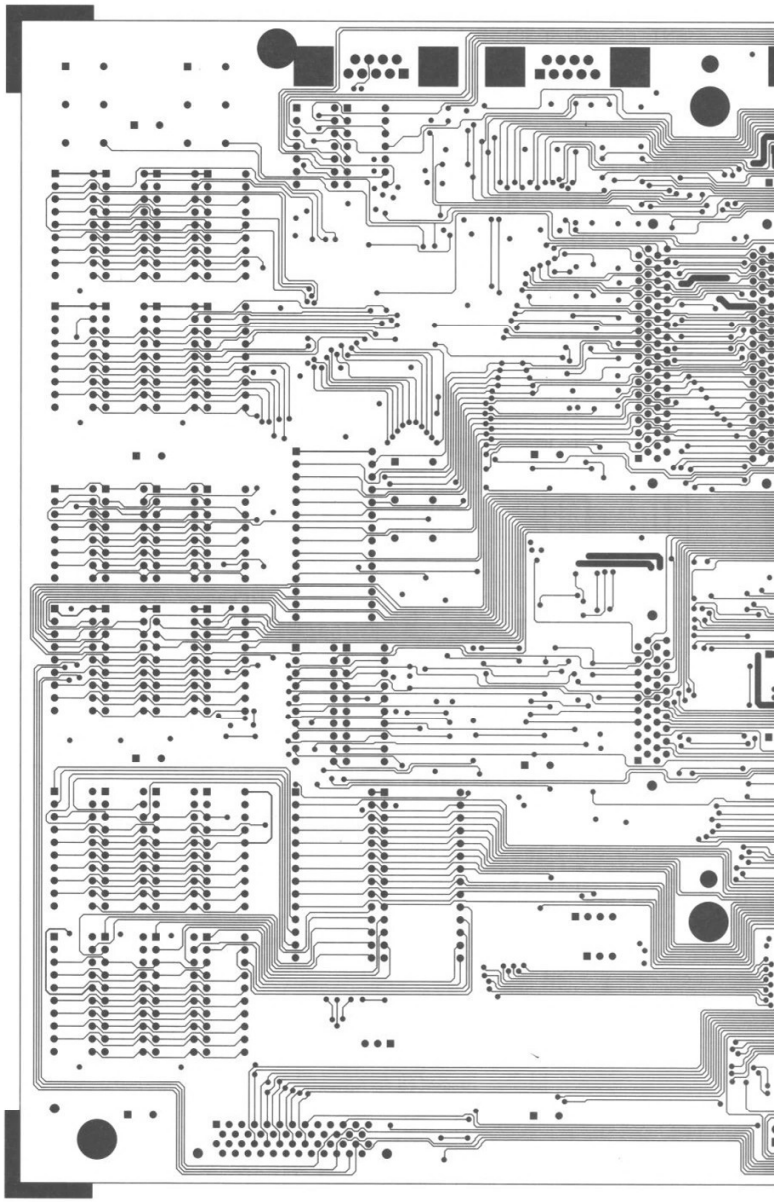


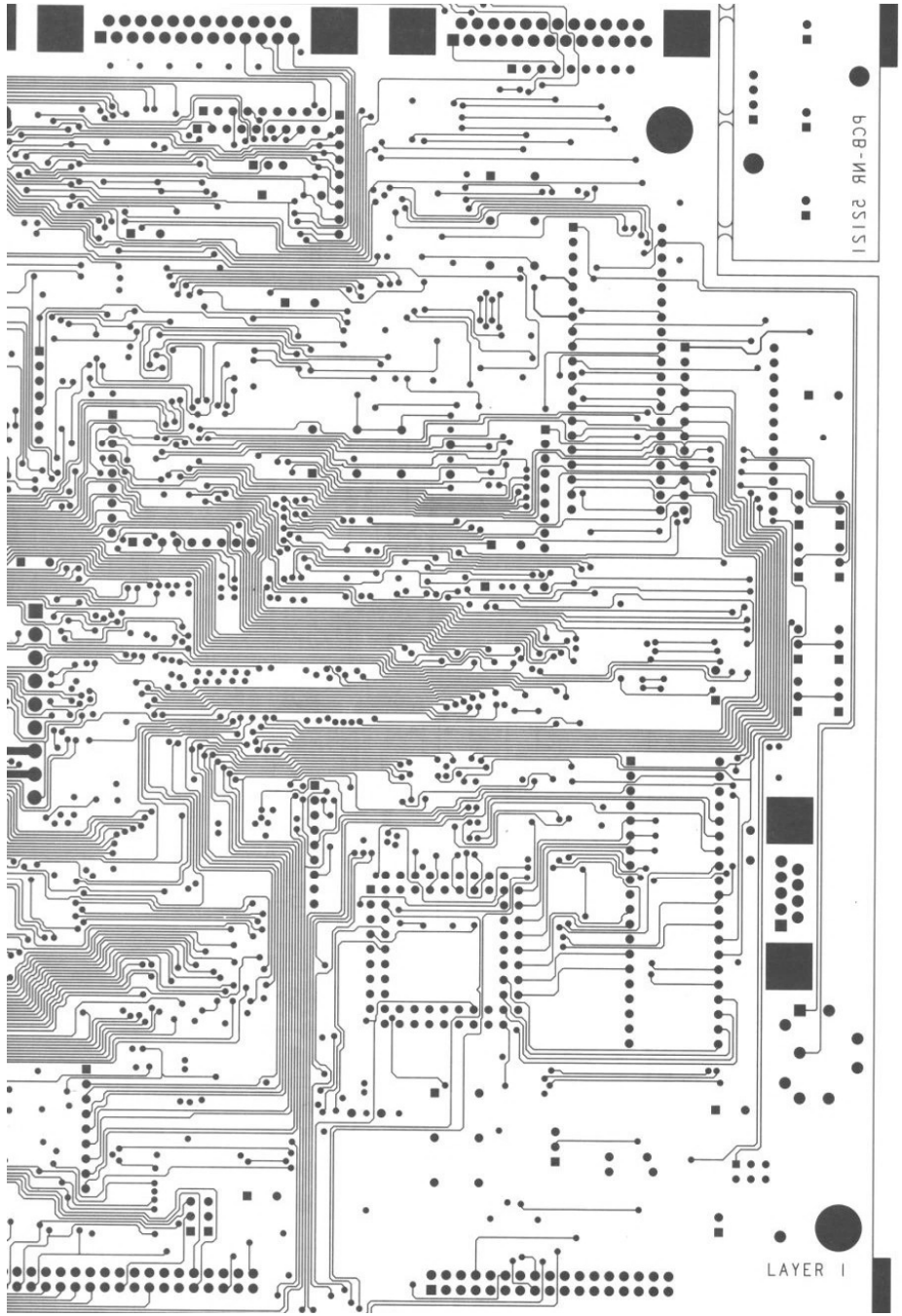


Schematic diagram
Power supply



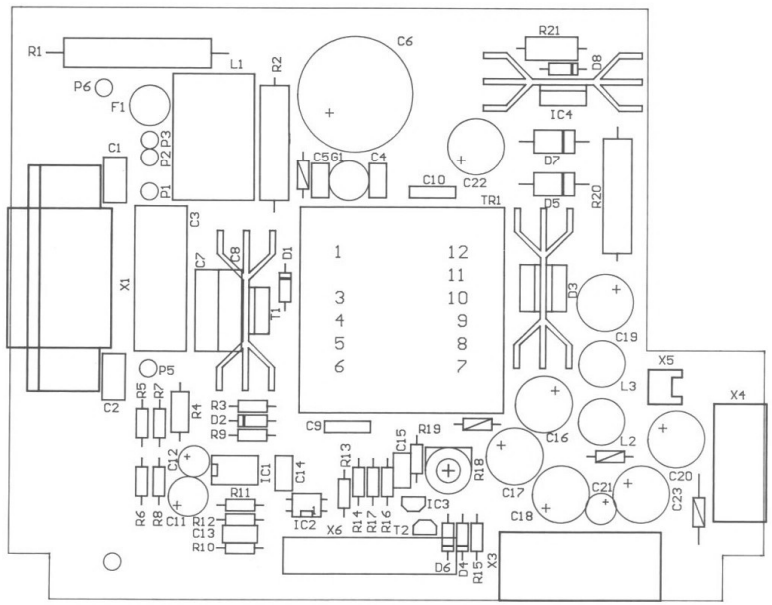
Soldering side



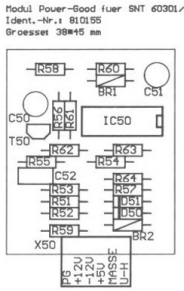


Power supply
Component side

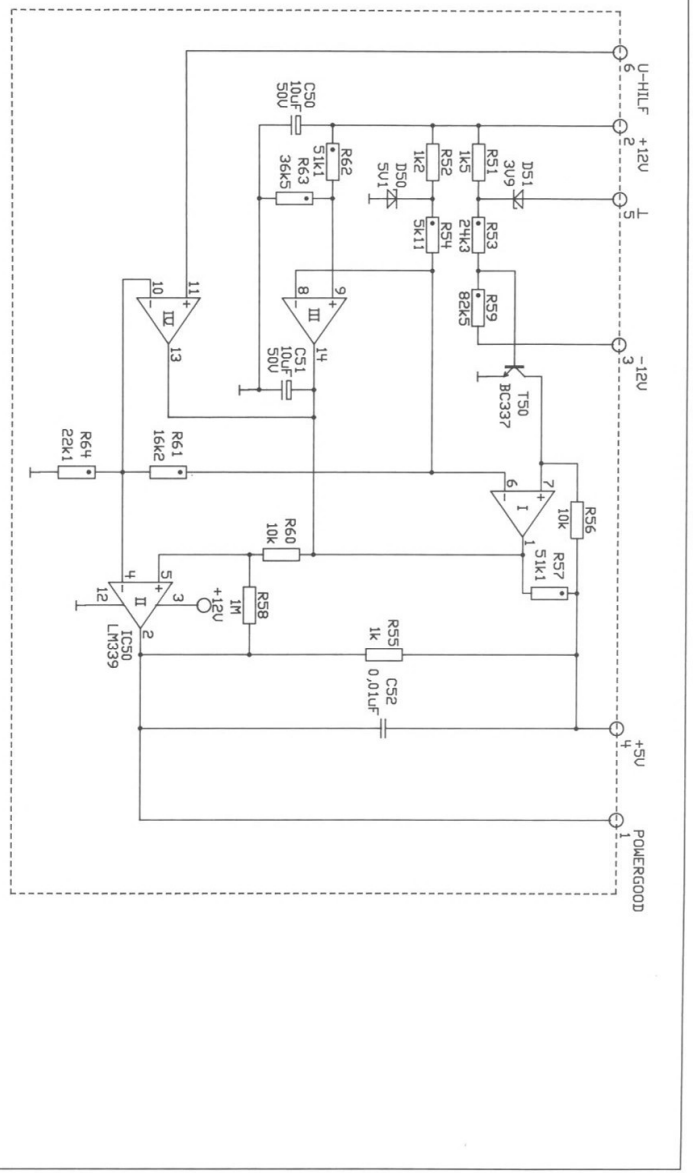
SNT 60300/60301 Schneider
Ident.-Nr.: 810154v2
Groesse: 130*166 mm



Power good modul
Component side



Schematic diagram
Power good modul



Zust. | Aenderung | Datum | Name

Modul 810155

Bearb. Datum 01.12.89 Name Hafner
Gepr. 3.2.89
Norm

Masstab

STROMLAUFPLAN

Power-Good-Modul fuer SNT60301 SNT90301

Werner Blum - Elektronik
D - 8907 Thannhausen

BLATT 1 BL.

Ersatzteilliste für Platine Best. Euro AT
Parts List for P.C.B. Euro AT

Best.-Nr. Part.-No.	Bezeichnung	Description	Zeich.-Pos. Ref.-No.	Preisgruppe
50 509 00	IC 80826 CPU 12 MHz	IC 80826 CPU 12 MHz	U 1	F 4
50 444 00	IC EPROM 256K prog.	IC EPROM 256K prog.	U 3	C 9
50 445 00	IC EPROM 256K prog.	IC EPROM 256K prog.	U 4	C 9
50 776 00	IC GC 101A CPU Contr.	IC GC 101A CPU Contr.	U 5	F 5
51 586 00	IC 7406 S014	IC 7406 S014	U 6	A 9
50 243 00	IC 8042 prog.	IC 8042 prog.	U 7	C 3
51 594 00	IC 74 HC 74 S014	IC 74 HC 74 S014	U 8	A 8
51 592 00	IC 74 HC 14 S014	IC 74 HC 14 S014	U 9	A 9
50 177 00	IC DS 1287	IC DS 1287	U 10	D 4
50 046 00	IC GC 102A PLCC	IC GC 102A PLCC	U 11, 12	D 7
51 587 00	IC 74 ALS 245 S020	IC 74 ALS 245 S020	U 13	B 1
51 588 00	IC 74 F 00 S014	IC 74 F 00 S014	U 14	A 7
51 590 00	IC 74 F 175 S016	IC 74 F 175 S016	U 15	A 7
50 334 00	IC HAL 16L8B DIL RAS-PAL	IC HAL 16L8B DIL RAS-PAL	U 16	B 8
50 333 00	IC HAL 16L8B DIL CAS-PAL	IC HAL 16L8B DIL CAS-PAL	U 17	B 8
50 153 00	IC DRAM 256K×4	IC DRAM 256K×4	U 18-25	E 9
50 773 00	IC BIG JIM TC110 G008	IC BIG JIM TC110 G008	U 34	D 1
51 319 00	IC 74 LS 245 S020	IC 74 LS 245 S020	U 35	A 7
51 589 00	IC 74 F 126 S014	IC 74 F 126 S014	U 36	A 6
50 105 00	IC WD 37C65B-JM00	IC WD 37C65B-JM00	U 37	D 5
50 827 00	IC 16 C 450 PLCC 44	IC 16 C 450 PLCC 44	U 38	C 6
50 120 00	IC MC 1488	IC MC 1488	U 39	A 5
50 121 00	IC MC 1489	IC MC 1489	U 40	A 5
50 147 00	IC GC 201	IC GC 201	U 41	F 2
51 596 00	IC 74 LS 273 S020	IC 74 LS 273 S020	U 42	A 6
50 110 00	IC DRAM 64K×4 120nS	IC DRAM 64K×4 120nS	U 43-50	D 4
50 447 00	IC EPROM 256K prog.	IC EPROM 256K prog.	U 51	C 9
51 591 00	IC 74 F 244 S020	IC 74 F 244 S020	U 52	A 7
51 593 00	IC 74 HC 373 S020	IC 74 HC 373 S020	U 53	A 7
51 595 00	IC 74 LS 10 S014	IC 74 LS 10 S014	U 54	A 5
51 321 00	IC 74 LS 244 S020	IC 74 LS 244 S020	U 55, 58	B 0
51 329 00	IC 74 LS 245 S020	IC 74 LS 245 S020	U 56, 57	A 7
50 238 00	IC 7905 T0220	IC 7905 T0220	U 59	A 6

Ersatzteilliste für Platine Best. Euro AT
Parts List for P.C.B. Euro AT

Best.-Nr. Part.-No.	Bezeichnung	Description	Zeich.-Pos. Ref.-No.	Preisgruppe
50 358 00	Transistor BC 337 B	Transistor BC 337 B	T 1-5	A 6
51 042 00	Transistor BC 327 B	Transistor BC 327 B	T 6-9	A 2
50 358 00	Transistor BC 337 B	Transistor BC 337 B	T 10, 11	A 6
50 338 00	Diode 1 N 4148	Diode 1 N 4148	D 1, 2	A 2
50 325 00	Quarz 14,31818 MHz HC-18U	Quartz 14.31818 MHz HC-18U	Q 1	B 3
50 312 00	Quarz 1,8432 MHz HC-18U	Quartz 1.8432 MHz HC-18U	Q 2	B 5
50 313 00	Oszillator 16 MHz	Oscillator 16 MHz	OSC 2	C 3
50 337 00	Oszillator 34 MHz	Oscillator 34 MHz	OSC 4	C 0
50 315 00	Oszillator 24 MHz	Oscillator 24 MHz	OSC 5	C 0
50 314 00	Oszillator 19, 20 MHz	Oscillator 19, 20 MHz	OSC 6	C 0
50 316 00	R-Netzwerk 8×10K	R, Network 8×10K	RN 1, 5	A 3
50 319 00	R-Netzwerk 8×4K7	R, Network 8×4K7	RN 2, 4, 9, 10	A 3
50 317 00	R-Netzwerk 8×1K	R, Network 8×1K	RN 3, 7	A 3
51 050 00	R-Netzwerk 8×33K	R, Network 8×33K	RN 6	A 3
50 320 00	R-Netzwerk 6×680K	R, Network 6×680K	RN 8	A 2
50 321 00	PTC PCL 0250,0	PTC PCL 0250.0	R 106	B 0
51 717 00	Resettaste	Pushbutton, reset	SW 1	A 9
50 332 00	Piepser	Buzzer	LS 1	A 8
51 469 00	LED-Kabel 4pol.	Cabel, LED 4-pin	CA 1	A 9
51 520 00	Steckverbindung 40pol.	Socket 40-pin	J 2 B	B 2
51 521 00	Steckverbindung 68pol.	Socket 68-pin	J 2 A, J 3	B 4
51 385 00	Buchse SUB-D 9pol.	Socket SUB-D 9-pin	J 4	A 9
50 133 00	Buchse SUB-D 25pol.	Socket SUB-D 25-pin	J 5	B 2
50 132 00	Buchse SUB-D 9pol.	Socket SUB-D 9-pin	J 6	B 0
51 140 00	Buchse Dioden 5pol.	Socket 5-pin	J 7	A 9
50 131 00	Buchse SUB-D 9pol.	Socket SUB-D 9-pin	J 8	A 9
50 133 00	Buchse SUB-D 25pol.	Socket SUB-D 25-pin	J 9	B 2
51 569 00	Stiftleiste RM 26pol.	Socket RM 26-pin	J 10	A 7
51 431 00	Stiftleiste 9pol.	Socket 9-pin	J 11	A 5
51 085 00	Stiftleiste 40pol.	Socket 40-pin	J 13	A 7
51 616 00	Steckverbindung Leiterplatine	Socket P.C.B.	J 15	A 5

CAUTION:

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

Ref.: IEC/74 (Central Office) 104.

Error Code Table for AT 286

The "DIAGNP OUTPUT" codes are placed at the diagnostic status port to indicate tests in progress and failed tests to someone with hardware which can detect the output. If the FAILBEEP option is selected, the "BEEP CODES" are announced on the speaker if and only if a fatal failure is detected. For instance, "2-1-4" (a burst of two beeps, a single beep, a burst of four beeps) indicates a failure of bit 3 in the first 64K of RAM. Both set of codes are only used prior to screen initialization and screen retrace verification.

Once the screen is believed operable, any diagnostic reporting is via screen messages, except if MANLOOP EQU TRUE and the jumpers say to loop on POST. In this case, it is assumed that no video adapter is attached and some additional errors will be reported via DIAGNP and the speaker.

DIAGNP OUTPUT	BEEP CODES	DESCRIPTION OF TEST OR FAILURE
01h		80286 register test in-progress
02h	1-1-3	CMOS write/read test in-progress or failure
03h	1-1-4	BIOS ROM checksum in-progress or failure
04h	1-2-1	Programmable Interval Timer test in-progress or failure
05h	1-2-2	DMA initialization in-progress or failure
06h	1-2-3	DMA page register write/read test in-progress or fail
07h	1-2-4	JIM port address offset determination in-progress or not found
08h	1-3-1	RAM refresh verification in-progress or failure
09h		1st 64K RAM test in-progress
0Ah	1-3-3	1st 64K RAM chip or data line failure - multi-bit
0Bh	1-3-4	1st 64K RAM odd/even logic failure
0Ch	1-4-1	1st 64K RAM address line failure
0Dh	1-4-2	1st 64K RAM parity test in_progress or failure
0Eh	1-4-3	invalid PBC ID ;V2.00
10h	2-1-1	1st 64K RAM chip or data line failure - bit 0
11h	2-1-2	1st 64K RAM chip or data line failure - bit 1
12h	2-1-3	1st 64K RAM chip or data line failure - bit 2
13h	2-1-4	1st 64K RAM chip or data line failure - bit 3
14h	2-2-1	1st 64K RAM chip or data line failure - bit 4
15h	2-2-2	1st 64K RAM chip or data line failure - bit 5
16h	2-2-3	1st 64K RAM chip or data line failure - bit 6
17h	2-2-4	1st 64K RAM chip or data line failure - bit 7
18h	2-3-1	1st 64K RAM chip or data line failure - bit 8
19h	2-3-2	1st 64K RAM chip or data line failure - bit 9
1Ah	2-3-3	1st 64K RAM chip or data line failure - bit A
1Bh	2-3-4	1st 64K RAM chip or data line failure - bit B
1Ch	2-4-1	1st 64K RAM chip or data line failure - bit C
1Dh	2-4-2	1st 64K RAM chip or data line failure - bit D
1Eh	2-4-3	1st 64K RAM chip or data line failure - bit E
1Fh	2-4-4	1st 64K RAM chip or data line failure - bit F
20h	3-1-1	slave DMA register test in-progress or failure
21h	3-1-2	master DMA register test in-progress or failure
22h	3-1-3	master interrupt mask register test in-progress or fail
23h	3-1-4	slave interrupt mask register test in-progress or fail
25h		interrupt vector loading in-progress
27h	3-2-4	keyboard controller test in-progress or failure
28h		CMOS power-fail and checksum checks in-progress
29h		CMOS config info validation in-progress
2Ah	3-3-3	monitor type determination in-progress or failure
2Bh	3-3-4	screen memory test in-progress or failure
2Ch	3-4-1	screen initialization in-progress or failure
2Dh	3-4-2	screen retrace tests in-progress or failure
2Eh		search for video ROM in-progress
30h		screen believed operable:
30h		screen believed running w/ video ROM
31h		monochromatic screen believed operable
32h		40-column color screen believed operable
33h		80-column color screen believed operable

The following codes are reported via DIAGNP and the speaker only if MANLOOP EQU TRUE and the "manufacturing jumper" indicates loop on POST. Otherwise, these errors are reported via the screen and POST continues. Use of the manufacturing jumper requires working correctly configured CMOS.

34h	4-2-1	timer tick interrupt test in_progress or failure
35h	4-2-2	shutdown test in_progress or failure
36h	4-2-3	gate A20 failure
37h	4-2-4	unexpected interrupt in protected mode
38h	4-3-1	RAM test in_progress or failure above address 0FFFFh
3Ah	4-3-3	Interval timer channel 2 test in_progress or failure
3Bh	4-3-4	Time-Of-Day clock test in_progress or failure
3Ch	4-4-1	Serial port test test in_progress or failure
3Dh	4-4-2	Parallel port test test in_progress or failure
3Eh	4-4-3	Math Coprocessor test in_progress or failure

********* ACHTUNG! *********

Für Daten aller Art, die sich bei Einsendung an die Firma Schneider im Servicefall oder in jedem anderen Fall noch auf einem Datenträger befinden, wird bei Verlust oder Beschädigung keinerlei Haftung übernommen!
Bitte, sichern Sie sich Ihre Daten vorher von Ihrem Datenträger. Wie man eine Sicherungskopie erstellt, können Sie in Ihrer MS-DOS-Betriebsanleitung nachlesen.

********* IMPORTANT! *********

We accept no responsibility for the loss of or damage to data of any kind which is still contained on a data carrier which is sent to Schneider for servicing or for any other reason!
Please copy your data from your data carrier beforehand. You can read how to produce a backup copy in your MS-DOS operating instructions.

Bitte bei Ersatzteilbestellung die genaue Bezeichnung und Ident-Nr. (siehe Typenschild) des Gerätes sowie Bestell-Nummer und Positions-Nummer des Ersatzteils angeben.

For ordering of spare parts please state exact description and ident no. of unit (see silver rating label on the backside of unit) as well as part no. and position no. of required spare parts.

Benutzen Sie:

Telex: 531516

oder

Bildschirmtext ✱317298 #

oder

Telefax: 08245/51326