H19/H19A-GRAPHIC-INTERFACE

H89-Z80-BUS-INTERFACE

PORT-3-LEFT LIGHT PEN

PORT-4-RIGHT

JP2

PIN 1

PIN 17

H19-BUS-INTERFACE

JP1

H89-Z80-BUS-INTERFACE

J6

J7

RN3 4.7K

RN4 4.7K

F1 1.1A

H19/H19A HIGH RESOLUTION GRAPHICS CONTROLLER

+5V

74LS86

74LS32

74LS244

74LS273

74LS153

74LS04

74LS14

74LS74

74LS374

74LS08

74LS161

74LS164

74LS373

R5 330

R6 330

D3

D2

RN5 1K

C50 47uf

/OE

A18/ENABLE

DIS-AUTO

ENA-AUTO

D5 BAT49

R4 4.7K

R15 4.7K

J8

512KB

AS6C4008-55PCN

Cxpf C2

100pf C4

/CAS DELAY

33pf C55

R1 470

R2 1K

J3

FRAME RATE

FIXEL INTERLACED ON/OFF

CHARACTER INTERLACE ON/OFF

I/O ADDRESS BUSS

LIGHT PEN

RN6 10K

A16 64KB

A16/64KB

A18/SELECT

RAM-256KB

RAM-512KB

J12

R16 4.7K

J9

J4

PAGE INTERLACED ON/OFF

A17/CE2

A17

CE2

J11

A17-TO-GND

JP5

CR1220

BT1

WINDOW ADDRESSS BUSS

R9 4.7K

R13 4.7K

R10 4.7K

R12 4.7K

R11 4.7K

R14 4.7K

POWER

D1

C11 47uf

U28 POLOLU S13V10F5

R3 330

J5

+5v/12v Wall Adapter 1A

C1 47uf

/RESET

R8 4.7K

BATT_OFF

JP4

D4 BAT49

R7 4.7K

J10

H19_H89_POWER

NC

GND

GND

+12V

Re-Designed by:Norberto Collado

Rev 2.1

10/31/2026

Interactive Graphics Controller (IGC)