VideoComposto

File: videoComposto.kicad_sch

TMS9918

File: TMS9918ADisplay.kicad_sch

MultIO

File: multio.kicad_sch

Parallel Interface

File: Parallel.kicad_sch

Serial Interface

File: serialInterface.kicad_sch

W65C02

File: W65C02.kicad_sch

R6502

File: R6502.kicad_sch

U701 TMS9918A

Pin	Signal
24	CD0
23	CD1
22	CD2
21	CD3
20	CD4
19	CD5
18	CD6
17	CD7
13	MODE
14	CSW
15	CSR
16	INT
34	RESET/SYNC
37	GROMCLK
38	CPUCLK
39	XTAL1
40	XTAL2
33	VCC
12	VSS

AD0 10, AD1 9, AD2 8, AD3 7, AD4 6, AD5 5, AD6 4, AD7 3
RAS 1, CAS 2, R/W 11
RD0 32, RD1 31, RD2 30, RD3 29, RD4 28, RD5 27, RD6 26, RD7 25
EXTVDP 35, COMVID 36

D7, D6, D5, D4, D3, D2, D1, D0
A0
VDPWR, VDPRD
RST

C710 22 pF, C711 22 pF
Y701 10.738635 MHz
GND

U702F 74HCT04 13, 12 — VR/W
U702D 74HCT04 RAS 9, 8
U702E 74HCT04 CAS 11, 10

U704 74HCT574
D0 2, D1 3, D2 4, D3 5, D4 6, D5 7, D6 8, D7 9
Q0 19 VD0, Q1 18 VD1, Q2 17 VD2, Q3 16 VD3, Q4 15 VD4, Q5 14 VD5, Q6 13 VD6, Q7 12 VD7
VCC 20, Cp 11, OE 1, GND 10
AD0–AD7 inputs
VR/W
GND

U705 74HCT574
D0 2, D1 3, D2 4, D3 5, D4 6, D5 7, D6 8, D7 9
Q0 19 VA0, Q1 18 VA1, Q2 17 VA2, Q3 16 VA3, Q4 15 VA4, Q5 14 VA5, Q6 13 VA6
VCC 20, Cp 11, OE 1, GND 10
AD1–AD7 inputs
GND

U706 74HCT574
D0 2, D1 3, D2 4, D3 5, D4 6, D5 7, D6 8, D7 9
Q0 19, Q1 18 VA7, Q2 17 VA8, Q3 16 VA9, Q4 15 VA10, Q5 14 VA11, Q6 13 VA12, Q7 12 VA13
VCC 20, Cp 11, OE 1, GND 10
AD1–AD7 inputs
GND

U707 HM62256BLP-7
VA0 10 A0, VA1 9 A1, VA2 7 A2, VA3 6 A3, VA4 5 A4, VA5 4 A5, VA6 3 A6, VA7 25 A7, VA8 24 A8, VA9 21 A9, VA10 23 A10, VA11 2 A11, VA12 26 A12, VA13 1 A13, A14
D0 11 VD0, D1 12 VD1, D2 13 VD2, D3 15 VD3, D4 16 VD4, D5 17 VD5, D6 18 VD6, D7 19 VD7
OE 22 VR/W, WE 27 VR/W, CS 20
GND

Unused gates

U703A 74HCT00: 1, 2, 3 — VDPCS
U703D 74HCT00: 12, 13, 11 — VDPRD
U703B 74HCT00: 4, 5, 6 — R/W
U703C 74HCT00: 9, 10, 8 — VDPWR
VDPCS, R/W

U702A 74HCT04: 1, 2
U702B 74HCT04: 3, 4
U702C 74HCT04: 5, 6
GND

U702G 74HCT04: VCC 14, GND 7
U703E 74HCT00: VCC 14, GND 7
VCC, GND

Q701 2N4401
R701 470, R702 1k
J701 Conn_01x02
VCC

Decoupling caps: place near power pins of U701–U707
C701, C702, C703, C704, C705, C706, C707 — 100 nF
VCC, GND

GND

J?

PA0	a1		b1	
PA1	a2		b2	
PA2	a3		b3	
PA3	a4		b4	
PA4	a5		b5	
PA5	a6		b6	
PA6	a7		b7	
PA7	a8		b8	
PB0	a9		b9	
PB1	a10		b10	
PB2	a11		b11	
PB3	a12		b12	
PB4	a13		b13	
PB5	a14		b14	
PB6	a15		b15	
PB7	a16		b16	
GND	a17		b17	GND
VCC	a18		b18	VCC
	a19		b19	
	a20		b20	/RESET
	a21		b21	
	a22		b22	SDA
	a23		b23	SCL
	a24		b24	/WR
	a25		b25	/RD
	a26		b26	/IORQ
PC0	a27		b27	D0
PC1	a28		b28	D1
PC2	a29		b29	D2
PC3	a30		b30	D3
PC4	a31		b31	D4
PC5	a32		b32	D5
PC6	a33		b33	D6
PC7	a34		b34	D7
	a35		b35	RESET
	a36		b36	
	a37		b37	
	a38		b38	
	a39		b39	
	a40		b40	

SDA
SCL

9 SCK
10 MISO
11 MOSI
12 SS

Atmega328

Arduino Pro Mini Pinout

www.TheEngineeringProjects.com

Reset