Support Group Application Note
Number: 238
Issue: 2
Author:PD

Electron, BBC B, B+, Master 128 and Master Compact port pinouts.

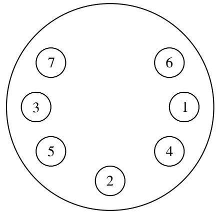
Applicable Hardware : N/A

Related Application Notes: N/A

Support Group
Acorn Computers Limited
Acorn House
Vision Park
Histon, Cambridge
CB4 4AE

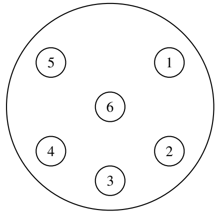
Electron **All Connectors viewed from outside**

Connector: Cassette
Type: 7-pin DIN



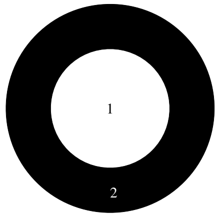
Pinout: 1 Output
2 0V
3 Input
4 Output
5 N/C
6 } Motor Control
7

Connector: RGB
Type: 6-pin DIN



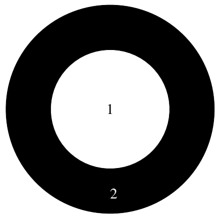
Pinout: 1 Red
2 Green
3 Blue
4 Sync
5 0V
6 +5V

Connector: UHF
Type: Phono



Pinout: 1 UHF
2 Ground

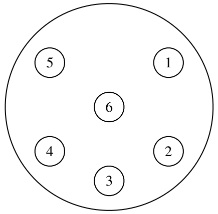
Connector: Video Out
Type: Phono



Pinout: 1 Video
2 Ground

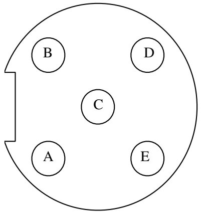
BBC Model B, B+ and Master 128.

Connector: RGB
Type 6-pin DIN



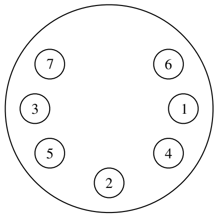
Pinout: 1 Red
2 Green
3 Blue
4 Sync
5 0V
6 +5V

Connector: RS 423
Type: 5-pin DIN



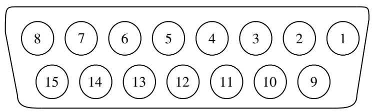
Pinout: A) Data in
B) Data Out
C) 0V
D) CTS
E) RTS

Connector: Cassette
Type: 7-pin DIN



Pinout: 1 Output
2 0V
3 Input
4 Output
5 N/C
6 } Motor Control
7

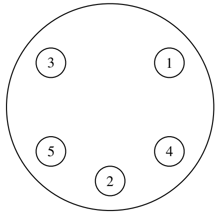
Connector: Analogue in
Type: 15 way D-type socket



Pinout:

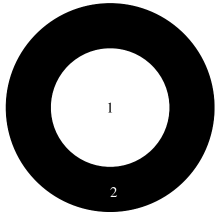
1 +5V	9 light pen strobe (notLPSTB)
2 0V	10 digital switch input (I1)
3 0V	11 voltage reference (VREF)
4 CH3	12 CH2
5 analogue ground	13 digital switch input (I0)
6 0V	14 voltage reference (VREF)
7 CH1	15 CH0
8 analogue ground	

Connector: Econet
Type: 5-pin DIN



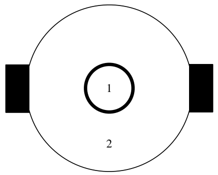
Pinout: 1 Data +
2 0V
3 Clock +
4 Data -
5 Clock -

Connector: UHF
Type: Phono

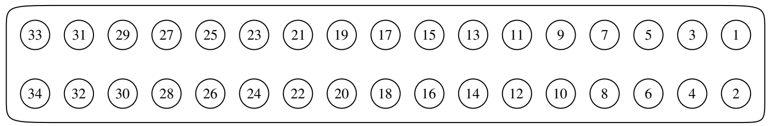


Pinout: 1 UHF
2 Ground

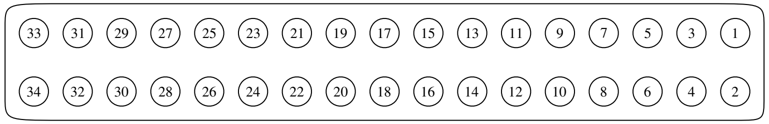
Connector: Video Out
Type: BNC



Pinout: 1 Video
2 Ground



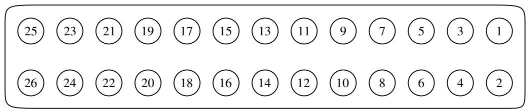
Connector: Disc Drive
Type: 34-way IDC



Pinout

1 0V	10 S0	19 0V	28 WR PCT
2 (S/SEL 8")	11 0V	20	29 0V
3 0V	12 S1	21 0V	30 R/DATA
4 (INX 8")	13 0V	22 W/DATA	31 0V
5 0V	14 N/C	23 0V	32 S/SEL 5¼"
6 N/C	15 0V	24 WR/EN	33 0V
7 0V	16 MOTOR	25 0V	34 (RDY 8")
8 INX 5¼"	17 0V	26 TK0	
9 0V	18 notDIR	27 0V	

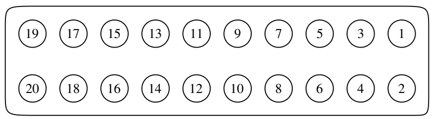
Connector: Parallel
Type: 26-way IDC



Pinout:

1 STB	8 0V	15 PA6	22 0V
2 0V	9 PA3	16 0V	23 N/C
3 PA0	10 0V	17 PA7	24 0V
4 0V	11 PA4	18 0V	25 N/C
5 PA1	12 0V	19 ACK	26 N/C
6 0V	13 PA5	20 0V	
7 PA2	14 0V	21 N/C	

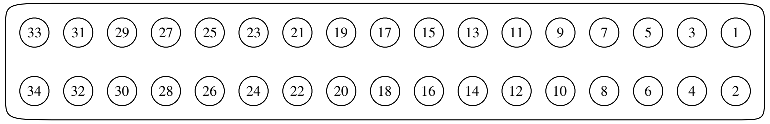
Connector: User Port
Type: 20-way IDC



Pinout:

1 +5V	6 PB0	11 0V	16 PB5
2 CB1	7 0V	12 PB3	17 0V
3 +5V	8 PB1	13 0V	18 PB6
4 CB2	9 0V	14 PB4	19 0V
5 0V	10 PB2	15 0V	20 PB7

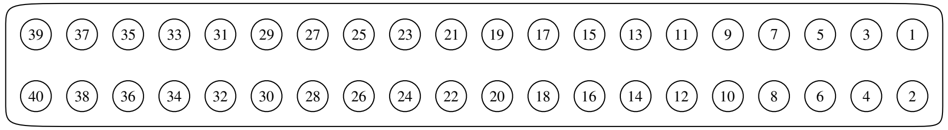
Connector: 1MHz Bus
Type: 34-way IDC



Pinout:

1 0V	10 PGFC	19 D1	28 A1
2 R/W	11 0V	20 D2	29 A2
3 0V	12 PGFD	21 D3	30 A3
4 1E	13 0V	22 D4	31 A4
5 0V	14 RS	23 D5	32 A5
6 NMI	15 0V	24 D6	33 A6
7 0V	16 audio in / out	25 D7	34 A7
8 IRQ	17 0V	26 0V	
9 0V	18 D0	27 A0	

Connector: Tube
type: 40-way IDC



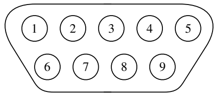
Pinout:

1 0V	11 0V	21 0V	31 +5V
2 R/W	12 D0	22 D5	32 A2
3 0V	13 0V	23 0V	33 +5V
4 2E	14 D1	24 D6	34 A3
5 0V	15 0V	25 0V	35 +5V
6 1RQ	16 D2	26 D7	36 A4
7 0V	17 0V	27 0V	37 +5V
8 TUBE	18 D3	28 A0	38 N/C
9 0V	19 0V	29 0V	39 +5V
10 RS	20 D4	30 A1	40 N/C

Master Compact

The majority of the Master Compact connectors are the same as the Model B and Master, however there are some different and additional connectors which are documented below.

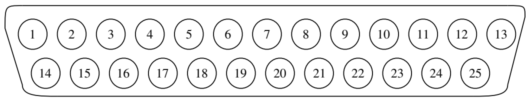
Connector: Joystick
Type: 9-pin D-type



Pinout:

1 PB3	8 0V
2 PB2	9 CB2 (LPTSTB - if connected)
3 PB1	
4 PB4	
5 CB1	
6 PB0	
7 +5V	

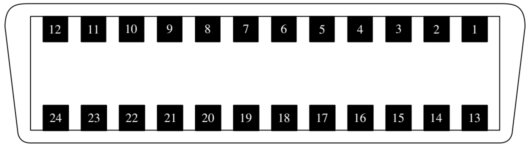
Connector: Disc Drive
Type: 25-way D-type



Pinout:

1 INDEX	7 STEP
2 S0	8 WRITE DATA
3 S1	9 WRITE ENABLE
4 N/C	10 TRACK 0
5 MOTOR	11 WRITE PROTECT
6 DIR	12 READ DATA
	13 SIDE SELECT
	14 to 25 0V

Connector: Parallel
Type: 24-way Delta type D connector



Pinout:

1 STB	8 PD6
2 PD0	9 PD7
3 PD1	10 ACK
4 PD2	11 N/C
5 PD3	12 N/C
6 PD4	13 to 25 0V
7 PD5	