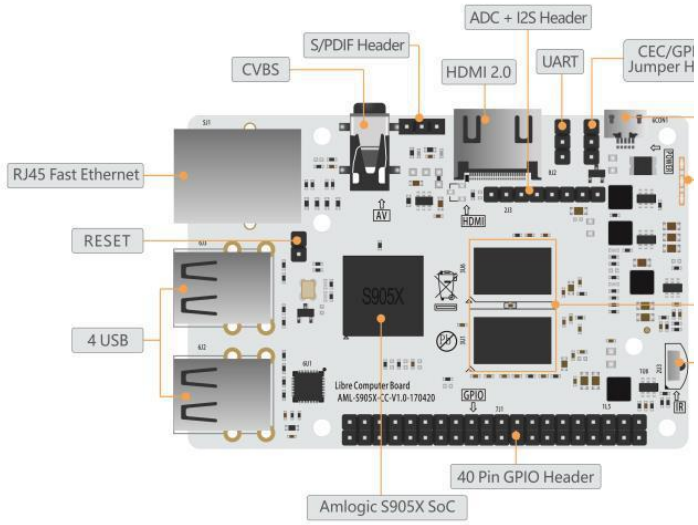
							40 Pin Header 7J1								
					GPIO		IR/SD/LED Side			GPIO					
Ref Alias	Ref Functions / Pin Mux	Pad	Name	Chip	Linux #	sysfs	Row 1	Row 2	sysfs	Linux #	Chip	Name	Pad	Ref Functions / Pin Mux	Ref Alias
VCC3.3V	3.3V	3.3V	3.3V	3.3V	3.3V	3.3V	1	2	5V	5V	5V	5V	5V	5V	VCC5V
I2C_SDA_AO	I2C_SDA_AO // I2C_SLAVE_SDA_AO // UART_RX_AO_B	D13	GPIOAO_5	0	5	506	3	4	5V	5V	5V	5V	5V	5V	VCC5V
I2C_SCK_AO	I2C_SCK_AO // I2C_SLAVE_SCK_AO // UART_TX_AO_B	A10	GPIOAO_4	0	4	505	5	6	GND	GND	GND	GND	GND	GND	GND
GPIOCLK_0	CLK24 // CLK12 // CLKOUT	E9	GPIOCLK_0	1	98	499	7	8	492	91	1	GPIOX_12	A6	UART_TX_A (long fifo) // SLIP_UART_TX	UART_A_TX
GND	GND	GND	GND	GND	GND	GND	9	10	493	92	1	GPIOX_13	B6	UART_RX_A // SLIP_UART_RX	UART_A_RX
I2SOUT-CH23	2J1 SELECT // AO_CEC // EE_CEC // I2SOUT_CH23 // PWM_AO_A	F17	GPIOAO_8*	0	8	509	11	12	507	6	0	GPIOAO_6	C11	CLK_32K_IN // I2S_IN_01 // SPDIF_OUT // PWM_AO_B	PWM_F
I2SOUT-CH45	REMOTE_OUTPUT // PWM_AO_B // I2SOUT_CH45 // SPDIF_OUT	C12	GPIOAO_9	0	9	510	13	14	GND	GND	GND	GND	GND	GND	GND
I2SOUT-CH67	INPUT LOW RESET // WATCHDOG // GPOAO_14 // I2SOUT_CH67	B12	TEST_N**	0	10	511	15	16	494	93	1	GPIOX_14	C6	UART_CTS_A // SLIP_UART_CTS	UART_A_CTS_N
VCC3.3V	3.3V	3.3V	3.3V	3.3V	3.3V	3.3V	17	18	495	94	1	GPIOX_15	C7	UART_RTS_A // SLIP_UART_RTS	UART_A_RTS_N
BTPCM_DOUT	PCM_OUT_A // UART_TX_C // SPI_MOSI // TSin_SOP_A	B4	GPIOX_8	1	87	488	19	20	GND	GND	GND	GND	GND	GND	GND
BTPCM_DIN	PCM_IN_A // UART_RX_C // SPI_MISO // Tsin_D_VALID_A	B3	GPIOX_9	1	88	489	21	22	480	79	1	GPIOX_0	A2	SDIO_D0	WIFI_SD_D0
BTPCM_CLK	PCM_CLK_A // UART_RTS_C // SPI_SCLK // TSin_CLK_A	C4	GPIOX_11	1	90	491	23	24	490	89	1	GPIOX_10	C5	PCM_FS_A // UART_CTS_C // SPI_SS0 // TSin_D0_A	BTPCM_SYNC
GND	GND	GND	GND	GND	GND	GND	25	26	481	80	1	GPIOX_1	C3	SDIO_D1	WIFI_SD_D1
I2C_SDA_A	UART_CTS_B // I2C_SDA_B	E2	GPIODV_26	1	75	476	27	28	477	76	1	GPIODV_27	F3	UART_RTS_B // I2C_SCK_B	I2C_SCK_A
BT_EN	BT_EN	B5	GPIOX_17	1	96	497	29	30	GND	GND	GND	GND	GND	GND	GND
BT_WAKE_HOST	BT_WAKE_HOST	B7	GPIOX_18	1	97	498	31	32	496	95	1	GPIOX_16	A3	PWM_E	WIFI_32K
WIFI_PWREN	PWM_A	D2	GPIOX_6	1	85	486	33	34	GND	GND	GND	GND	GND	GND	GND
WIFI_WAKE_HOST	SDIO_IRQ // PWM_F	C1	GPIOX_7	1	86	487	35	36	482	81	1	GPIOX_2	C2	SDIO_D2	WIFI_SD_D2
WIFI_SD_CMD	SDIO_CMD	D3	GPIOX_5	1	84	485	37	38	483	82	1	GPIOX_3	B1	SDIO_D3	WIFI_SD_D3
GND	GND	GND	GND	GND	GND	GND	39	40	484	83	1	GPIOX_4	B2	SDIO_CLK	WIFI_SD_CLK
							USB/Ethernet Side								

							8 Pin Header 2J3
							CVBS/Ethernet Side
ADC0	SARADC_CH0	B8	SARADC_CH0	ADC	ADC	ADC0	1
ADC2	SARADC_CH2	F9	SARADC_CH2	ADC	ADC	ADC2	2
I2SOUT-CH01	JTAG_TDO // I2SOUT_CH01 // TSin_D_VALID_B	N19	GPIOH_9	1	25	426	3
I2S-LR-CLK	JTAG_TDI // I2S_LR_CLK_OUT // TSin_SOP_B	M19	GPIOH_8	1	24	425	4
I2S-AO-CLK	JTAG_TMS // I2S_AO_CLK_OUT // Tsin_D0_B	N18	GPIOH_7	1	23	424	5
I2S-AM-CLK	JTAG_TCK // I2S_AM_CLK // TSin_CLK_B	N20	GPIOH_6	1	22	423	6
GND	GND	GND	GND	GND	GND	GND	7
VDDIO_AO3.3V	3.3V	3.3V	3.3V	3.3V	3.3V	3.3V	8
							MicroUSB/LED Side
							3 Pin UART Header 2J1
							Board Edge Side
GND	GND	GND	GND	GND	GND	GND	1
Linux_TX	UART_TX_AO_A // UART_TX_AO_B	C9	GPIOAO_0	0	0	501	2
Linux_RX	UART_RX_AO_A // UART_RX_AO_B	B9	GPIOAO_1	0	1	502	3
							8 Pin Header Side
							3 Pin SPDIF Header 9J1
							CVBS Side
GND	GND	GND	GND	GND	GND	GND	1
SPDIF_OUT	SPDIF_OUT // SPDIF_IN	G19	GPIOH_4	1	20	421	2
VCC5V	5V	5V	5V	5V	5V	5V	3
							HDMI Side



* Requires 2J1 jumper to be positioned to pass GPIOAO_8 to 40 pin header. Default is set to HDMI CEC. Move the jumper to the two pins on the edge of the board for controlling GPIO on the 40 pin header.

** Output only pin. This pin can be set to input and pulled down to reset the system.

GPIO chip 0 accounts for the first 10 GPIO numbers and GPIO chip 1 pins must add the GPIO chip 0 offset of 10 to the pin to get the quoted GPIO number for /sys/class/gpio/export. This is not necessary for gpiod library since the GPIO chip must be supplied so use the unquoted GPIO number.

GPIOX bank will output 3.3V by default and it can be modified to output 1.8V by removing the 0 Ohm resistor from 7R1 and attaching it to 7R4. Performing this will void the board warranty.


IO11
Header
MicroUSB Power
Status LEDs
RAM
IR