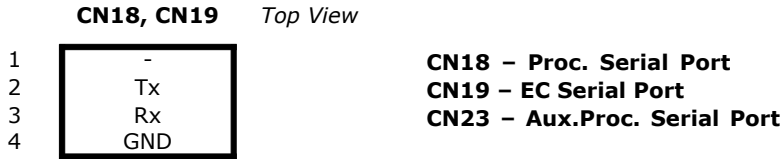
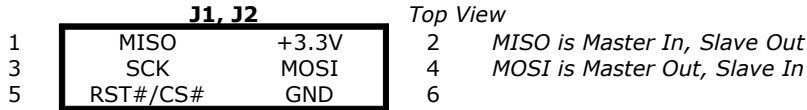


Serial Interfaces



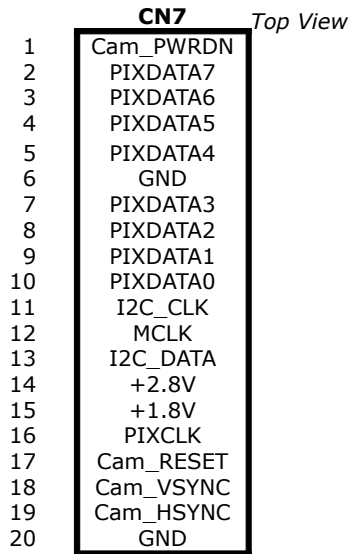
SPI Interfaces

J1 – OFW SPI Flash Prog. Port !! +1.8V !!
J2 – EC SPI Flash Prog. Port

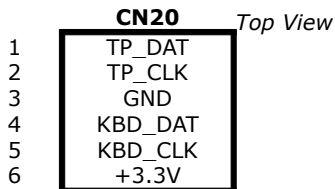


This pinout is used by J1 and J2 in the laptop. These are slave connectors, allowing in-system programming (ISP) of the onboard SPI Flash ROMs. This pinout is defined by Atmel App. Note AVR910.

Camera



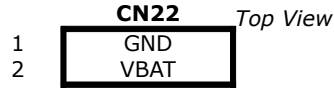
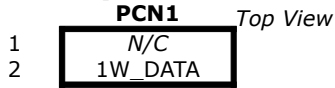
Keyboard/Touchpad



The keyboard and touchpad use PS/2 protocol interfaces

Connectors

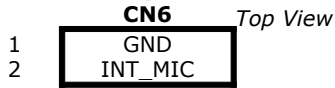
Main Battery



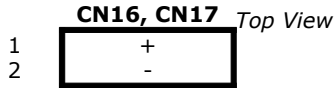
RTC Battery



Internal Microphone

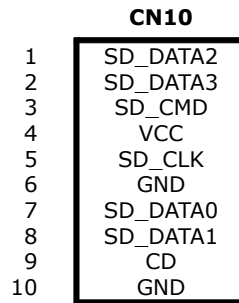
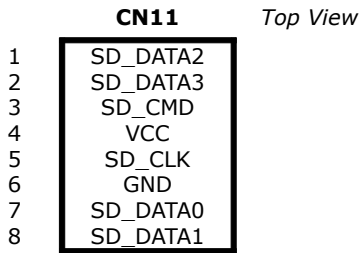


Speakers

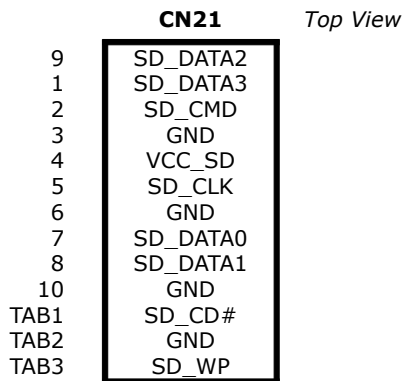


Also used for CN24

Internal SD/MMC



External SD/MMC



The external SD connector pins are not numbered sequentially. In addition, two of the signal pins (TAB1/TAB3) appear to be mounting tabs along the edge.

Backlight

CN2 <i>Top View</i>	
1	+17V
2	LED1
3	LED2
4	LED3

LCD

CN1 <i>Top View</i>	
1	VCOM
2	VCOM
3	-7V
4	+9.6V
5	GND
6	GMA10-2
7	GMA8-2
8	GMA6-2
9	GMA5-2
10	GMA3-2
11	GMA1-2
12	GND
13	+1.8V
14	BD00
15	BD01
16	BD10
17	BCLK
18	BREV
19	BD11
20	BD20
21	BD21
22	BSTH
23	BTP1
24	BPOL
25	VCOM
26	+9.6V
27	GND
28	GMA10-1

CN1 (cont.)	
29	GMA8-1
30	GMA6-1
31	GMA5-1
32	GMA3-1
33	GMA1-1
34	GND
35	+1.8V
36	FD00
37	FD01
38	FD10
39	FCLK
40	FREV
41	FD11
42	FD20
43	FD21
44	FSTH
45	FTP1
46	FPOL
47	VCOM
48	XAO
49	OE
50	CKV
51	STV
52	+1.8V
53	-7V
54	+18V
55	GND

Touchscreen

CN5 <i>Top View</i>	
1	GND
2	GND
3	TOUCH_RST0
4	TOUCH_INT0
5	SPI_SOMI
6	SPI_SIMO
7	+3.3V_ANA
8	+3.3V_ANA
9	n.c.
10	SPI_CS0
11	SPI_CLK
12	+3.3V_DIG

Touchscreen Debug

CN9	
1	+3.3V_DIG
2	TOUCH_HD#
3	BSL_TXD
4	BSL_RXD
5	TOUCH_SDA
6	TOUCH_SCL
7	TOUCH_TCK
8	TOUCH_RST#
9	TOUCH_INT
	GND

The touchscreen debug connector should not be driven without removing the isolation resistors.

WLAN Card

CN13			Top View
1	GPIO4	+3.3V	2
3	BT_PRIORITY	GND	4
5	WL_ACTIVE	+1.8V	6
7	BT_STATE	TRST#	8
9	GND	TMS_CPU	10
11	-	TCK	12
13	-	TDO	14
15	GND	TDI	16
<i>key</i>			
17	SD_CD	GND	18
19	GND	PD#	20
21	SD_CLK	RESET#	22
23	GND	+1.8V	24
25	SD_CMD	GND	26
27	SD_DAT0	+1.8V	28
29	SD_DAT1	-	30
31	SD_DAT2	-	32
33	SD_DAT3	GND	34
35	GND	USB-	36
37	GND	USB+	38
39	+3.3V	GND	40
41	SD_VCC	-	42
43	GND	LED_WLAN#	44
45	GPIO2	-	46
47	ECS#	SLEEP_CLK	48
49	TR3#	GND	50
51	ANT_SEL_N	+3.3V	52

USB supplied but not used

SD_VCC is +1.8V on XO-1.75/XO-4

OLPC Debug (JTAG) Port

CN8		Top View
1	+3.3V	
2	+1.8V	
3	JTAG_SEL	<i>On XO-4, JTAG_SEL is pulled high on motherboard</i>
4	SOC_RESET#	
5	SOC_TRST#	
6	SOC_TMS	
7	SOC_TCK	
8	SOC_TDI	
9	SOC_TDO	
10	GND	