

Atmel AP7000 Pinout

by Jesper Hansen - May 2006

Ball	Signal	Ball	Signal
A1	VDDIO	E1	PX48/RAS0
A2	PE15/DATA31/LCD_D18	E2	PX50/SDWE0
A3	PE13/DATA29/LCD_D16	E3	PX49/CAS0
A4	PE11/DATA27/LCD_D11	E4	PX47/SDCKE0
A5	PE07/DATA23/LCD_D4	E5	PE05/DATA21/LCD_D2
A6	PE02/DATA18/MODE0	E6	PE01/DATA17/DVAL0
A7	AGNDPLL	E7	XOUT32
A8	OSCEN_N	E8	PC28/LCD_D2/MACB1-TXD3
A9	PC23/LCD_DVAL0/MACB1-CRS0	E9	VDDIO
A10	PA06/TWI_SDA0/USART0_RTS0	E10	GND
A11	PB21/DAC_D0/AC97_SYNC0	E11	PB19/SM_GCLK2/USART3_CLK0
A12	PB16/SCC2_TX_FSYNC0/USART3_RTS0	E12	PB00/ISI_D0/SPI1_MISO0
A13	PB13/SCC2_TXD0/ISI_D10	E13	PX46/SDCK0
A14	PB11/PSIF_CLOCK1/ISI_D8	E14	PB01/ISI_D1/SPI1_MOSI0
A15	GND	E15	VDDIO
A16	VDDIO	E16	PB02/ISI_D2/SPI1_NPCS0
B1	GND	F1	PX32/ADDR16
B2	PE16/ADDR23/LCD_D19	F2	PX00/DATA00
B3	PE12/DATA28/LCD_D12	F3	PX33/ADDR17
B4	PE09/DATA25/LCD_D9	F4	VDDIO
B5	PE04/DATA20/LCD_D1	F5	PX51/SDA100
B6	PLL0	F6	AVDDPLL
B7	AVDDOSC	F7	XIN0
B8	PC30/LCD_D4/MACB1-RXD3	F8	PC27/LCD_D1/MACB1-TXD2
B9	PC25/LCD_PWR0	F9	PC21/LCD_PCLK0
B10	PC19/LCD_CC0/MACB1-COL0	F10	VDDCORE
B11	PB23/DAC_DATAN0/AC97_SDI0	F11	GND
B12	PB18/SCC2_RX_CLK0/USART3_RXD0	F12	PX44/NWE10
B13	PB14/SCC2_RXD0/ISI_D11	F13	PX42/NRD0
B14	PB10/ISI_PCLK0/MCI_D7	F14	PX43/NWE00
B15	PC17/MACB0-MDIO0	F15	PX40/NCS1
B16	PC16/MACB0-MDC0	F16	PX45/NWE30
C1	PD01/LCD_D7	G1	PX04/DATA04
C2	PD00/LCD_D6	G2	VDDCORE
C3	PE14/DATA30/LCD_D17	G3	PX05/DATA05
C4	PE10/DATA26/LCD_D10	G4	PX03/DATA03
C5	PE06/DATA22/LCD_D3	G5	PX02/DATA02
C6	PE00/DATA16/CC0	G6	PX01/DATA01
C7	PLL1	G7	XOUT0
C8	PC31/LCD_D5	G8	PC26/LCD_D0/MACB1-TX_ER0
C9	PC24/LCD_MODE0/MACB1-RX_CLK0	G9	PC20/LCD_HSYNC0
C10	PA07/TWI_SCL0/USART0_CTS0	G10	PC15/MACB0-RX_DV0
C11	PB22/DAC_DATAN1/AC97_SCLK0	G11	PC14/MACB0-RX_CLK0
C12	PB17/SCC2_RX_FSYNC0/USART3_TXD0	G12	PC10/MACB0-RXD1
C13	PB12/PSIF_DATA1/ISI_D9	G13	PC11/MACB0-RXD2
C14	PB09/ISI_VSYNC0/MCI_D6	G14	PC13/MACB0-RX_ER0
C15	PB07/ISI_D7/MCI_D4	G15	PC12/MACB0-RXD3
C16	PB08/ISI_HSYNC0/MCI_D5	G16	VDDCORE
D1	PE17/ADDR24/LCD_D20	H1	PD06/LCD_D12/MACB1-RXD1
D2	PE18/ADDR25/LCD_D21	H2	VDDIO
D3	PD02/LCD_D8/MACB1-MDIO0	H3	PD07/LCD_D13
D4	PE08/DATA24/LCD_D8	H4	PD05/LCD_D11/MACB1-RX_ER0
D5	PE03/DATA19/LCD_D0	H5	PD04/LCD_D10/MACB1-RX_DV0
D6	GND	H6	PD03/LCD_D9/MACB1-MDC0
D7	AGNDOSC	H7	GND
D8	PC29/LCD_D3/MACB1-RXD2	H8	XIN32
D9	PC22/LCD_VSYNC0	H9	PC09/MACB0-RXD0
D10	PC18/MACB0-SPEED0	H10	PC05/MACB0-TXD2/DMARQ2
D11	PB20/DAC_D1/AC97_SDO0	H11	PC06/MACB0-TXD3/DMARQ3
D12	PB15/SCC2_TXCLK0/USART3_CTS0	H12	PE26/SDCS0
D13	PB03/ISI_D3/SPI1_NPCS1	H13	VDDIO
D14	PB05/ISI_D5/SPI1_SCK0	H14	PC07/MACB0-TX_EN0
D15	PB04/ISI_D4/SPI1_NPCS2	H15	PX39/NCS0
D16	PB06/ISI_D6/MCI_CMD0	H16	PC08/MACB0-TX_CLK0

Ball	Signal	Ball	Signal
J1	TRST_N	N1	PA18/USART1_TXD0/TC0_CLK20
J2	TMS	N2	PA16/USART1_CLK0/TC0_B10
J3	TDI	N3	PA17/USART1_RXD0/TC0_B20
J4	TCK	N4	PA15/MCI_D3/TC0_B00
J5	TDO	N5	PD14/LCD_D20/MACB1-TXD1
J6	PD09/LCD_D15	N6	GND
J7	PD08/LCD_D14	N7	FSDM
J8	EVTI_N	N8	VBG
J9	PB27/EXTINT2/USART2_TXD0	N9	PA30/SM_GCLK0/TC1_CLK10
J10	PX27/ADDR11	N10	PX53/NANDWE0
J11	PX28/ADDR12	N11	PE22/NCS5
J12	PX29/ADDR13	N12	PX06/DATA06
J13	PX30/ADDR14	N13	PX11/DATA11
J14	VDDCORE	N14	PX15/DATA15
J15	GND	N15	PX17/ADDR01
J16	PX31/ADDR15	N16	PX16/ADDR00
K1	PA05/SPI0_NPCS2/SCC1_RXD0	P1	PA20/USART1_CTS0/SPI0_NPCS3
K2	PA01/SPI0_MOSI0/SCC1_TX_FSYNC0	P2	PA19/USART1_RTS0/TC0_CLK10
K3	PA02/SPI0_SCK0/SCC1_TX_CLK0	P3	PA21/SCC0_RX_FSYNC0/PWM2
K4	PA00/SPI0_MISO0/SCC1_RX_FSYNC0	P4	PD11/LCD_D17/MACB1-TX_EN0
K5	RESET_N	P5	PD16/LCD_D22
K6	PA03/SPI0_NPCS0/SCC1_RX_CLK0	P6	XOUT1
K7	PA04/SPI0_NPCS1/SCC1_TXD0	P7	GND
K8	HSDP	P8	PA25/SCC0_TXD0/TC1_B00
K9	PA27/SPI1_NPCS3/TC1_CLK00	P9	WAKE_N
K10	GND	P10	PX41/NCS3
K11	PX22/ADDR06	P11	PE21/NCS4
K12	PX23/ADDR07	P12	PX09/DATA09
K13	PX24/ADDR08	P13	PB30/SM_GCLK4/USART2_RTS0
K14	PX26/ADDR10	P14	PC02/MACB0-TX_ER0
K15	VDDIO	P15	PX13/DATA13
K16	PX25/ADDR09	P16	PX14/DATA14
L1	PA09/PSIF_DATA0/USART0_TXD0	R1	PA22/SCC0_RX_CLK0/PWM3
L2	PB25/EXTINT0/DMAC_DMARQ1	R2	PD10/LCD_D16/MACB1-RXD0
L3	VDDIO	R3	PA23/SCC0_TX_CLK0/TC1_A00
L4	PA08/PSIF_CLOCK0/USART0_RXD0	R4	PD13/LCD_D19/MACB1-TXD0
L5	GND	R5	PD17/LCD_D23
L6	PB24/NMI_N/DMAC_DMARQ0	R6	AVDDUSB
L7	AGNDUSB	R7	HSMD
L8	VDDCORE	R8	PA26/SCC0_RXD0/TC1_B10
L9	PA28/PWM0/TC1_A20	R9	PA31/SM_GCLK1/TC1_CLK20
L10	VDDIO	R10	PX52/NANDOE0
L11	PE24/NWAIT0	R11	PE23/CFRNW0
L12	PX38/ADDR22	R12	PX07/DATA07
L13	PX18/ADDR02	R13	PB29/SM_GCLK3/USART2_CTS0
L14	PX20/ADDR04	R14	PC00/MACB0-COL0
L15	PX21/ADDR05	R15	PC04/MACB0-TXD1
L16	PX19/ADDR03	R16	GND
M1	PA14/MCI_D2/TC0_A20	T1	VDDIO
M2	PA11/MCI_CMD0/TC0_CLK00	T2	GND
M3	PA13/MCI_D1/TC0_A10	T3	PA24/SCC0_TX_FSYNC0/TC1_A10
M4	PA10/MCI_CLK0/USART0_CLK0	T4	PD12/LCD_D18/MACB1-TX_CLK0
M5	PA12/MCI_D0/TC0_A00	T5	PD15/LCD_D21/MACB1-SPEED0
M6	VDDIO	T6	XIN1
M7	VDDIO	T7	FSDP
M8	GND	T8	VDDIO
M9	PA29/PWM1/TC1_B20	T9	PB26/EXTINT1/USART2_RXD0
M10	PB28/EXTINT3/USART2_CLK0	T10	PE25/NCS2
M11	PE20/CFCE20	T11	PE19/CFCE10
M12	PX08/DATA08	T12	PX10/DATA10
M13	PX34/ADDR18	T13	PX12/DATA12
M14	PX36/ADDR20	T14	PC01/MACB0-CRS0
M15	PX37/ADDR21	T15	PC03/MACB0-TXD0
M16	PX35/ADDR19	T16	VDDIO

Ball	Signal	Ball	Signal
D7	AGNDOSC	D16	PB06/ISI_D6/MCI_CMD0
A7	AGNDPLL	C15	PB07/ISI_D7/MCI_D4
L7	AGNDUSB	C16	PB08/ISI_HSYNC0/MCI_D5
B7	AVDDOSC	C14	PB09/ISI_VSYNC0/MCI_D6
F6	AVDDPLL	B14	PB10/ISI_PCLK0/MCI_D7
R6	AVDDUSB	A14	PB11/PSIF_CLOCK1/ISI_D8
J8	EVTI_N	C13	PB12/PSIF_DATA1/ISI_D9
N7	FSDM	A13	PB13/SCC2_TXD0/ISI_D10
T7	FSDP	B13	PB14/SCC2_RXD0/ISI_D11
A15	GND	D12	PB15/SCC2_TXCLK0/USART3_CTS0
B1	GND	A12	PB16/SCC2_TX_FSYNC0/USART3_RTS0
D6	GND	C12	PB17/SCC2_RX_FSYNC0/USART3_TXD0
E10	GND	B12	PB18/SCC2_RX_CLK0/USART3_RXD0
F11	GND	E11	PB19/SM_GCLK2/USART3_CLK0
H7	GND	D11	PB20/DAC_D1/AC97_SDO0
J15	GND	A11	PB21/DAC_D0/AC97_SYNC0
K10	GND	C11	PB22/DAC_DATAN1/AC97_SCLK0
L5	GND	B11	PB23/DAC_DATAN0/AC97_SDI0
M8	GND	L6	PB24/NMI_N/DMAC_DMARQ0
N6	GND	L2	PB25/EXTINT0/DMAC_DMARQ1
P7	GND	T9	PB26/EXTINT1/USART2_RXD0
R16	GND	J9	PB27/EXTINT2/USART2_TXD0
T2	GND	M10	PB28/EXTINT3/USART2_CLK0
R7	HSDM	R13	PB29/SM_GCLK3/USART2_CTS0
K8	HSDP	P13	PB30/SM_GCLK4/USART2_RTS0
A8	OSCEN_N	R14	PC00/MACB0-COL0
K4	PA00/SPI0_MISO0/SCC1_RX_FSYNC0	T14	PC01/MACB0-CRS0
K2	PA01/SPI0_MOSI0/SCC1_TX_FSYNC0	P14	PC02/MACB0-TX_ER0
K3	PA02/SPI0_SCK0/SCC1_TX_CLK0	T15	PC03/MACB0-TXD0
K6	PA03/SPI0_NPCS0/SCC1_RX_CLK0	R15	PC04/MACB0-TXD1
K7	PA04/SPI0_NPCS1/SCC1_TXD0	H10	PC05/MACB0-TXD2/DMARQ2
K1	PA05/SPI0_NPCS2/SCC1_RXD0	H11	PC06/MACB0-TXD3/DMARQ3
A10	PA06/TWI_SDA0/USART0_RTS0	H14	PC07/MACB0-TX_EN0
C10	PA07/TWI_SCL0/USART0_CTS0	H16	PC08/MACB0-TX_CLK0
L4	PA08/PSIF_CLOCK0/USART0_RXD0	H9	PC09/MACB0-RXD0
L1	PA09/PSIF_DATA0/USART0_TXD0	G12	PC10/MACB0-RXD1
M4	PA10/MCI_CLK0/USART0_CLK0	G13	PC11/MACB0-RXD2
M2	PA11/MCI_CMD0/TC0_CLK00	G15	PC12/MACB0-RXD3
M5	PA12/MCI_D0/TC0_A00	G14	PC13/MACB0-RX_ER0
M3	PA13/MCI_D1/TC0_A10	G11	PC14/MACB0-RX_CLK0
M1	PA14/MCI_D2/TC0_A20	G10	PC15/MACB0-RX_DV0
N4	PA15/MCI_D3/TC0_B00	B16	PC16/MACB0-MDC0
N2	PA16/USART1_CLK0/TC0_B10	B15	PC17/MACB0-MDIO0
N3	PA17/USART1_RXD0/TC0_B20	D10	PC18/MACB0-SPEED0
N1	PA18/USART1_TXD0/TC0_CLK20	B10	PC19/LCD_CC0/MACB1-COL0
P2	PA19/USART1_RTS0/TC0_CLK10	G9	PC20/LCD_HSYNC0
P1	PA20/USART1_CTS0/SPI0_NPCS3	F9	PC21/LCD_PCLK0
P3	PA21/SCC0_RX_FSYNC0/PWM2	D9	PC22/LCD_VSYNC0
R1	PA22/SCC0_RX_CLK0/PWM3	A9	PC23/LCD_DVAL0/MACB1-CRS0
R3	PA23/SCC0_TX_CLK0/TC1_A00	C9	PC24/LCD_MODE0/MACB1-RX_CLK0
T3	PA24/SCC0_TX_FSYNC0/TC1_A10	B9	PC25/LCD_PWR0
P8	PA25/SCC0_TXD0/TC1_B00	G8	PC26/LCD_D0/MACB1-TX_ER0
R8	PA26/SCC0_RXD0/TC1_B10	F8	PC27/LCD_D1/MACB1-TXD2
K9	PA27/SPI1_NPCS3/TC1_CLK00	E8	PC28/LCD_D2/MACB1-TXD3
L9	PA28/PWM0/TC1_A20	D8	PC29/LCD_D3/MACB1-RXD2
M9	PA29/PWM1/TC1_B20	B8	PC30/LCD_D4/MACB1-RXD3
N9	PA30/SM_GCLK0/TC1_CLK10	C8	PC31/LCD_D5
R9	PA31/SM_GCLK1/TC1_CLK20	C2	PD00/LCD_D6
E12	PB00/ISI_D0/SPI1_MISO0	C1	PD01/LCD_D7
E14	PB01/ISI_D1/SPI1_MOSI0	D3	PD02/LCD_D8/MACB1-MDIO0
E16	PB02/ISI_D2/SPI1_NPCS0	H6	PD03/LCD_D9/MACB1-MDC0
D13	PB03/ISI_D3/SPI1_NPCS1	H5	PD04/LCD_D10/MACB1-RX_DV0
D15	PB04/ISI_D4/SPI1_NPCS2	H4	PD05/LCD_D11/MACB1-RX_ER0
D14	PB05/ISI_D5/SPI1_SCK0	H1	PD06/LCD_D12/MACB1-RXD1

Ball	Signal	Ball	Signal
H3	PD07/LCD_D13	K13	PX24/ADDR08
J7	PD08/LCD_D14	K16	PX25/ADDR09
J6	PD09/LCD_D15	K14	PX26/ADDR10
R2	PD10/LCD_D16/MACB1-RXD0	J10	PX27/ADDR11
P4	PD11/LCD_D17/MACB1-TX_EN0	J11	PX28/ADDR12
T4	PD12/LCD_D18/MACB1-TX_CLK0	J12	PX29/ADDR13
R4	PD13/LCD_D19/MACB1-TXD0	J13	PX30/ADDR14
N5	PD14/LCD_D20/MACB1-TXD1	J16	PX31/ADDR15
T5	PD15/LCD_D21/MACB1-SPEED0	F1	PX32/ADDR16
P5	PD16/LCD_D22	F3	PX33/ADDR17
R5	PD17/LCD_D23	M13	PX34/ADDR18
C6	PE00/DATA16/CC0	M16	PX35/ADDR19
E6	PE01/DATA17/DVAL0	M14	PX36/ADDR20
A6	PE02/DATA18/MODE0	M15	PX37/ADDR21
D5	PE03/DATA19/LCD_D0	L12	PX38/ADDR22
B5	PE04/DATA20/LCD_D1	H15	PX39/NCS0
E5	PE05/DATA21/LCD_D2	F15	PX40/NCS1
C5	PE06/DATA22/LCD_D3	P10	PX41/NCS3
A5	PE07/DATA23/LCD_D4	F13	PX42/NRD0
D4	PE08/DATA24/LCD_D8	F14	PX43/NWE00
B4	PE09/DATA25/LCD_D9	F12	PX44/NWE10
C4	PE10/DATA26/LCD_D10	F16	PX45/NWE30
A4	PE11/DATA27/LCD_D11	E13	PX46/SDCK0
B3	PE12/DATA28/LCD_D12	E4	PX47/SDCKE0
A3	PE13/DATA29/LCD_D16	E1	PX48/RAS0
C3	PE14/DATA30/LCD_D17	E3	PX49/CAS0
A2	PE15/DATA31/LCD_D18	E2	PX50/SDWE0
B2	PE16/ADDR23/LCD_D19	F5	PX51/SDA100
D1	PE17/ADDR24/LCD_D20	R10	PX52/NANDOE0
D2	PE18/ADDR25/LCD_D21	N10	PX53/NANDWE0
T11	PE19/CFCE10	K5	RESET_N
M11	PE20/CFCE20	J4	TCK
P11	PE21/NCS4	J3	TDI
N11	PE22/NCS5	J5	TDO
R11	PE23/CFRNW0	J2	TMS
L11	PE24/NWAIT0	J1	TRST_N
T10	PE25/NCS2	P9	WAKE_N
H12	PE26/SDCS0	N8	VBG
B6	PLL0	F10	VDDCORE
C7	PLL1	G2	VDDCORE
F2	PX00/DATA00	G16	VDDCORE
G6	PX01/DATA01	J14	VDDCORE
G5	PX02/DATA02	L8	VDDCORE
G4	PX03/DATA03	A1	VDDIO
G1	PX04/DATA04	A16	VDDIO
G3	PX05/DATA05	E9	VDDIO
N12	PX06/DATA06	E15	VDDIO
R12	PX07/DATA07	F4	VDDIO
M12	PX08/DATA08	H2	VDDIO
P12	PX09/DATA09	H13	VDDIO
T12	PX10/DATA10	K15	VDDIO
N13	PX11/DATA11	L3	VDDIO
T13	PX12/DATA12	L10	VDDIO
P15	PX13/DATA13	M6	VDDIO
P16	PX14/DATA14	M7	VDDIO
N14	PX15/DATA15	T1	VDDIO
N16	PX16/ADDR00	T8	VDDIO
N15	PX17/ADDR01	T16	VDDIO
L13	PX18/ADDR02	F7	XIN0
L16	PX19/ADDR03	T6	XIN1
L14	PX20/ADDR04	H8	XIN32
L15	PX21/ADDR05	G7	XOUT0
K11	PX22/ADDR06	P6	XOUT1
K12	PX23/ADDR07	E7	XOUT32