

[illegible]

Option: IMU – IM19

3.3V
C9 22uF 6.3V 20%
GND

3.3V
C7 2.2uF 10V 10%
GND

3.3V
C10 0.1uF 6.3V 10%
GND

RESET
BOOT.1
GPIO.1

U2 IM19
10 VCC
2 RST
1 UART1_TX
1 UART1_RX
5 GPIO
21 GND

1PPS
PPS1
TXD3
RXD3
TXD4
RXD4

JP1
JP2
JP4

TXD1
TXD2
RXD4

IM19 requires GP2GA, GP2MC and GP2GT from GNS5 at >= 5Hz

Default UART baud rate: 115200

BOOT pin at startup: Low / Open: normal mode High: B001 mode

GPIO pin: Status buzzer

Configure these jumpers to select the source of the location data

Antenna

The diagram illustrates an antenna circuit with two main sections. The top section features a UFL connector (J4) connected to a diode (D1, PESD0402, 14VWM/40V) which is connected to an antenna (ANT) and ground (GND). The bottom section shows a VCC_RF input connected to a resistor (R2, 4700ohm) and an inductor (L1, 100MHz) in series, with a capacitor (C8, 47pF, 500V, 10%) connected to ground (GND) and an antenna (ANT).

RTK STAT Inversion

74LVC1G14

The diagram illustrates the connection of an SN74LVC1G14DCK inverter (U5A) to invert the RTK_STAT signal. The inverter's input (pin 2) is connected to RTK_STAT, and its output (pin 4) is connected to RTK_LED. The inverter is powered by a 3.3V supply (pin 5) and ground (pin 3). A 2.2uF capacitor (C6) is connected between the 3.3V supply and ground, with a 10V rating and 10% tolerance. The inverter is also connected to a 3.3V supply (pin 5) and ground (pin 3).

U5A
SN74LVC1G14DCK

RTK_STAT 2 4 RTK_LED

3.3V
C6
2.2uF
10V
10%
GND

3.3V
5
U5B
SN74LVC1G14DCK
3
GND

Connectors

J1 Conn_02x10

Pin	Function	Color
1	3V3	Red
2	PPS1	Yellow
3	GND	Black
4	PPS2	Yellow
5	VBACKUP	Red
6	EVENTA	Yellow
7	RTK_LED	Red
8	EVENTB	Yellow
9	PVT_LED	Red
10	SD_CMD	Blue
11	I2C SDA	Green
12	SD_CLK	Blue
13	I2C SCL	Green
14	SD DAT0	Blue
15	SD DAT3	Blue
16	USB D-	Pink
17	USB D+	Pink
18	GND	Black
19	3V3	Red
20	VUSB	Red

J3 Conn_02x10

Pin	Function	Color
1	3V3	Red
2	ID	Black
3	GND	Black
4	CTS3	Yellow
5	RTS3	Yellow
6	TXD3	Yellow
7	RXD3	Yellow
8	CTS2	Yellow
9	RTS2	Yellow
10	TXD2	Yellow
11	RXD2	Yellow
12	TXD4	Yellow
13	RXD4	Yellow
14	CTS1	Yellow
15	RTS1	Yellow
16	RESET	Grey
17	TXD1	Yellow
18	RXD1	Yellow
19	GND	Black
20	3V3	Red

Legend: GNSS Flex

Power +	GNSS Out
Power GND	GNSS In
I ² C	microSD
USB	ID (0-3.3V)
RMII	Aux



Id: 1/1