AT91SAM7S256

J4
Conn_02x10_Odd_Even

	TCK 1	2	PA31_SS1_SD	
	TMS 3	4	TDO	
	PA0_SD_CD 5	6	PA1_SD_WP	
(SD_DIRECT)	PA2_SS4 7	8	PA3_SS3	(OSD)
	PA30_INT 9	10	PA29_LED	
	PA28_J1UP 11	12	PA27_J1DW	
	PA4_CONF_DONE 13	14	PA5_RX	
	PA6_TX 15	16	TDI	
	PA7_CONF_NSTAT 17	18	PA8_CONF_NCFG	
	PA9_CONF_D0 19	20	PA10_SS2	(FPGA)

J5
Conn_02x10_Odd_Even

	PB1_AD5 1	2	PB0_AD4	
	PB3_AD7 3	4	PB2_AD6	
	PA18_J0B1 5	6	PA17_J0B2	
	PA19_J0RG 7	8	PA21_J0DW	
	PA23_J1B2 9	10	PA22_J0UP	
	PA16_DM_PUP 11	12	PA20_J0LF	
	PA14_SCK 13	14	PA15_CONF_DCLK	
	PA24_J1B1 15	16	PA13_MOSI	
	PA26_J1LF 17	18	PA25_J1RG	
	PA11_SS0_USB 19	20	PA12_MISO	

USB Mini Host (MAX3421E)

JP1
Conn_01x02
5V 1
2

J3
Conn_01x05
VBUS 1
PA30_INT 2
GPX 3
NRST2 4
SS 5

J2
Conn_01x12
1 PA11_SS0_USB
2 PA13_MOSI
3 PA12_MISO
4 PA14_SCK
R3 47
5
6
7
8
9 3V3
10
11 GND
12

UART DEBUG

J10
Conn_01x03
GND 1
PA5_RX 2
PA6_TX 3

DISK LED

3V3
PA29_LED
R12 220
D1
LED

POWER SUPPLY

J6
Conn_01x06

WIRED EXTERNALLY FROM FPGA	5V 1	
WIRED EXTERNALLY TO SAM7S POWER PINS	5V 2	
(OPTIONAL) POWER SUPPLY FROM SAM7S (**)	3V3 3	(**) IF 3V3 FROM FPGA PMOD, DO NOT CONNECT TO SAM7S!!
WIRED EXTERNALLY TO SAM7S POWER PINS	GND 4	
SPARE	GND 5	
NRST WIRED EXTERNALLY TO SAM7S (JTAG PIN 15)	NRST 6	

SD CARD MODULE

J1
Conn_02x06_Top_Bottom

PA31_SS1_SD	1	7	
PA13_MOSI	2	8	
PA12_MISO	3	9	
PA14_SCK 47 R2	4	10	
GND	5	11	GND
3V3	6	12	3V3

PA0_SD_CD
JP2
SolderJumper_3_Open
3 2 1
GND

PA1_SD_WP 1
PA16_DM_PUP 2
JP5
Conn_01x02

FPGA INTERFACE

pmod SPI

J7
Conn_02x06_Top_Bottom

(OSD)	PA3_SS3 CS0	1	7	NRST2	
	PA13_MOSI	2	8	PA2_SS4	(SD_DIRECT)
	PA12_MISO	3	9 CS1	PA9_CONF_D0	(USER_IO)
	PA14_SCK 47 R1	4	10 CS2	PA10_SS2	(FPGA)
	GND	5	11	GND	
	3V3	6	12	3V3	

passive serial

3V3
R9 10k
R10 10k
R11 10k

PA15_CONF_DCLK	1	
PA8_CONF_NCFG	2	
PA7_CONF_NSTAT	3	J11 Conn_01x05
PA4_CONF_DONE	4	
PA9_CONF_D0	5	

BUTTONS

OSD & USER

3V3
PB3_AD7 R5 4k7
PB2_AD6 R6 4k7
PB1_AD5 R7 4k7
PB0_AD4 R8 4k7

Conn_01x02
JP4
SW3
SW4
PWR_FLAG
GND GND

RESET

JP3
Conn_01x02
3V3
R4 4k7
NRST NRST2
SW1
SW_Push
GND

JOYSTICKS (DB9)

J8
DB9_Male

	5V	5	
PA17_J0B2		9	
PA19_J0RG		4	
	GND	8	
PA20_J0LF		3	
		7	
PA21_J0DW		2	
PA18_J0B1		6	
PA22_J0UP		1	

J9
DB9_Male

	5V	5	
PA23_J1B2		9	
PA25_J1RG		4	
	GND	8	
PA26_J1LF		3	
		7	
PA27_J1DW		2	
PA24_J1B1		6	
PA28_J1UP		1	

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