ISA BUS
J1
Bus_ISA_8bit
NOTE: Bus pin numbers are flipped from the Tandy Schematic. Tandy numbers are 1–31 down the right side and 32–62 down the left side.
DECOUPLING (TANDY SCHEMATIC SHEET 1)
C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18
0.1uF
MISCELLANEOUS
U51B 74LS00
On a real board, these inputs do appear to be connected and otherwise floating.
The Tandy schematic shows this output driving HSCLK which makes no sense. Checking a real board, it appears to be not connected
R4 2K2
_2K2_PULLUP
8237 READY TIMING
U12B 74LS74
U51D 74LS00
U51C 74LS00
U12A 74LS74
U51A 74LS00
_IR_OR_IW
DRAM CONTROL LOGIC/TIMING
U2E 74LS04
U2D 74LS04
U3A 74LS32
U4A 74LS74
U4B 74LS74
U5 825153
U3B 74LS32
_MR
_MW
_MR_OR_MW
_RAM_SIZE
ADDRESS DECODING
U8 74LS260
U9 825153
_LOW_ADDR_RANGE_A
_LOW_ADDR_RANGE_B
8237 DMA CONTROLLER
U13 8237
R11 470R
U2F 74LS04
UNI-DIRECTIONAL BUS BUFFERING
U1 74LS244
U2C 74LS04
U7 74LS244
U2B 74LS04
U2A 74LS04
R3 2K2
U11 74LS244
_DMATC_UNBUF
_BREQ_UNBUF
DRAM SECTION (TANDY SCHEMATIC SHEET 2)
R5 33R
R6 33R
R7 33R
R8 56R
R9 33R
R10 56R
RP1 56R
U19 MCM6665
U20 MCM6665
U21 MCM6665
U22 MCM6665
U23 MCM6665
U24 MCM6665
U25 MCM6665
U26 MCM6665
U27 MCM6665
U28 MCM6665
U29 MCM6665
U30 MCM6665
U31 MCM6665
U32 MCM6665
U33 MCM6665
U34 MCM6665
U35 MCM6665
U36 MCM6665
U37 MCM6665
U38 MCM6665
U39 MCM6665
U40 MCM6665
U41 MCM6665
U42 MCM6665
U43 MCM6665
U44 MCM6665
U45 MCM6665
U46 MCM6665
U47 MCM6665
U48 MCM6665
U49 MCM6665
U50 MCM6665
C19 C20 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45 C46 C47 C48 C49 C50
0.1uF
C51 C52 C53 C54 C55 C56
68uF
JUMPER CONFIGURATION
R1 2K2
R2 2K2
_RAM_SIZE
_FIRSTBD
MISCELLANEOUS POWER
U2G 74LS04
U3E 74LS32
U4C 74LS74
U12C 74LS74
U16E 74LS125
U51E 74LS00
BI-DIRECTIONAL BUS BUFFERING AND ADDRESS LINE DRIVING
U15 74LS245
U14 74LS373
U17 74LS245
U16A 74LS125
U16B 74LS125
U16C 74LS125
U16D 74LS125
U18 74LS670
DRAM MULTIPLEXING
U6 74LS257
U10 74LS257
Derived from the schematic in the Tandy 1000 Technical Reference Manual and checking against a real board.
Sheet: /
File: MemoryDMABoard.sch
Title: TANDY 25-1004 Memory/DMA Expansion Board
Size: A2
Date:
Rev:
KiCad E.D.A. kicad (5.1.9)-1
Id: 1/1