RevNo	Revision note	Date	Signature	Checked

DATA BUS

ADDRESS BUS

6522 I/O

+5V

External Bus Expansion

Internal Bus Expansion

NWDS

NRDS

NRST

PL6.2

PL7.2

PL6.1

PL7.1

74LS244

IC2.1

IC3.1

74LS245

IC4.1

EXT OE

RDY

SO

IRQ

NMI

SYNC

RP2(R39-41)

4K7

0V

LK2

6522 IRQ

6522

IC1.1

R1 4K7

R2 4K7

Printer

PL5

IC50.1

IC28.1

IC27.1

R3 470R

ADDRESS BUS

IC20-21 COS F000-FFFF

DOS C000-CFFF

FP D000-DFFF

BASIC C000-CFFF

27128

IC20-21.1

IC24 UTILITY (e.g. NFS) A000-AFFF

IC24.1

62256

IC10-52.1

CONTROL BUS

IDENT CS (B404)

6854 CS (B400)

NMI

NRDS

NWDS

O2

R/W

4MHz

FDC CS (8Axx)

NRST

Reset

74LS245

IC29.1

74LS123

IC105.2

R42 8K2

C36 150pF

R43 4K7

1N4148 D1

1N4148 D2

UTILITY ROM

LK6

Util Switch

S3.2

S3.1

74LS373

IC55.1

6264

IC32-43.1

LK4

INVERT

MC6847

IC31.1

3.58MHz

X1

C4 10uF

8K2 R7

1K0 R9

BC239 Q1

3K3 R8

470R R10

Colour O/P

PL4

470R R28

C5 22uF

Speaker

PL10

74LS132

IC109.1

74LS04

IC45.1

4K7 R29

1K0 R30

C6 10nF

Cassette

SK3

8255

IC25.1

7445

IC26.1

RP1(R17-25)

470K R35

LM358

IC46.2

4K7 R36

10K R37

C7 47nF

47nF C9

LM358

IC46.1

47K R33

4K7 R31

4K7 R32

22uF C8

74LS393

IC44.1

Div 8

74LS163

IC47.1

Div 13

74LS393

IC44.2

4.00MHz

X2

Keyboard

PL9

Power

SK4

PL13

C12 47uF/16V

Aux Power

C14 100nF … C31 100nF

IC1 6522 … IC25 8255

IC26 7445 … IC50 74LS244

IC55 74LS373

IC104.2 75159

Block C-F OS EPROM CS (C000-FFFF)

Block 8-B

Block 0-3

74LS139

IC49a.1

IC49b.2

IC49c.2

IC49c.1

IC49b.1

IC49a.2

8255 CS (B000)

Econet CS (B400)

6522 CS (B800)

6854 CS (B400)

IDENT CS (B404)

Block 8-B Decode

Utility EPROM CS (A000-AFFF)

Video WS (8000-9FFF)

Block 0-3 Decode

I/O = (0400-07FF)

RAM = (0000-03FF)+(2000-7FFF)

74LS00

IC8.2

IC8.4

IC8.3

74LS02

IC7.1

IC7.4

IC7.3

74LS08

IC8.1

74HCT04

IC204.3

IC7.2

IC204.4

74LS138

IC222.1

I/O Decode

PL14

PL8

74LS04

IC45.2

74LS132

IC109.4

10uF C11

1K0 R38

6502

IC22.1

4K7 R13

4K7 R14

4K7 R15

4K7 R16

Original Refs used where possible, 100 series for Econet, 200 for FDC and 300 for GOTEK

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Drawn by: CDO		Filename: Replica Atom.dch	August 2024
			Scale 1:1
Replica Acorn Atom		Replica Acorn Atom	
Based on Issue 3 Schematic		Issue 1.0	Sheet 1 of 2