Power Macintosh 7200, 7500, 8500, 9500: Pinouts (6/96)

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TOPIC -----

This article presents the pinouts for Power Macintosh 7200, 7500, 7600, 8500, and 9500 series computers. These pinouts include: PCI connector, video connector, serial port (GeoPort), SCSI, ADB, Ethernet, SCSI, Ram DIMM connector, Level 2 cache, DAV connector, S-video input, and S-video output.

DISCUSSION -----

PCI connector

Begin_Table

Pin	Side B	Side A
1	-12V	TRST#
2	TCK	+12V
3	Ground	TMS
4	TDO	TDI
5	+5V	+5V
6	+5V	INTA#
7	INTB#	INTC#
8	INTD#	+5V
9	PRSNT1#	Reserved
10	Reserved	+5V
11	PRSNT2#	Reserved
12	Ground	Ground
13	Ground	Ground
14	Reserved	Reserved
15	Ground	RST#
16	CLK	+5V
17	Ground	GNT#
18	REQ#	Ground
19	+5V (I/O)	Reserved
20	AD[31]	AD[30]
21	AD[29]	+3.3V
22	Ground	AD[28]

23	AD[27]	AD[26]
24	AD[25]	Ground
25	+3.3V	AD[24]
26	C/BE[3]#	IDSEL
27	AD[23]	+3.3V
28	Ground	AD[22]
29	AD[21]	AD[20]
30	AD[19l	Ground
31	+3 3V	AD[181
32	AD[17]	AD[16]
33	C/BE[2]#	+3.3V
34	Ground	FRAME#
35	IRDY#	Ground
36	+3.3V	TRDY#
37	DEVSEL#	Ground
38	Ground	STOP#
39	LOCK#	+3.3V
40	PERR#	SDONE
41	+3.3V	SBO#
42	SERR#	Ground
43	+3.3V	PAR
44	C/BE[1]#	AD[15]
45	AD[14]	+3.3V
46	Ground	AD[13]
47	AD[12]	AD[11]
48	AD[10]	Ground
49	Ground	AD[09]
50	Connector Key	
51	Connector Key	
52	AD[08]	C/BE[0]#
53	AD[07]	+3.3V
54	+3.3V	AD[06]
55	AD[05]	AD[04]
56	AD[03]	Ground
57	Ground	AD[02]
58	AD[011	AD[00]
59	+5V (I/O)	+5V (I/O)
60	ACK64#	REQ64#
61	+5V	+5V
62	+5V	+5V

End_Table

Video connector (All models except the Power Macintosh 9500)

Begin_Table

Pin	Signal name	Description
1	RED.GND	Red video ground
2	RED.VID	Red video signal
3	/CSYNC	Composite synchronization signal

4	SENSE0	Monitor sense signal 0
5	GRN.VID	Green video signal
6	GRN.GND	Green video ground
7	SENSE1	Monitor sense signal 1
8	+12V 12-	volt power from computer
9	BLU.VID	Blue video signal
10	SENSE2	Monitor sense signal 2
11	GND	CSYNC and VSYNC ground
12	/VSYNC	Vertical synchronization signal
13	BLU.GND	Blue video ground
14	HSYNC.GND	HSYNC ground
15	/HSYNC	Horizontal synchronization signal
Shell	SGND	Shield ground

End_Table

Apple Accelerated Graphics Card (Power Macintosh 9500/120)

Begin_Table

Pin	Description	Pin	Description
1	Red ground	9	Blue video signal
2	Red video signal	10	Monitor sense 2
3	Composite synchronization	11	Synchronization ground
4	Monitor sense 0	12	Vertical synchronization
5	Green video signal	13	Blue ground
6	Green ground	14	Horizontal synchronization ground
7	Monitor sense 1	15	Horizontal synchronization
8	No connection		

End_Table

Serial port connector (Geoport)

Begin_Table

Pin	Name	Function
1	HSKo	Handshake output
2	HSKi	Handshake input or external clock
3	TxD–	Transmit data –
4	Gnd	Ground
5	RxD–	Receive data –
6	TxD+	Transmit data +
7	GPi	General-purpose input (wake up CPU or DMA handshake)
8	RxD+	Receive data +
9	+5V	Power to external device (100 mA maximum)

End_Table

ADB connector

Begin_Table

Pin	Name	Description
1	ADB	Bidirectional data bus
2	PSW	Power-on signal
3	+5V	+5 volts
4	GND	Ground

End_Table

AAUI-15 Ethernet connector

Begin_Table

Pin	Description	Pin	Description
1	+5 V	8	+5 V
2	DI+	9	DO+
3	DI–	10	DO–
4	Ground	11	Ground
5	CI+	12	No connection
6	CI–	13	No connection
7	+5 V	14	+5 V

End_Table

10BASE-T Connector (RJ-45 Connector)

Begin_Table

Contact	Signal
1	TD+
2	TD-
3	RD+
4	Not Used by 10BASE-T
5	Not Used by 10BASE-T
6	RD-
7	Not Used by 10BASE-T
8	Not Used by 10BASE-T

End_Table

SCSI connectors

Begin_Table

Pin number (internal 50-pin)	Pin number (external 25-pin)	Signal name	Signal description
2	8	/DB0	Bit 0 of SCSI data bus
4	21	/DB1	Bit 1 of SCSI data bus
6	22	/DB2	Bit 2 of SCSI data bus
8	10	/DB3	Bit 3 of SCSI data bus
10	23	/DB4	Bit 4 of SCSI data bus
12	11	/DB5	Bit 5 of SCSI data bus
14	12	/DB6	Bit 6 of SCSI data bus
16	13	/DB7	Bit 7 of SCSI data bus
18	20	/DBP	Parity bit of SCSI data bus
25 –	n.c.		Not connected
26	25	TPWR	+5 V terminator power
32	17	/ATN	Attention
36	6	/BSY	Bus busy
38	5	/ACK	Handshake acknowledge
40	4	/RST	Bus reset
42	2	/MSG	Message phase
44	19	/SEL	Select
46	15	/C/D	Control or data
48	1	/REQ	Handshake request
50	3	/I/O	Input or output

20, 22, 24, 28, 30, 34, and all odd pins except pin 25, 7, 9, 14, 16, 18, and 24
GND Ground

End_Table

Floppy disk connector

Begin_Table

Pin	Signal name	Signal description
1	GND	Ground
2	PH0	Phase 0: state control line
3	GND	Ground
4	PH1	Phase 1: state control line
5	GND	Ground
6	PH2	Phase 2: state control line
7	GND	Ground
8	PH3	Phase 3: register write strobe
9	n.c.	Not connected
10	/WRREQ	Write data request
11	+5V	+5 volts
12	SEL	Head select
13	+12V	+12 volts
14	/ENBL	Drive enable
15	+12V	+12 volts
16	RD	Read data

17	+12V	+12 volts
18	WR	Write data
19	+12V	+12 volts
20	n.c.	Not connected

End_Table

RAM DIMM connectors

Begin_Table

Pin	Signal name	Pin	Signal name
1	VSS	85	VSS
2	DQ(0)	86	DQ(32)
3	DQ(1)	87	DQ(33)
5	DQ(3)	89	DQ(35)
6	VCC	90	VCC
7	DQ(4)	91	DQ(36)
8	DQ(5)	92	DQ(37)
9	DQ(6)	93	DQ(38)
10	DQ(7)	94	DQ(39)
11	Reserved	95	Reserved
12	VSS	96	VSS
13	DQ(8)	97	DQ(40)
14	DQ(9)	98	DQ(41)
15	DQ(10)	99	DQ(42)
16	DQ(11)	100	DQ(43)
17	DQ(12)	101	DQ(44)
18	VCC	102	VCC
19	DQ(13)	103	DQ(45)
20	DQ(14)	104	DQ(46)
21	DQ(15)	105	DQ(47)
22	Reserved	106	Reserved
23	VSS	107	VSS
24	Reserved	108	Reserved
25	Reserved	109	Reserved
26	VCC	110	VCC
27	/WE(0)	111	Reserved
28	/CAS(0)	112	/CAS(1)
29	/CAS(2)	113	/CAS(3)
30	/RAS(0)	114	Reserved
31	/OE(0)	115	Reserved
32	VSS	116	VSS
33	A(0)	117	A(1)
34	A(2)	118	A(3)
35	A(4)	119	A(5)
36	A(6)	120	A(7)
37	A(8)	121	A(9)
38	A(10)	122	A(11)
39	A(12)	123	A(13)
40	VCC	124	VCC

41	Reserved	125	Reserved
42	Reserved	126	B(0)
43	VSS	127	VSS
44	/OE(2)	128	Reserved
45	/RAS(2)	129	Reserved
46	/CAS(4)	130	/CAS(5)
47	/CAS(6)	131	/CAS(7)
48	/WE(2)	132	/PDE
49	VCC	133	VCC
50	Reserved	134	Reserved
51	Reserved	135	Reserved
52	DQ(16)	136	DQ(48)
53	DQ(17)	137	DQ(49)
54	VSS	138	VSS
55	DQ(18)	139	DQ(50)
56	DQ(19)	140	DQ(51)
57	DQ(20)	141	DQ(52)
58	DQ(21)	142	DQ(53)
59	VCC	143	VCC
60	DQ(22)	144	DQ(54)
61	Reserved	145	Reserved
62	Reserved	146	Reserved
63	Reserved	147	Reserved
64	Reserved	148	Reserved
65	DQ(23)	149	DQ(55)
66	Reserved	150	Reserved
67	DQ(24)	151	DQ(56)
68	VSS	152	VSS
69	DQ(25)	153	DQ(57)
70	DQ(26)	154	DQ(58)
71	DQ(27)	155	DQ(59)
72	DQ(28)	156	DQ(60)
73	VCC	157	VCC
74	DQ(29)	158	DQ(61)
75	DQ(30)	159	DQ(62)
76	DQ(31)	160	DQ(63)
77	Reserved	161	Reserved
78	VSS	162	VSS
79	PD(1)	163	PD(2)
80	PD(3)	164	PD(4)
81	PD(5)	165	PD(6)
82	PD(7)	166	PD(8)
83	ID(0)	167	ID(1)
84	VCC	168	VCC

End_Table

L2 cache SIMM connector

Begin_table

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal

| --- | ----- | ---- | ------ | --- | ------ | --- | ------ |
1	+5 V	41	/TOEN	81	+3.3 V	121	/DOEN
2	GND	42	/TWEN	82	GND	122	/DWEN
3	D0	43	/ADV	83	D1	123	/ADSC
4	D2	44	A12	84	D3	124	/CSIZ(2)
5	D4	45	CSIZ(1)	85	D5	125	GND
6	D6	46	A14	86	D7	126	A13
7	GND	47	A16	87	GND	127	A15
8	D8	48	A18	88	D9	128	A17
9	D10	49	A20	89	D11	129	A19
10	D12	50	GND	90	D13	130	GND
11	D14	51	A22	91	D15	131	A21
12	GND	52	A24	92	GND	132	A23
13	+5 V	53	A26	93	+3.3 V	133	A25
14	GND	54	A28	94	GND	134	A27
15	D16	55	GND	95	D17	135	GND
16	D18	56	+5 V	96	D19	136	+3.3 V
17	D20	57	GND	97	D21	137	D33
18	D22	58	D32	98	D23	138	D35
19	GND	59	D34	99	GND	139	D35
20	D24	60	D36	100	D25	140	D37
21	D26	61	D38	101	D27	141	D39
22	D28	62	GND	102	D29	142	GND
23	D30	63	D40	103	D31	143	D41
24	GND	64	D42	104	GND	144	D43
25	+5 V	65	D44	105	+3.3 V	145	D45
26	GND	66	D46	106	GND	146	D47
27	T0	67	GND	107	T1	147	GND
28	T2	68	+5 V	108	T3	148	+3.3 V
29	T4	69	GND	109	T5	149	GND
30	T6	70	D48	110	T7	150	D49
31	GND	71	D50	111	GND	151	D51
32	T8	72	D52	112	T9	152	D53
33	T10	73	D54	113	T11	153	D55
34	T12	74	GND	114	T13	154	GND
35	T14	75	D56	115	T15	155	D57
36	GND	76	D58	116	GND	156	D59
37	+5 V	77	D60	117	+3.3 V	157	D61
38	GND	78	D62	118	GND	158	D63
39	CLK	79	GND	119	CPRES	159	GND
40	GND	80	+5 V	120	A11	160	+3.3 V

End_Table

DAV connector

Begin_Table

Pin	Signal description	Pin	Signal description
1	Ground	31	Ground
2	Reserved	32	Vertical sync

3	Ground	33	Ground
4	Reserved	34	Reserved
5	Ground	35	Ground
6	Reserved	36	HRef
7	Ground	37	Ground
8	Reserved	38	DIR *
9	Ground	39	IIC Data †
10	Reserved	40	IIC Clock
11	UV bit 7	41	Ground
12	UV bit 6	42	Analog audio input left
13	UV bit 5	43	Analog audio input common
14	UV bit 4	44	Analog audio input right
15	UV bit 3	45	Ground
16	UV bit 2	46	Digital audio input
17	UV bit 1	47	Ground
18	UV bit 0	48	Digital audio output
19	Y bit 7	49	Ground
20	Y bit 6	50	Digital audio clock
21	Y bit 5	51	Ground
22	Y bit 4	52	Digital audio sync
23	Y bit 3	53	Ground
24	Y bit 2	54	S video input C component
25	Y bit 1	55	Video input ground
26	Y bit 0	56	S video input Y component
27	Ground	57	Video input ground
28	Line-locked clock	58	Reserved
29	Ground	59	Reserved
30	Clock reference qualifier	60	Reserved

End_Table

S-video input and output connectors

Begin_Table

Pin	S-video input connector	S-video output connector
1	Analog GND	Analog GND
2	Analog GND	Analog GND
3	Video Y (luminance)	Video Y (luminance)
4	Video C (chroma)	Video C (chroma)
5	I 2 C clock(Philips serial bus)	—
6	+12 V at 250 mA maximum *	—
7	I 2 C data (Philips serial bus)	—

End_Table

Article Change History:
27 Jun 1996 - Added additional computer.
14 Sep 1995 - Added PCI connector.
13 Sep 1995 - Made minor corrections.

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