SOPine Pin	SOPine Name	Allwinner name	Allwinner category	Ball	Type	Description
1	HBIAS	HBIAS	AUDIO_CODEC	D13	AO	Master Analog Headphone Bias Voltage Output
2	EAROUT_P	EAROUTP	AUDIO_CODEC	B13	AO	Earpiece Amplifier Positive Differential Output
3	HPOUTL	HPOUTL	AUDIO_CODEC	C13	AO	Headphone Output Left Channel
4	EAROUT_N	EAROUTN	AUDIO_CODEC	A13	AO	Earpiece Amplifier Negative Differential Output
5	HPOUTR	HPOUTR	AUDIO_CODEC	C12	AO	Headphone Output Right Channel
6	HS-MIC	MIC-DET	AUDIO_CODEC	B10	AI	Headphone MIC Detect
7	GND	GND	POWER	?	G	
8	GND	GND	POWER	?	G	
9	MIC2N	MICIN2N	AUDIO_CODEC	A17	AI	Microphone Negative Input 2
10	HPOUTFB	HP-FB	AUDIO_CODEC	C10	AI	Headphone Common Reference Feedback Input
11	MIC2P	MICIN2P	AUDIO_CODEC	B17	AI	Microphone Positive Input 2
12	KEYADC	KEYADC	ADC	A16	AI	ADC input for key
13	GPIO363	PL11	GPIO	PL11	GPIO	General Purpose Input Output #363
14	GPIO356	PL4	GPIO	PL4	GPIO	General Purpose Input Output #356
15	GPIO360	PL8	GPIO	PL8	GPIO	General Purpose Input Output #360
16	GPIO358	PL6	GPIO	PL6	GPIO	General Purpose Input Output #358
17	GPIO361	PL9	GPIO	PL9	GPIO	General Purpose Input Output #361
18	GPIO357	PL5	GPIO	PL5	GPIO	General Purpose Input Output #357
19	GND	GND	POWER	?	G	
20	GND	GND	POWER	?	G	
21	GPIO354	PL2	GPIO	PL2	GPIO	General Purpose Input Output #354
22	HP-DET	HP-DET	AUDIO_CODEC	D11	AI	Headphone Detect
23	GPIO355	PL3	GPIO	PL3	GPIO	General Purpose Input Output #355
24	GPIO359	PL7	GPIO	PL7	GPIO	General Purpose Input Output #359
25	GPIO69	PC5	GPIO	PC5	GPIO	General Purpose Input Output #69
26	GPIO234	PH10	GPIO	PH10	GPIO	General Purpose Input Output #234
27	GPIO37	PB5	GPIO	PB5	GPIO	General Purpose Input Output #37
28	GPIO36	PB4	GPIO	PB4	GPIO	General Purpose Input Output #36
29	GPIO39	PB7	GPIO	PB7	GPIO	General Purpose Input Output #39
30	GPIO35	PB3	GPIO	PB3	GPIO	General Purpose Input Output #35
31	GND	GND	POWER	?	G	
32	GND	GND	POWER	?	G	
33	GPIO41	PB9	GPIO	PB9	GPIO	General Purpose Input Output #41
34	GPIO40	PB8	GPIO	PB8	GPIO	General Purpose Input Output #40
35	GPIO32	PB0	GPIO	PB0	GPIO	General Purpose Input Output #32
36	GPIO34	PB2	GPIO	PB2	GPIO	General Purpose Input Output #34
37	GPIO227	PH3	GPIO	PH3	GPIO	General Purpose Input Output #227
38	GPIO232	PH8	GPIO	PH8	GPIO	General Purpose Input Output #232
39	GPIO38	PB6	GPIO	PB6	GPIO	General Purpose Input Output #38
40	GPIO103	PD7	GPIO	PD7	GPIO	General Purpose Input Output #103
41	GND	GND	POWER	?	G	
42	GND	GND	POWER	?	G	
43	GPIO224	PH0	GPIO	PH0	GPIO	General Purpose Input Output #224
44	GPIO101	PD5	GPIO	PD5	GPIO	General Purpose Input Output #101
45	GPIO102	PD6	GPIO	PD6	GPIO	General Purpose Input Output #102
46	GPIO225	PH1	GPIO	PH1	GPIO	General Purpose Input Output #225
47	GPIO116	PD20	GPIO	PD20	GPIO	General Purpose Input Output #116
48	GPIO107	PD11	GPIO	PD11	GPIO	General Purpose Input Output #107
49	GPIO97	PD1	GPIO	PD1	GPIO	General Purpose Input Output #97
50	GPIO120	PD24	GPIO	PD24	GPIO	General Purpose Input Output #120
51	GPIO106	PD10	GPIO	PD10	GPIO	General Purpose Input Output #106
52	GPIO100	PD4	GPIO	PD4	GPIO	General Purpose Input Output #100
53	GPIO118	PD22	GPIO	PD22	GPIO	General Purpose Input Output #118
54	GPIO133	PE5	GPIO	PE5	GPIO	General Purpose Input Output #133
55	GND	GND	POWER	?	G	
56	GND	GND	POWER	?	G	
57	GPIO98	PD2	GPIO	PD2	GPIO	General Purpose Input Output #98
58	GPIO128	PE0	GPIO	PE0	GPIO	General Purpose Input Output #128
59	GPIO137	PE9	GPIO	PE9	GPIO	General Purpose Input Output #137
60	GPIO96	PD0	GPIO	PD0	GPIO	General Purpose Input Output #96
61	GPIO99	PD3	GPIO	PD3	GPIO	General Purpose Input Output #99
62	GPIO226	PH2	GPIO	PH2	GPIO	General Purpose Input Output #226

63	GPIO194	PG2	GPIO	PG2	GPIO	General Purpose Input Output #194
64	GPIO228	PH4	GPIO	PH4	GPIO	General Purpose Input Output #228
65	GPIO135	PE7	GPIO	PE7	GPIO	General Purpose Input Output #135
66	GPIO230	PH6	GPIO	PH6	GPIO	General Purpose Input Output #230
67	GPIO235	PH11	GPIO	PH11	GPIO	General Purpose Input Output #235
68	GPIO229	PH5	GPIO	PH5	GPIO	General Purpose Input Output #229
69	GND	GND	POWER	?	G	
70	GND	GND	POWER	?	G	
71	GPIO231	PH7	GPIO	PH7	GPIO	General Purpose Input Output #231
72	GPIO192	PG0	GPIO	PG0	GPIO	General Purpose Input Output #192
73	GPIO104	PD8	GPIO	PD8	GPIO	General Purpose Input Output #104
74	GPIO117	PD21	GPIO	PD21	GPIO	General Purpose Input Output #117
75	GPIO33	PB1	GPIO	PB1	GPIO	General Purpose Input Output #33
76	GPIO119	PD23	GPIO	PD23	GPIO	General Purpose Input Output #119
77	GPIO233	PH9	GPIO	PH9	GPIO	General Purpose Input Output #233
78	GPIO113	PD17	GPIO	PD17	GPIO	General Purpose Input Output #113
79	GPIO115	PD19	GPIO	PD19	GPIO	General Purpose Input Output #115
80	GPIO111	PD15	GPIO	PD15	GPIO	General Purpose Input Output #111
81	GND	GND	POWER	?	G	
82	GPIO112	PD16	GPIO	PD16	GPIO	General Purpose Input Output #112
83	GPIO105	PD9	GPIO	PD9	GPIO	General Purpose Input Output #105
84	GND	GND	POWER	?	G	
85	GPIO114	PD18	GPIO	PD18	GPIO	General Purpose Input Output #114
86	GPIO203	PG11	GPIO	PG11	GPIO	General Purpose Input Output #203
87	GPIO110	PD14	GPIO	PD14	GPIO	General Purpose Input Output #110
88	GPIO200	PG8	GPIO	PG8	GPIO	General Purpose Input Output #200
89	GPIO109	PD13	GPIO	PD13	GPIO	General Purpose Input Output #109
90	GPIO198	PG6	GPIO	PG6	GPIO	General Purpose Input Output #198
91	GPIO108	PD12	GPIO	PD12	GPIO	General Purpose Input Output #108
92	GPIO144	PE16	GPIO	PE16	GPIO	General Purpose Input Output #144
93	GND	GND	POWER	?	G	
94	GND	GND	POWER	?	G	
95	GPIO132	PE4	GPIO	PE4	GPIO	General Purpose Input Output #132
96	GPIO134	PE6	GPIO	PE6	GPIO	General Purpose Input Output #134
97	GPIO205	PG13	GPIO	PG13	GPIO	General Purpose Input Output #205
98	GPIO140	PE12	GPIO	PE12	GPIO	General Purpose Input Output #140
99	GPIO202	PG10	GPIO	PG10	GPIO	General Purpose Input Output #202
100	GPIO130	PE2	GPIO	PE2	GPIO	General Purpose Input Output #130
101	GPIO131	PE3	GPIO	PE3	GPIO	General Purpose Input Output #131
102	GPIO129	PE1	GPIO	PE1	GPIO	General Purpose Input Output #129
103	GND	GND	POWER	?	G	
104	GND	GND	POWER	?	G	
105	GPIO136	PE8	GPIO	PE8	GPIO	General Purpose Input Output #136
106	GPIO196	PG4	GPIO	PG4	GPIO	General Purpose Input Output #196
107	GPIO138	PE10	GPIO	PE10	GPIO	General Purpose Input Output #138
108	GPIO193	PG1	GPIO	PG1	GPIO	General Purpose Input Output #193
109	GPIO145	PE17	GPIO	PE17	GPIO	General Purpose Input Output #145
110	GPIO195	PG3	GPIO	PG3	GPIO	General Purpose Input Output #195
111	GPIO139	PE11	GPIO	PE11	GPIO	General Purpose Input Output #139
112	GPIO197	PG5	GPIO	PG5	GPIO	General Purpose Input Output #197
113	GPIO141	PE13	GPIO	PE13	GPIO	General Purpose Input Output #141
114	GND	GND	POWER	?	G	
115	GND	GND	POWER	?	G	
116	DSI-D1P	MDSI-D1P	MIPI_DSI	P22	AO	MIPI DSI Positive Differential Data Line 1
117	GPIO201	PG9	GPIO	PG9	GPIO	General Purpose Input Output #201
118	DSI-D1N	MDSI-D1N	MIPI_DSI	R22	AO	MIPI DSI Negative Differential Data Line 1
119	GPIO199	PG7	GPIO	PG7	GPIO	General Purpose Input Output #199
120	GPIO204	PG12	GPIO	PG12	GPIO	General Purpose Input Output #204
121	DSI-D0P	MDSI-D0P	MIPI_DSI	T22	AO	MIPI DSI Positive Differential Data Line 0
122	DSI-D3P	MDSI-D3P	MIPI_DSI	L23	AO	MIPI DSI Positive Differential Data Line 3
123	DSI-D0N	MDSI-D0N	MIPI_DSI	T23	AO	MIPI DSI Negative Differential Data Line 0
124	DSI-D3N	MDSI-D3N	MIPI_DSI	L22	AO	MIPI DSI Negative Differential Data Line 3
125	GND	GND	POWER	?	G	
126	DSI-D2P	MDSI-D2P	MIPI_DSI	M22	AO	MIPI DSI Positive Differential Data Line 2

127	DSI-CKP	MDSI-CKP	MIPI_DSI	N23	AO	MIPI DSI Positive Differential Clock Line
128	DSI-D2N	MDSI-D2N	MIPI_DSI	N22	AO	MIPI DSI Negative Differential Data Line 2
129	DSI-CKN	MDSI-CKN	MIPI_DSI	P23	AO	MIPI DSI Negative Differential Clock Line
130	GPIO72	PC8	GPIO	PC8	GPIO	General Purpose Input Output #72
131	GND	GND	POWER	?	G	
132	GPIO71	PC7	GPIO	PC7	GPIO	General Purpose Input Output #71
133	GPIO79	PC15	GPIO	PC15	GPIO	General Purpose Input Output #79
134	GPIO64	PC0	GPIO	PC0	GPIO	General Purpose Input Output #64
135	GPIO68	PC4	GPIO	PC4	GPIO	General Purpose Input Output #68
136	VIDEO-HTX0P	HTX0P	HDMI	G22	AO	HDMI Positive Differential Data Line 0
137	GND	GND	POWER	?	G	
138	VIDEO-HTX0N	HTX0N	HDMI	G23	AO	HDMI Negative Differential Data Line 0
139	VIDEO-HTX2N	HTX2N	HDMI	E22	AO	HDMI Negative Differential Data Line 2
140	GND	GND	POWER	?	G	
141	VIDEO-HTX2P	HTX2P	HDMI	D23	AO	HDMI Positive Differential Data Line 2
142	GPIO66	PC2	GPIO	PC2	GPIO	General Purpose Input Output #66
143	VIDEO-HTX1P	HTX1P	HDMI	E23	AO	HDMI Positive Differential Data Line 1
144	GPIO80	PC16	GPIO	PC16	GPIO	General Purpose Input Output #80
145	VIDEO-HTX1N	HTX1N	HDMI	F22	AO	HDMI Negative Differential Data Line 1
146	GPIO76	PC12	GPIO	PC12	GPIO	General Purpose Input Output #76
147	GND	GND	POWER	?	G	
148	GPIO67	PC3	GPIO	PC3	GPIO	General Purpose Input Output #67
149	VIDEO-TXCN	HTXCN	HDMI	H23	AO	HDMI Negative Differential Clock Line
150	GPIO65	PC1	GPIO	PC1	GPIO	General Purpose Input Output #65
151	VIDEO-TXCP	HTXCP	HDMI	H22	AO	HDMI Positive Differential Clock Line
152	GND	GND	POWER	?	G	
153	GPIO73	PC9	GPIO	PC9	GPIO	General Purpose Input Output #73
154	GPIO70	PC6	GPIO	PC6	GPIO	General Purpose Input Output #70
155	GPIO78	PC14	GPIO	PC14	GPIO	General Purpose Input Output #78
156	GPIO74	PC10	GPIO	PC10	GPIO	General Purpose Input Output #74
157	GPIO77	PC13	GPIO	PC13	GPIO	General Purpose Input Output #77
158	USB1-DP	USB1-DP	USB	B23	A I/O	USB 1 Data Positive
159	GND	GND	POWER	?	G	
160	USB1-DM	USB1-DM	USB	C22	A I/O	USB 1 Data Negative
161	VIDEO-SCL	HSCL	HDMI	G21	I/O	HDMI DDC Clock
162	GND	GND	POWER	?	G	
163	VIDEO-SDA	HSDA	HDMI	E20	I/O	HDMI DDC Data
164	VIDEO-HPD	HHPD	HDMI	E21	I/O	HDMI Hot Plug Detection
165	GPIO75	PC11	GPIO	PC11	GPIO	General Purpose Input Output #75
166	GPIO362	PL10	GPIO	PL10	GPIO	General Purpose Input Output #362
167	VIDEO-CEC	HCEC	HDMI	F21	I/O	HDMI CEC
168	PWR_ON	PWRON	PMU	60	I	Power On-Off key input
169	GND	GND	POWER	?	G	
170	NC					
171	USB0-DP	USB0-DP	USB	A22	A I/O	USB 0 Data Positive
172	DCDC1	DCDC1	POWER	?	P	3.3V from DCDC for eMMC, LEDs and other external devices with higher power consumption
173	USB0-DM	USB0-DM	USB	B22	A I/O	USB 0 Data Negative
174	GPIO0-LDO	GPIO0	POWER	?	P	3.3V@100mA from LDO for Capacitive Touch Screen I2C interface as pull-up and other purposes with low power consumption
175	CHG_LED	CHGLED	OTHER	53	O	Charger status indication
176	ALDO1	ALDO1	POWER	?	P	2.8V@500mA from LDO for CSI Camera and other 2.8V based devices with low power consumption
177	RESET	RESET	OTHER	?	I	Pin for restarting of device, ground pin to perform device reset
178	NC					
179	NC					
180	DCIN	ACIN	POWER	?	P	5V input, but probably can be more, look at the AXP803 datasheet
181	ELDO3	ELDO3	POWER	?	P	1.8V@200mA from LDO for CSI Camera and other 1.8V based devices with low power consumption
182	DCIN	ACIN	POWER	?	P	5V input, but probably can be more, look at the AXP803 datasheet
183	DLDO3	DLDO3	POWER	?	P	2.8V@300mA from LDO for CSI Camera and other 2.8V based devices with low power consumption
184	DCIN	ACIN	POWER	?	P	5V input, but probably can be more, look at the AXP803 datasheet
185	VCC-WIFI	DLDO4	POWER	?	P	3.3V@500mA from LDO for WiFi, Bluetooth and other 3.3V based devices
186	NC					
187	DC1-SW	DC1-SW	POWER	?	P	3.3V from DCDC for LCD and Ethernet (RGMII, RMII so GMAC and EMAC) and other 3.3V

						based devices
188	USBVBUS	USBVBUS	POWER	?	P	5V for powering and charging PMU
189	DLDO2	DLDO2	POWER	?	P	Probably 1.8V@400mA (some sources indicate 3.3V) from DCDC for MIPI and other 1.8V based devices
190	USBVBUS	USBVBUS	POWER	?	P	5V for powering and charging PMU
191	DLDO1	DLDO1	POWER	?	P	3.3V@500mA from LDO for HDMI, MIPI DSI and other 3.3V based devices
192	USBVBUS	USBVBUS	POWER	?	P	5V for powering and charging PMU
193	VCC-WIFI-IO	DLDO4	POWER	?	P	3.3V@500mA from LDO for WiFi, Bluetooth and other 3.3V based devices
194	NC					
195	NC					
196	BATT_SENSOR	TS	PMU	?	I	Battery Temperature Sensor Input
197	VRTC	VCC-RTC	PMU	?	O	Output pin of RTLCDO (NOT SURE)
198	NC					
199	PS	IPSOUT	POWER	55	P	3.5V-5V@3A System power source
200	VBAT	VBAT	POWER	?	P	3.5-4.2V power input from battery
201	PS	IPSOUT	POWER	55	P	3.5V-5V@3A System power source
202	VBAT	VBAT	POWER	?	P	3.5-4.2V power input from battery
203	PS	IPSOUT	POWER	55	P	3.5V-5V@3A System power source
204	VBAT	VBAT	POWER	?	P	3.5-4.2V power input from battery