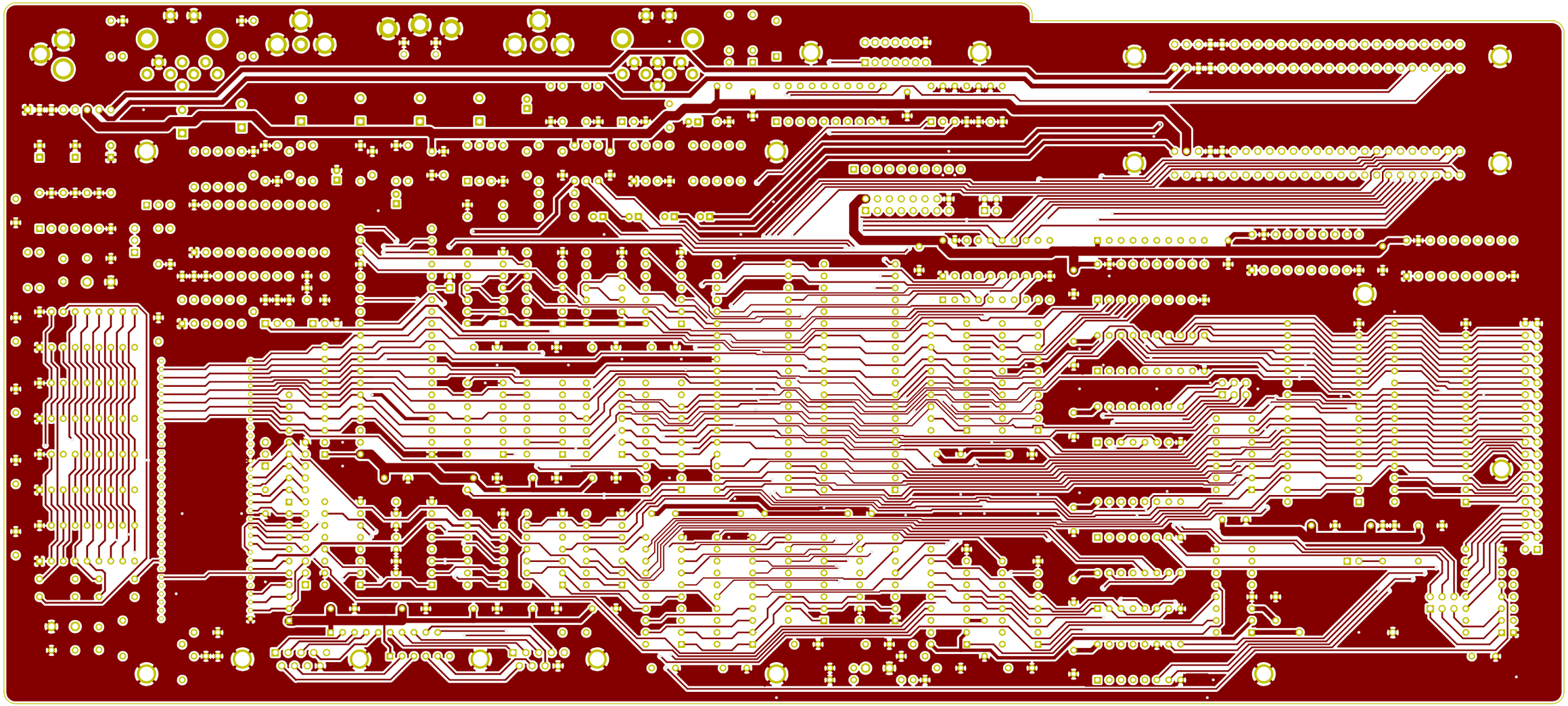

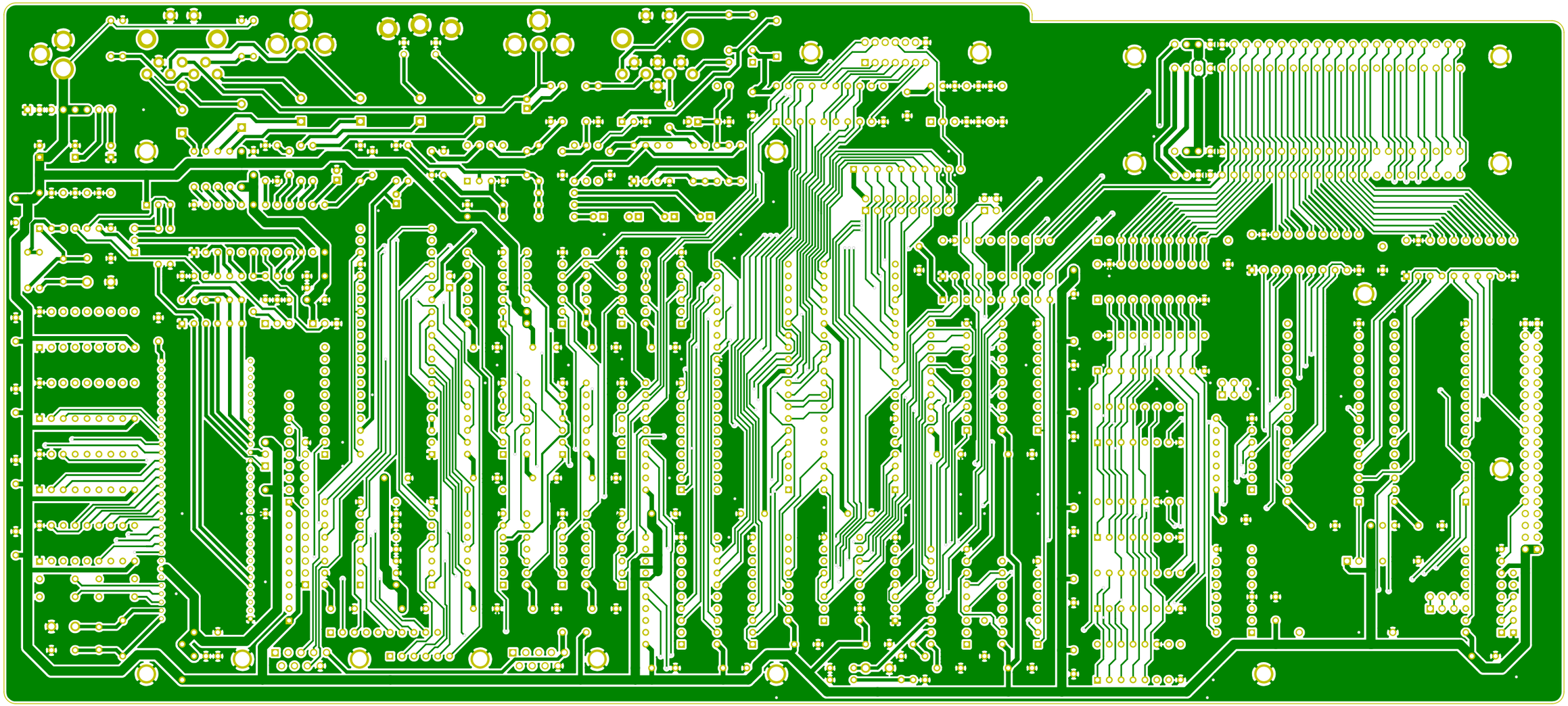

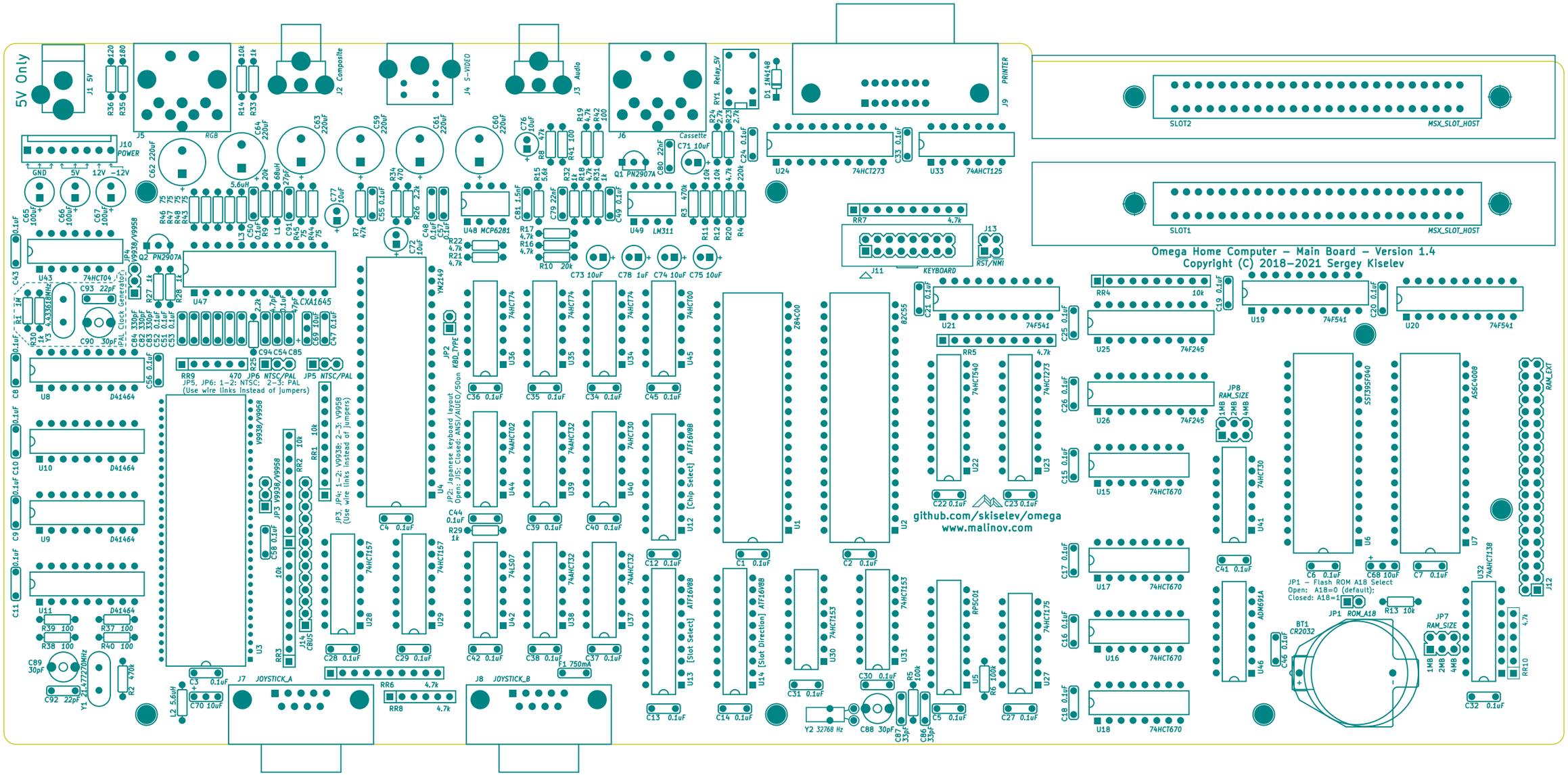
Omega Home Computer – Main Board – Version 1.4
Copyright (C) 2018–2021 Sergey Kiselev
5V Only
J1 5V
J10 POWER
GND 5V -12V 12V
J5 RGB
J2 Composite
J4 S-VIDEO
J3 Audio
J6 Cassette
J9 PRINTER
SLOT2 MSX_SLOT_HOST
SLOT1 MSX_SLOT_HOST
J11 KEYBOARD
J13 RST/NMI
U24 74HCT273
U33 74AHCT125
U48 MCP6281
U49 LM311
U47 CXA1645
U43 74HCT04
U4 YM2149
U3 V9938/V9958
U1 Z84C00
U2 82C55
U12 [Chip Select] ATF16V8B
U13 [Slot Select] ATF16V8B
U14 [Slot Direction] ATF16V8B
github.com/skiselev/omega
www.malinov.com
U19 74F541
U20 74F541
U21 74F541
U25 74F245
U26 74F245
U15 74HCT670
U17 74HCT670
U16 74HCT670
U18 74HCT670
U6 SST39SF040
U7 AS6C4008
U32 74AHCT138
U46 ADM691A
BT1 CR2032
J7 JOYSTICK_A
J8 JOYSTICK_B
J12 RAM_EXT
JP1 ROM_A18
JP1 – Flash ROM A18 Select
Open: A18=0 (default);
Closed: A18=1
JP8 RAM_SIZE
JP7 RAM_SIZE
JP5, JP6: 1–2: NTSC; 2–3: PAL
(Use wire links instead of jumpers)
JP3, JP4: 1–2: V9938; 2–3: V9958
(Use wire links instead of jumpers)
JP2: Japanese keyboard layout
Open: JIS; Closed: ANSI/ALIEO/SOon
U8 D41464
U10 D41464
U9 D41464
U11 D41464
U28 74HCT157
U29 74HCT157
U36 74HCT74
U35 74HCT74
U34 74HCT74
U45 74HCT00
U44 74AHCT02
U39 74AHCT32
U40 74HCT30
U42 74LS07
U38 74AHCT32
U37 74AHCT32
U22 74HCT540
U23 74HCT273
U41 74HCT30
U30 74HCT153
U31 74HCT153
U5 RP5C01
U27 74HCT175
Y1 14.4772720MHz
Y2 32768 Hz
Y3 4.433618MHz
F1 750mA
Q1 PN2907A
Q2 PN2907A
RR7 4.7k
RR4 10k
RR5 4.7k
RR8 4.7k
RR6 4.7k
RR10 4.7k
RR1 10k
RR2 10k
RR3 10k
RR9 470
R13 10k
R5 100k
R6 100k
R2 470k
R1 1k
R30 1k
R27 1k
R28 1k
R25 2.2k
R29 1k
R22 4.7k
R21 4.7k
R17 4.7k
R16 4.7k
R10 20k
R8 47k
R7 47k
R14 10k
R33 1k
R36 120
R35 180
R41 100
R37 100
R39 100
R38 100
R40 100
C89 30pF
C92 22pF
C90 30pF
C93 22pF
C94 C54 C85
C73 10uF
C78 1uF
C74 10uF
C75 10uF
C71 10uF
C80 22nF
C62 220uF
C64 220uF
C63 220uF
C59 220uF
C61 220uF
C60 220uF
C76 10uF
C77 10uF
C72 10uF
C65 100uF
C66 100uF
C67 100uF
C70 10uF
C68 10uF
C46 0.1uF
C13 0.1uF
C14 0.1uF
C31 0.1uF
C30 0.1uF
C5 0.1uF
C27 0.1uF
C88 30pF
C87 33pF
C86 33pF
C32 0.1uF
C41 0.1uF
C6 0.1uF
C7 0.1uF
C22 0.1uF
C23 0.1uF
C36 0.1uF
C35 0.1uF
C34 0.1uF
C45 0.1uF
C44 0.1uF
C39 0.1uF
C40 0.1uF
C12 0.1uF
C1 0.1uF
C2 0.1uF
C4 0.1uF
C28 0.1uF
C29 0.1uF
C42 0.1uF
C38 0.1uF
C37 0.1uF
C3 0.1uF
C58 0.1uF
C56 0.1uF
C47 0.1uF
C69 10uF
L2 5.6uH
L3 5.6uH
L1 68uH
L4 27pF