Pining of A20-SOM-EVB (https://www.olimex.com/Products/SOM/A20/A20-SOM-EVB/resources/A20-SOM-EVB-UM.pdf)

5.2.1 UEXT1

UEXT1* connector pinout							
Pin#	**Signal name**	**Header; pin#**	**A20 pin**	**Pin #**	**Signal name**	**Header; pin#**	**A20 pin**
1	3.3V	A20_CON-GPIO1–A20_CON-GPIO4; 3	-	**2**	GND	Any A20_CON-GPIOX; 2	Any GND
3	UART6-TX	A20_CON-GPIO4; 27	C16	**4**	UART6-RX	A20_CON-GPIO4; 28	D16
5	TWI2-SCK	A20_CON-GPIO4; 29	C8	**6**	TWI2-SDA	A20_CON-GPIO4; 30	C7
7	SPI2-MISO	A20_CON-GPIO4; 31	J20	**8**	SPI2-MOSI	A20_CON-GPIO4; 32	J21
9	SPI2-CLK	A20_CON-GPIO4; 33	K21	**10**	SPI2-CS0	A20_CON-GPIO4; 34	L21

**The first column represents the pin number of the signal in the UEXT connector. The second column has the signal name as per hardware design files and schematic. The column named "Header; pin#" shows the exact header pin where the signal might be found. The "A20 pin" column shows where the signal connects with the Allwinner A20 processor – this can be tracked in the A20-SOM's schematic, starting from the header.*

5.2.2 UEXT2

UEXT2* connector pinout							
Pin#	**Signal name**	**Header; pin#**	**A20 pin**	**Pin #**	**Signal name**	**Header; pin#**	**A20 pin**
1	3.3V	A20_CON-GPIO1–A20_CON-GPIO4; 3	-	**2**	GND	Any A20_CON-GPIOX; 2	Any GND
3	UART7-TX	A20_CON-GPIO4; 19	E14	**4**	UART7-RX	A20_CON-GPIO4; 20	E13
5	PB18/TWI1-SCK	A20_CON-GPIO4; 21	A8	**6**	PB19/TWI1-SDA	A20_CON-GPIO4; 22	B8
7	SPI1-MISO	A20_CON-GPIO4; 23	D14	**8**	SPI1-MOSI	A20_CON-GPIO4; 24	E15
9	SPI1-CLK	A20_CON-GPIO4; 25	E16	**10**	SPI1-CS0	A20_CON-GPIO4; 26	E17

**The first column represents the pin number of the signal in the UEXT connector. The second column has the signal name as per hardware design files and schematic. The column named "Header; pin#" shows the exact header pin where the signal might be found. The "A20 pin" column shows where the signal connects with the Allwinner A20 processor – this can be tracked in the A20-SOM's schematic, starting from the header.*

GPIO-1 connector					
Pin #	Signal name	Processor pin	Pin #	Signal name	Processor pin
1	+5V	-POWER CIRCUIT-	2	GND	-POWER CIRCUIT-
3	+3.0VA	-POWER CIRCUIT-	4	AGND	-POWER CIRCUIT-
5	PG0	F20	6	LINEINR	AB21
7	PG1	E21	8	LINEINL	AB20
9	PG2	E20	10	HPOUTR	W19
11	PG3	D21	12	HPOUTL	Y19
13	PG4	D20	14	HPCOM	AA19/AA20
15	PG5	C21	16	MICROPHONE	-MIC CIRCUIT-
17	PG6	E19	18	MIC1OUTP	AC22
19	PG7	C20	20	MIC1OUTN	AC23
21	PG8	D19	22	MICIN2	AC21
23	PG9	C19	24	LRADC0	AB23
25	PG10	D18	26	LRADC1	AB22
27	PG11	C18	28	TVIN0	AC18
29	PI0	A20	30	TVIN1	AB18
31	PI1	B20	32	TVOUT3	AB17
33	PI2	A19	34	VGA-R	AC17
35	PI3	B19	36	VGA-B	AB16
37	PI10	C17	38	VGA-G	AC16
39	PI11	D17	40	PI14	C15

GPIO-2 connector					
GPIO pin#	Signal name	Processor pin#	GPIO pin#	Signal name	Processor pin#
1	+5	-POWER CIRCUIT-	2	GND	-POWER CIRCUIT-
3	3.3V	-POWER CIRCUIT-	4	GND	-POWER CIRCUIT-
5	TWI0-SCK	A15	6	PE0/CSI0_PCLK	E23
7	TWI0-SDA	B15	8	PE1/CSI0_MCLK	E22
9	PE7/CSIO_D3	B22	10	PE2/CSI0_HSYNC	D23
11	PE8/CSIO_D4	A23	12	PE3/CSI0_VSYNC	D22
13	PE9/CSIO_D5	A22	14	PE4/CSI0_D0	C23
15	PE10/CSIO_D6	B21	16	PE5/CSI0_D1	C22
17	PE11/CSIO_D7	A21	18	PE6/CSI0_D2	B23
19	GPIO1	-AXP209-	20	PI15	D15
21	GPIO2	-AXP209-	22	NMI_N	F5
23	GPIO3	-AXP209-	24	RESET_N	C14
25	UART0-TX	A7	26	UART0-RX	B7
27	VOL+_BUT	-SAME AS LRADC0-*	28	MENU_BUT	-SAME AS LRADC0-*
29	VOL-_BUT	-SAME AS LRADC0-*	30	HOME_BUT	-SAME AS LRADC0-*
31	CLK125	D13	32	PA14	D13
33	EPHY-RST#	C13	34	PA9	E9

**The button lines is determined by signal LRADC0. The button pressed gets distinguished by a simple voltage divider. You can use the above GPIOs to mount additional buttons or measurements.*

GPIO-3 connector					
GPIO pin#	Signal name	Processor pin#	GPIO pin#	Signal name	Processor pin#
1	+5V	-POWER CIRCUIT-	2	GND	-POWER CIRCUIT-
3	3.3V	-POWER CIRCUIT-	4	GND (PB9)*	-POWER CIRCUIT- (A11)
5	PC16/CAM-PWR-EN	M21	6	PB3	B14
7	PH2/LED	C6	8	PB4	A13
9	PH8	C4	10	PB5	B13
11	PH9	D4	12	PB6	A12
13	PH10	A3	14	PB7	B12
15	PH11	B3	16	PB8	A11
17	PH12/CSI-STY-1	C3	18	PB10	C11
19	PH13/CSI-RST-1	A2	20	PB11	C10
21	PH14	B2	22	PB12	C9
23	PH15	A1	24	PB13	B11
25	PH16	B1	26	PB14	A10
27	PH17	C1	28	PB15	B10
29	PH18	C2	30	PB16	A9
31	PH19	D1	32	PB17	B9
33	PH20	D2	34	PH24	E3
35	PH21	D3	36	PH25	E4
37	PH22	E1	38	PH26	F3
39	PH23	E2	40	PH27	F4

**The signal available at pin 2 of GPIO-3 is controlled by jumper PB9/GND. By default it is set to GND position. Alternatively, it might be set to USB0-DRV/PB9 position.*

(Yellow → JTAG)