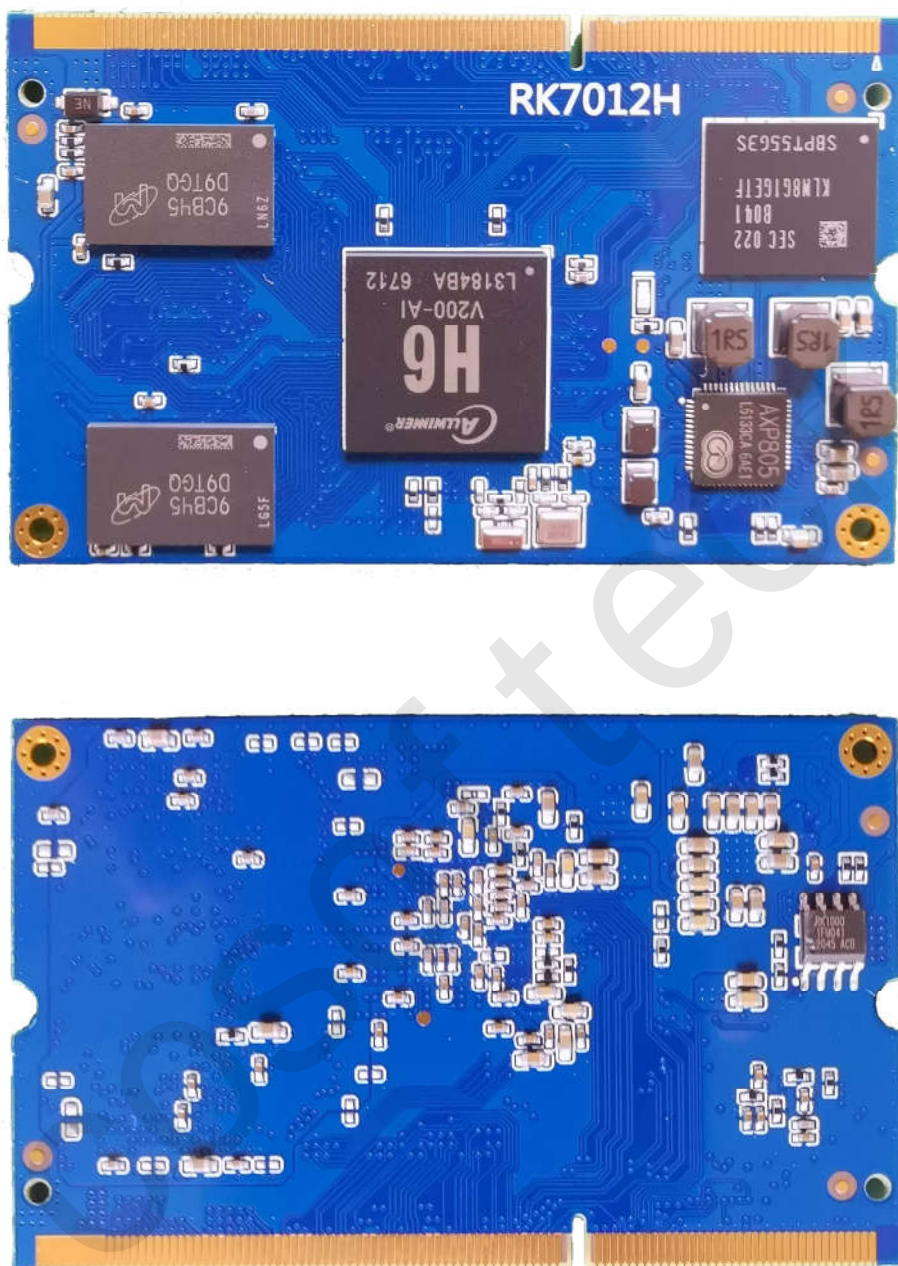


RK7012H 技术规格

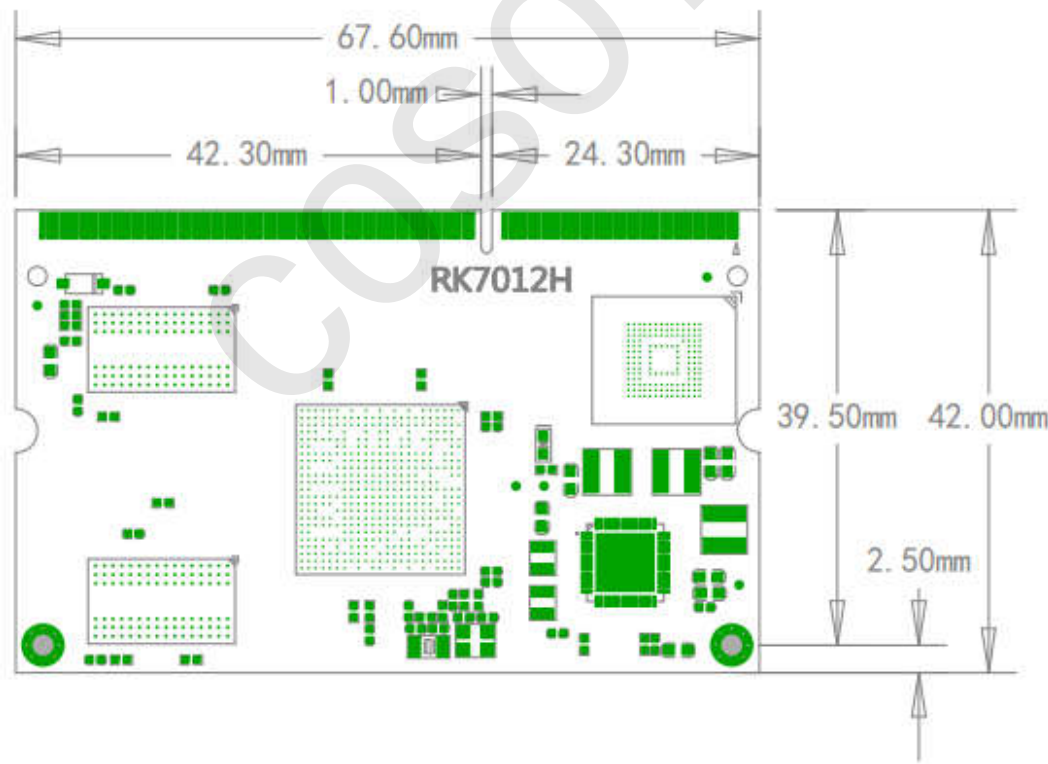
1. 外观



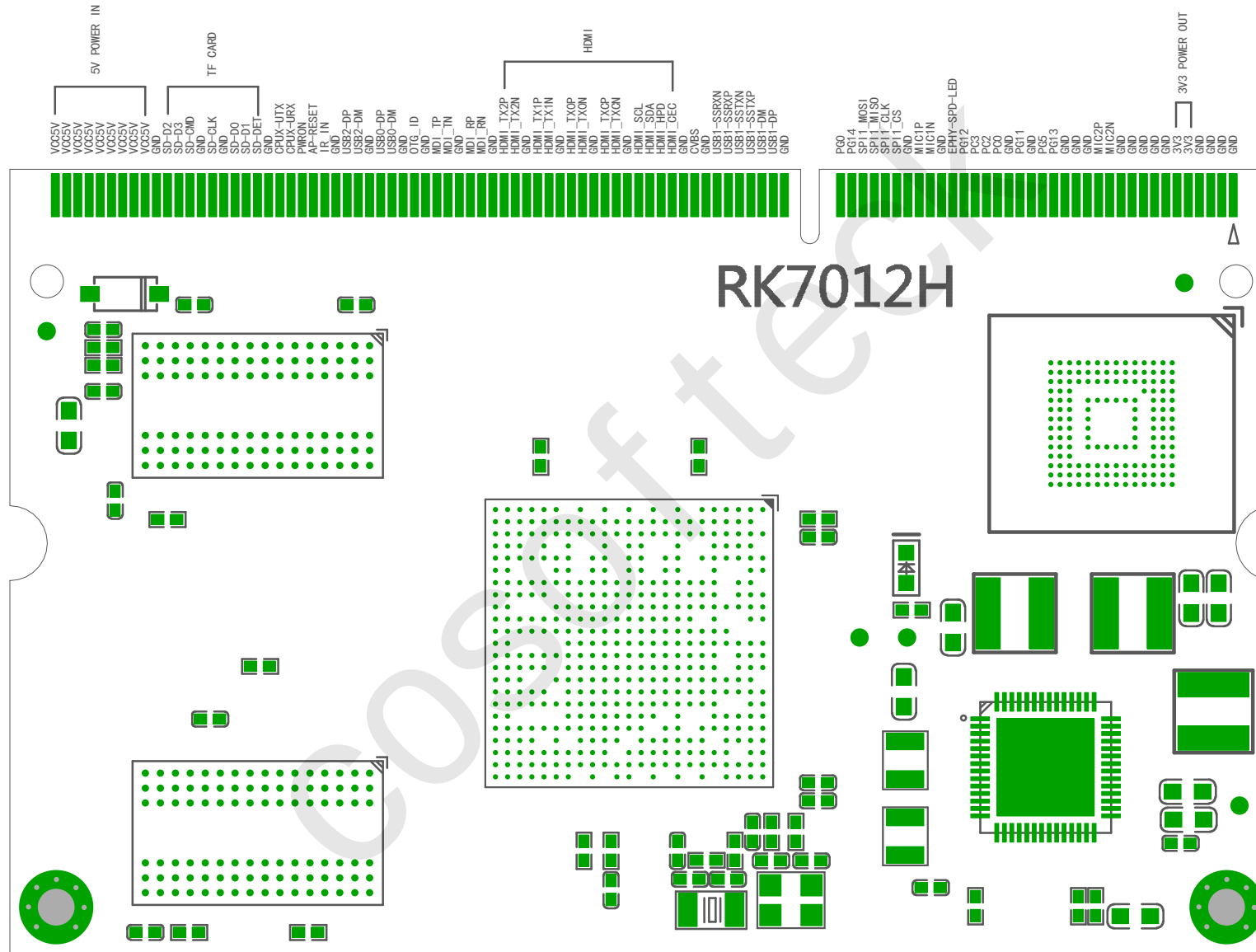
2. 参数

主板方案	
处理器 (CPU)	四核 ARM Cortex A53, 64 位架构
GPU	高性能多核 GPU Mali-T720
内存	1GB 或 2GB DDR4
本地存储	EMMC 标配 8GB
支持操作系统	Android 和 Ubuntu
视频处理	支持 4K VP9 and 4K 10bits H265/H264 视频解码, 高达 60fps 1080P 多格式视频解码 (WMV, MPEG-1/2/4, VP8) 1080P 视频编码, 支持 H.264
视频接口	HDMI 2.0, CVBS 和 RGB 输出 支持 ITU 601/656 并口摄像头输入
音频接口	模拟立体声输出 麦克风输入
存储接口	SDXC/SDHC/SD
以太网	10/100M MAC 和 10/100M PHY
无线/蓝牙接口	USB
USB	OTG X1, USB2.0 X1, USB3.0 X1
电源	5V Max 1A
工作温度	-20~70℃
产品尺寸	67.6x42mm

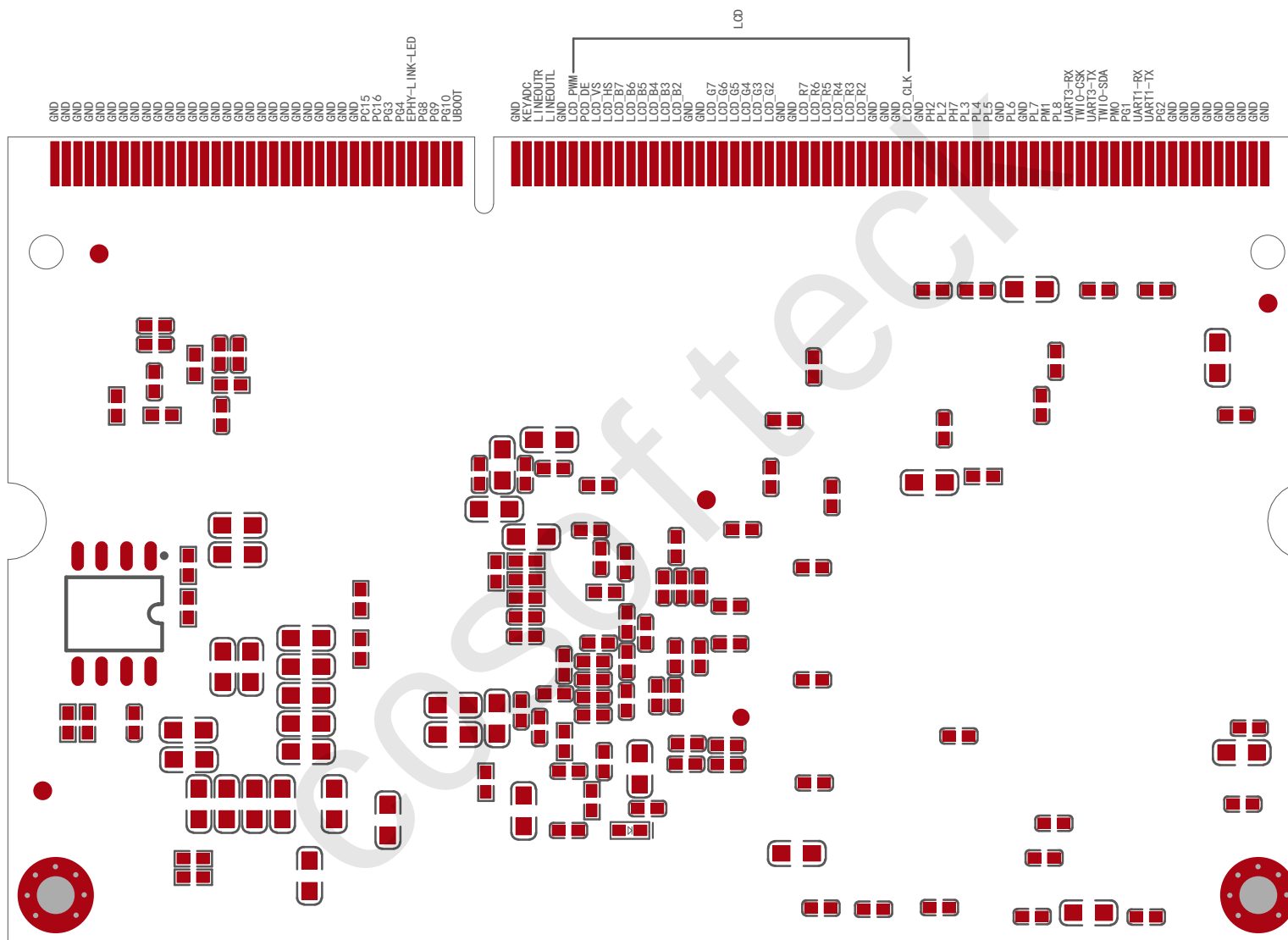
3. 尺寸图



4.PIN 定义 TOP



4.PIN 定义 BOTTOM



5.PIN GPIO复用表

PIN	接口定义	电平值	PD/PU	GPIO功能	复用功能1	复用功能2	复用功能3	复用功能4
1	GND							
3	GND							
5	GND							
7	GND							
9	VCC-3V3	3.3V电源输出						
11	VCC-3V3	3.3V电源输出						
13	GND							
15	GND							
17	GND							
19	GND							
21	GND							
23	MIC2N							
25	MIC2P							
27	GND							
29	GND							
31	GND							
33	PG13	3V3	PU/PD	PG13				
35	PG5	3V3	PU/PD	PG5				
37	GND							
39	PG11	3V3	PU/PD	PG11				
41	GND							
43	PC0	3V3	PU/PD	PC0				
45	PC2	3V3	PU/PD	PC2				
47	PC3	3V3	PU/PD	PC3				
49	PG12	3V3	PU/PD	PG12				
51	EPHY-SPD-LED							
53	GND							
55	MIC1N							
57	MIC1P							
59	GND							
61	SPI1_CS	3V3	PU/PD	PH3	SPI1_CS			
63	SPI1_CLK	3V3	PU/PD	PH4	SPI1_CLK			
65	SPI1_MISO	3V3	PU/PD	PH6	SPI1_MISO			
67	SPI1_MOSI	3V3	PU/PD	PH5	SPI1_MOSI			
69	PG14	3V3	PU/PD	PG14				

71	PG0	3V3	PU/PD	PG0				
73	GND							
75	USB1-DP							
77	USB1-DM							
79	USB1-SSTXP							
81	USB1-SSTXN							
83	USB1-SSRXP							
85	USB1-SSRXN							
87	GND							
89	CVBS	3V3						
91	GND							
93	HDMI_CEC							
95	HDMI_HPD							
97	HDMI_SDA							
99	HDMI_SCL							
101	GND							
103	HDMI_TXCN							
105	HDMI_TXCP							
107	GND							
109	HDMI_TX0N							
111	HDMI_TX0P							
113	GND							
115	HDMI_TX1N							
117	HDMI_TX1P							
119	GND							
121	HDMI_TX2N							
123	HDMI_TX2P							
125	GND							
127	MDI_RN							
129	MDI_RP							
131	GND							
133	MDI_TN							
135	MDI_TP							
137	GND							
139	OTG_ID							
141	GND							

143	USB0-DM							
145	USB0-DP							
147	GND							
149	USB2-DM							
151	USB2-DP							
153	GND							
155	IR_IN	3V3	PD/PU	PL9	IR_IN			
157	AP-RESET	3V3						
159	PWR_ON	3V3						
161	CPUX-URX	3V3	PD/PU	PH1	CPUX-URX			
163	CPUX-UTX	3V3	PD/PU	PH0	CPUX-UTX			
165	GND							
167	SDC0-DET	3V3	PD/PU	PF6	SDC0-DET			
169	SDC0-D1	3V3	PD/PU	PF0	SDC0-D1			
171	SDC0-D0	3V3	PD/PU	PF1	SDC0-D0			
173	GND							
175	SDC0-CLK	3V3	PD/PU	PF2	SDC0-CLK			
177	GND							
179	SDC0-CMD	3V3	PD/PU	PF3	SDC0-CMD			
181	SDC0-D3	3V3	PD/PU	PF4	SDC0-D3			
183	SDC0-D2	3V3	PD/PU	PF5	SDC0-D2			
185	GND							
187	VCC5V	5V电源输入						
189	VCC5V	5V电源输入						
191	VCC5V	5V电源输入						
193	VCC5V	5V电源输入						
195	VCC5V	5V电源输入						
197	VCC5V	5V电源输入						
199	VCC5V	5V电源输入						
201	VCC5V	5V电源输入						
203	VCC5V	5V电源输入						

PIN	接口定义	电平值	PD/PU	GPIO功能	复用功能1	复用功能2	复用功能3	复用功能4
2	GND							
4	GND							
6	GND							
8	GND							
10	GND							
12	GND							
14	GND							
16	GND							
18	GND							
20	GND							
22	GND							
24	GND							
26	GND							
28	GND							
30	GND							
32	GND							
34	GND							
36	GND							
38	GND							
40	GND							
42	GND							
44	GND							
46	GND							
48	GND							
50	GND							
52	GND							
54	GND							
56	PC15	3V3	PU/PD	PC15				
58	PC16	3V3	PU/PD	PC16				
60	PG3	3V3	PU/PD	PG3				
62	PG4	3V3	PU/PD	PG4				
64	EPHY-LNK-LED							
66	PG8	3V3	PU/PD	PG8				
68	PG9	3V3	PU/PD	PG9				
70	PG10	3V3	PU/PD	PG10				
72	UBOOT							

74	GND							
76	KEYADC	1V8						
78	LINEOUTR							
80	LINEOUTL							
82	GND							
84	LCD_PWM	3V3	Z		LCD_PWM			
86	LCD_DE	3V3	Z		LCD_DE			
88	LCD_VS	3V3	Z		LCD_VS			
90	LCD_HS	3V3	Z		LCD_HS			
92	LCD_B7	3V3	Z		LCD_B7			
94	LCD_B6	3V3	Z		LCD_B6			
96	LCD_B5	3V3	Z		LCD_B5			
98	LCD_B4	3V3	Z		LCD_B4			
100	LCD_B3	3V3	Z		LCD_B3			
102	LCD_B2	3V3	Z		LCD_B2			
104	GND							
106	GND							
108	LCD_G7	3V3	Z		LCD_G7			
110	LCD_G6	3V3	Z		LCD_G6			
112	LCD_G5	3V3	Z		LCD_G5			
114	LCD_G4	3V3	Z		LCD_G4			
116	LCD_G3	3V3	Z		LCD_G3			
118	LCD_G2	3V3	Z		LCD_G2			
120	GND							
122	GND							
124	LCD_R7	3V3	Z		LCD_R7			
126	LCD_R6	3V3	Z		LCD_R6			
128	LCD_R5	3V3	Z		LCD_R5			
130	LCD_R4	3V3	Z		LCD_R4			
132	LCD_R3	3V3	Z		LCD_R3			
134	LCD_R2	3V3	Z		LCD_R2			
136	GND							
138	GND							
140	GND							
142	LCD_CLK	3V3	Z		LCD_CLK			
144	GND							
146	PH2	3V3	PU/PD	PH2				

148	PL2	3V3	PU/PD	PL2				
150	PH7	3V3	PU/PD	PH7				
152	PL3	3V3	PU/PD	PL3				
154	PL4	3V3	PU/PD	PL4				
156	PL5	3V3	PU/PD	PL5				
158	GND							
160	PL6	3V3	PU/PD	PL6				
162	GND							
164	PL7	3V3	PU/PD	PL7				
166	PM1	3V3	PU/PD	PM1				
168	PL8	3V3	PU/PD	PL8				
170	UART3-RX	3V3	PU/PD	PD24	UART3-RX			
172	TWI0-SCK	3V3	PU/PD	PD25	TWI0-SCK			
174	UART3-TX	3V3	PU/PD	PD23	UART3-TX			
176	TWI0-SDA	3V3	PU/PD	PD26	TWI0-SDA			
178	PM0	3V3	PU/PD	PM0				
180	PG1	3V3	PU/PD	PG1				
182	UART1-RX	3V3	PU/PD	PG7	UART1-RX			
184	UART1-TX	3V3	PU/PD	PG6	UART1-TX			
186	PG2	3V3	PU/PD	PG2				
188	GND							
190	GND							
192	GND							
194	GND							
196	GND							
198	GND							
200	GND							
202	GND							
204	GND							