“ ”

1016 3 B 5 200233
+86 21 5108 6236 info@quectel.com

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1)
2)
3)

4)

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1.0.0	2024-04-30	Bruce

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10 20

1

PH-7 2.54mm 38PIN

设计理念：PH-7

Be water , My friend.

Python Open Python
Python https://python.quectel.com/download
Python API https://python.quectel.com/doc/API_reference/zh/index.html

1.1.

1

QuecPython BG&EG

2

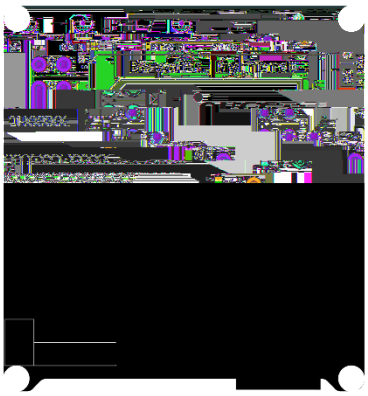
QuecPython BG&EG	BG95 BG96 EG915UEUAB EG915ULAAB EG912UGLAA EG QuecPython Python API

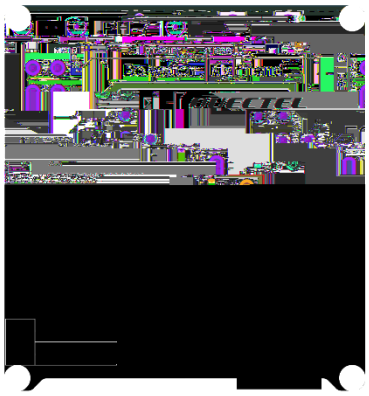
1.2.

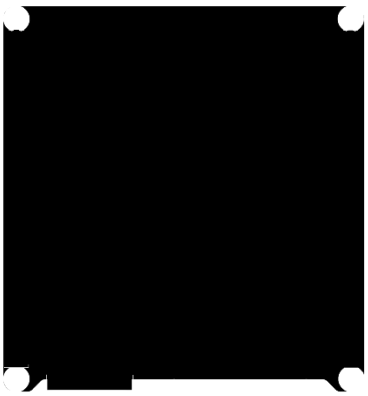
GPIO/UART/IIC/SPI/USB

EG
Python Open C

2







1 PH-7(C4-P02)

3

PH-7

3

			-35 ~ 75 -40 ~ 85	1 2
		2.54mm	Type-C (USB2.0/USB3.0)	
		USB BAT	≤5.1V:3A ≥5V:2A ≤16V:3A ≥5V:2A 3.7V	
UART				(2.54mm)
SPI				(2.54mm)
IIC				(2.54mm)
USB*1	USB	Type-C Python		
LED*7	PWR			
	NET	P21		
	SK1	SIM1 SIM 1	SIM 1	
	SK2	SIM2 SIM 2	SIM 2 EG	
	PSM	PSM	PSM	

	CHR			
	STD			
ADC		ADC0	VBAT	VBAT:ADC0=4:1
GPIO		GPIO		2.54mm
Level_Line		2.3V-5.5V 3.3V		IC host
PWM		2.54mm		
LT_EN				
PON	PSM	PSM_EINT	PSM	
MIC&SPK				
PA	PA	SPK PA		

4	BOOT	
	EG	EG
	BG	BG
BOOT	USB_BOOT	

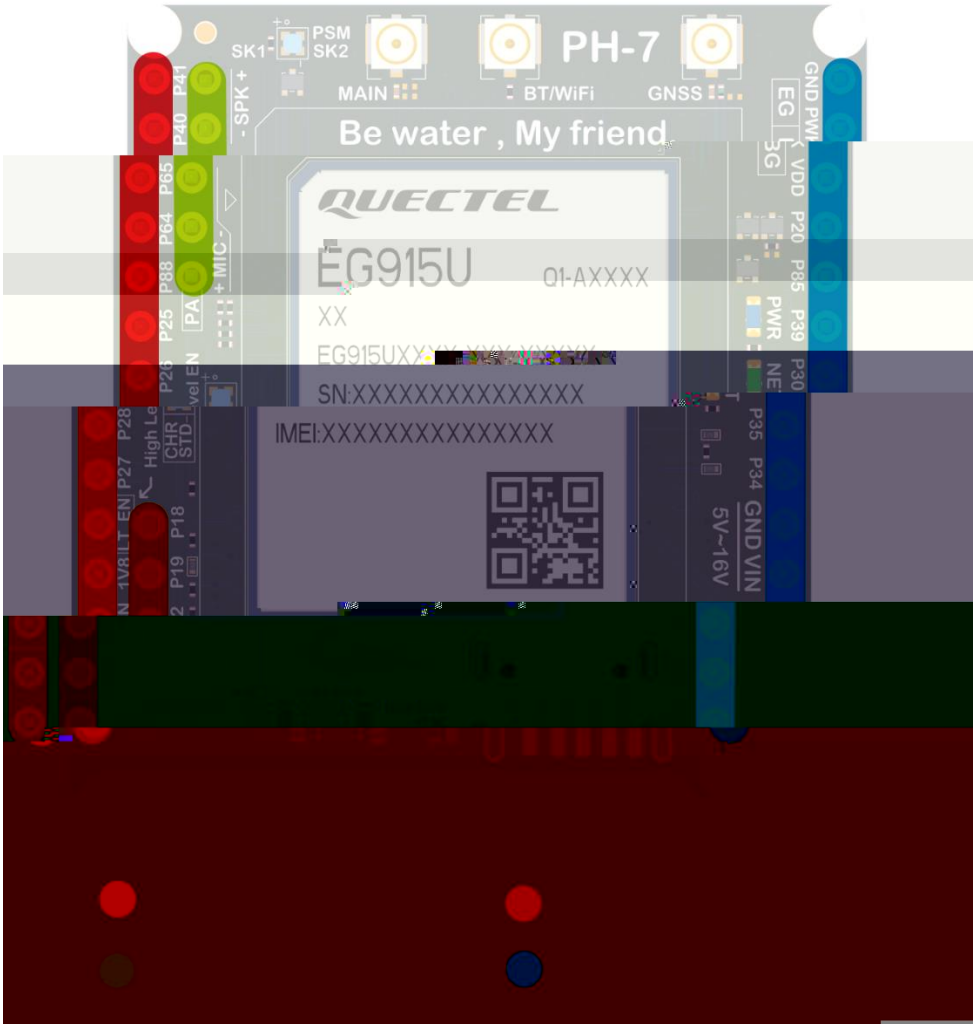
1. 3GPP
2. 3GPP
3GPP

4

PH-7

4.1.

EG915U



2

5

GPIO14		BG_CS1		BG&EG_SDA1	**P41**	X1	S1	**SPK_N**	Y1	**GND**					
GPIO13		BG_CLK1		BG&EG_SCL1	**P40**	X2	S2	**SPK_P**	Y2	**POWERKEY**					
BG_GPIO16	BG_RX2	BG_MISO1			**P65**	X3	S3	**MIC_N**	Y3	**VDD_EXT**					
GPIO15	BG_TX2	BG_MOSI1		EG_MOSI0	**P64**	X4	S4	**MIC_P**	Y4	**P20**			EG_PWM0	BG_GPIO22	EG_GPIO16
GPIO21				EG_MISO0	**P88**	X5	S5	**PA**	Y5	**P85**		BG_PWM1		BG_GPIO18	EG_GPIO18
GPIO9		BG_SDA2	BG_CS0	EG_CS0	**P25**	X6									

X6

4.2.

4.2.1. USB

Type-C USB
5V-16V X13 X14 Y13 Y14
4.2V
USB CHRG X14

4.2.2.

1 VIN
2 EN Y12 DCDC 1

4.2.3.

3.3V IC
LT_EN Y10 LT_EN Y10 1V8 Y11

4.2.4. GNSS

GNSS BG95

1 AT AT+QPGS=1 GNSS
2 GNSS P37
P37 GNSS

4.2.5. SD SIM

EG912UGLAA SD SD P36 SD
SD SIM2 SD SIM2 SIM2
SD

4.2.6. Flash

Flash Flash

4.2.7.

MIC SPK&PA EG912UGLAA
1 AT PA S5 PA
2 Python PA S5 P114 2

4.2.8. ADC

ADC ADC0 VBAT VBAT:ADC0=4:1

4.2.9.

PSM QuecPython

4.2.10. PSM

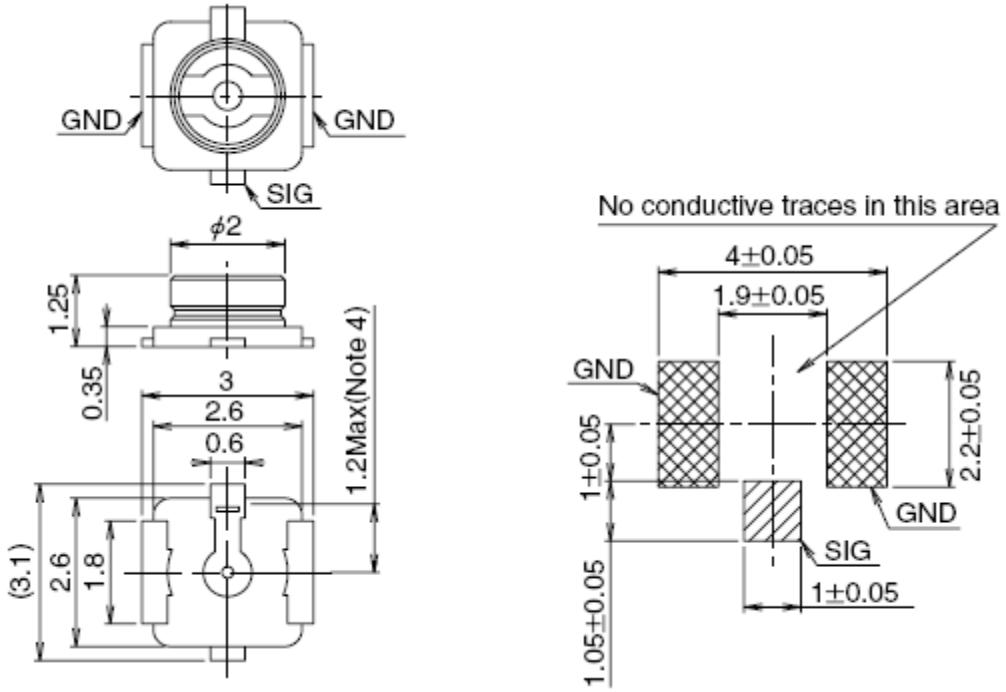
PSM PSM

1 POWERKEY

2 PON X12 X12 X11 3

1. EN VIN VIN 12V EN 12V EN, MOS IO
2. PA 1.8V Y11 X3
3. PON 1.8V X12 X11 .

5



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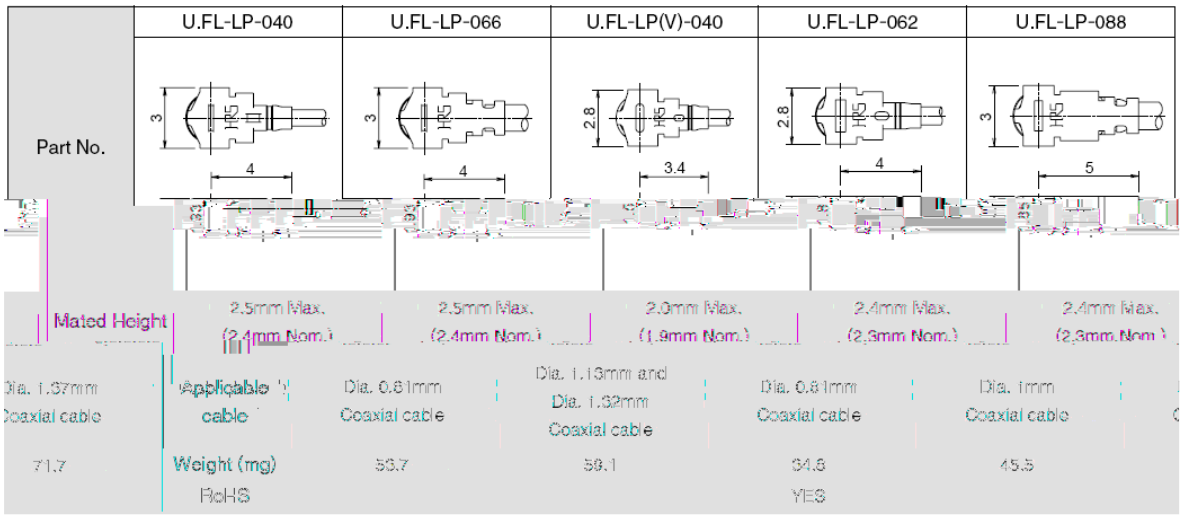
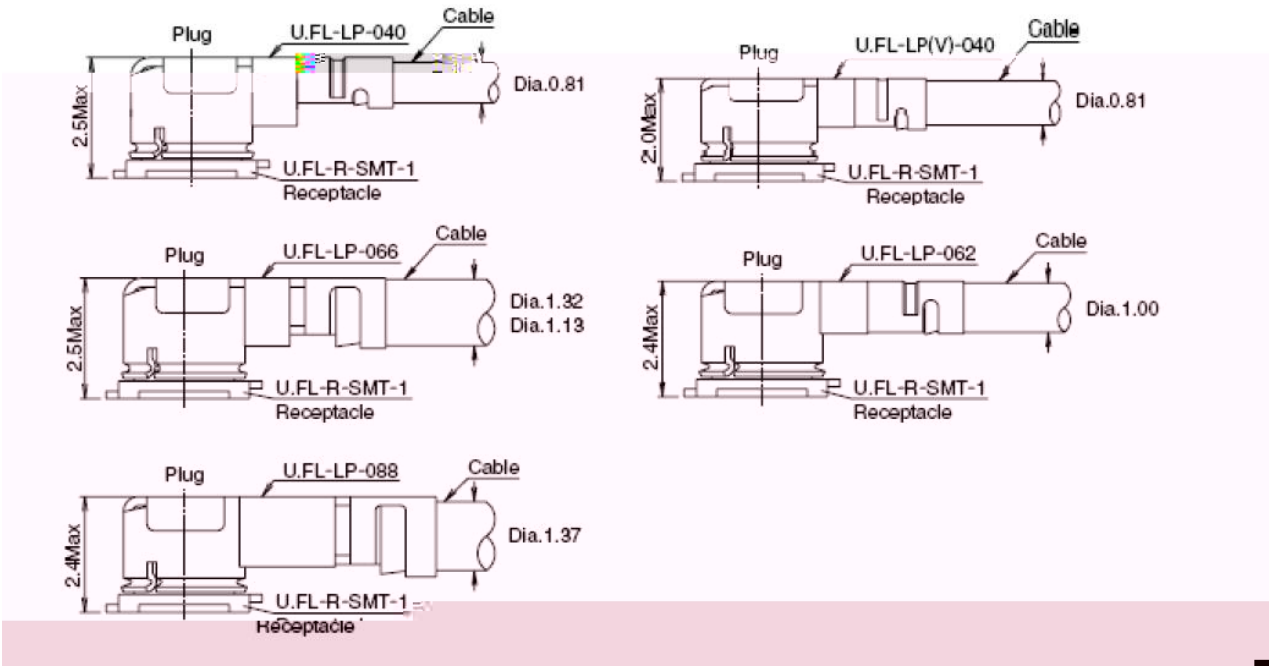
U.FL-LP



4 U.FL-LP


Plug
U.FL-LP-040
Cable
Dia.0.81
2.5Max
U.FL-R-SMT-1
Receptacle
Plug
U.FL-LP(V)-040
Cable
Dia.0.81
2.0Max
U.FL-R-SMT-1
Receptacle
Plug
U.FL-LP-066
Cable
Dia.1.32
Dia.1.13
2.5Max
U.FL-R-SMT-1
Receptacle
Plug
U.FL-LP-062
Cable
Dia.1.00
2.4Max
U.FL-R-SMT-1
Receptacle
Plug
U.FL-LP-088
Cable
Dia.1.37
2.4Max
U.FL-R-SMT-1
Receptacle

5

6.2.

ESD

8

	±4000	±8000	V
	±4000	±8000	V
	±500	±1000	V

8

8.1.

10

[1] QuecPython-PH-7C4-P02_Core_Board_Specification_and_User_Guide_V1.0.0
[2] QuecPython-PH-7C4-P02_Schematic_Diagram
[3] QuecPython-PH-7C4-P02_Silkscreen