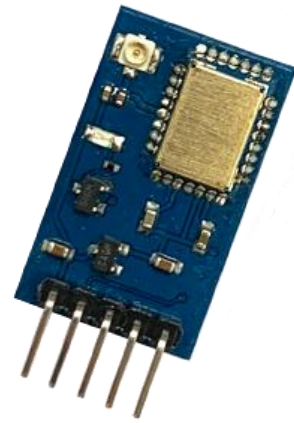


# RYS8833\_Lite

Ultra Low Power 1.8V UART interface GNSS module

Datasheet



27mm\*16mm\*1mm



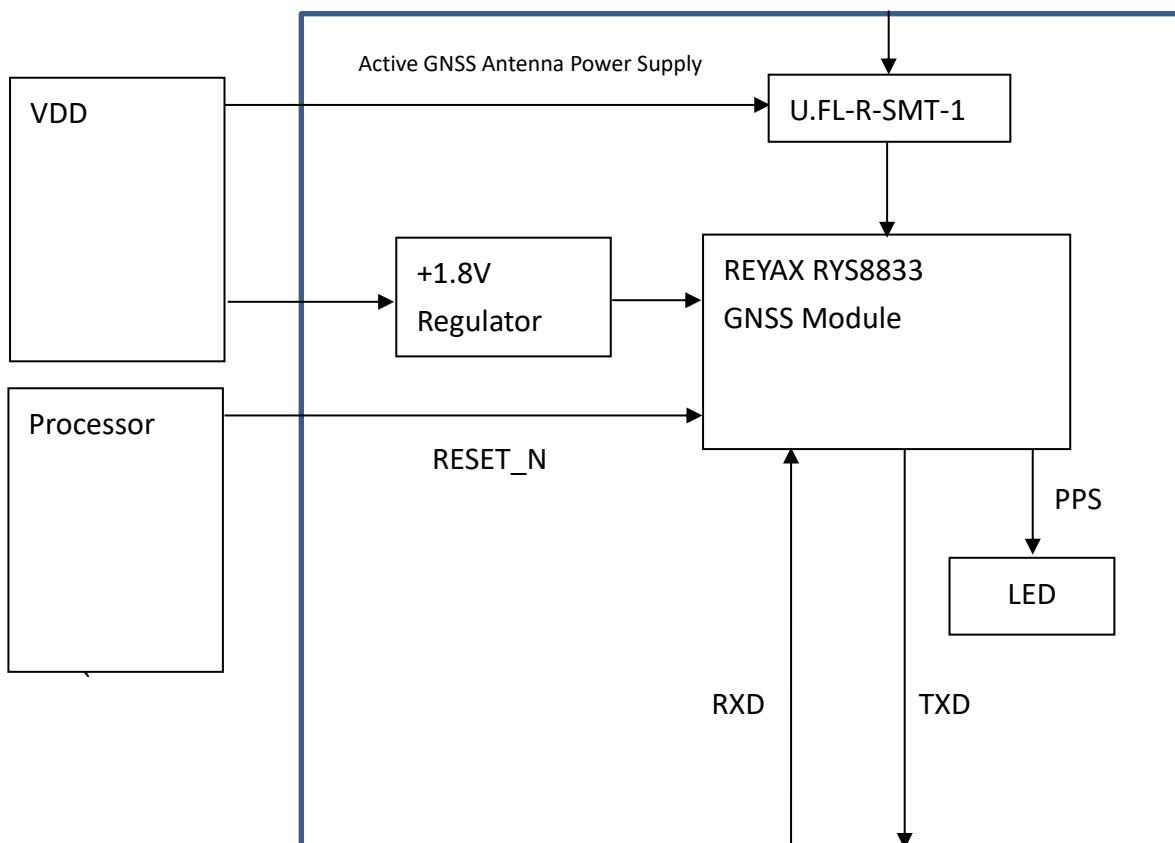
## PRODUCT DESCRIPTION

The RYS8833\_Lite is a multi-GNSS module with high sensitivity.

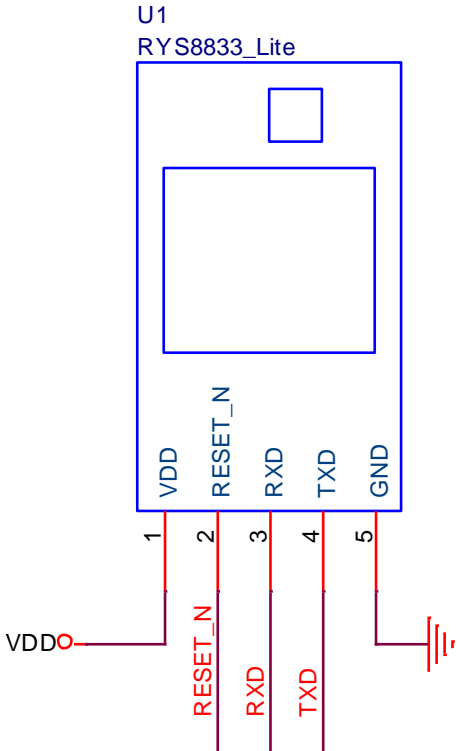
## FEATURES

- REYAX RYS8833 with SONY CXD5605GF Engine.
- A multi-GNSS module for GPS(L1 C/A), GLONASS(L1 OF), SBAS(L1 C/A), QZSS(L1 C/A), BeiDou(B1 TBD) and Galileo(E1 CBOC TBD).
- +1.8V UART Interface.

## BLOCK DIAGRAM

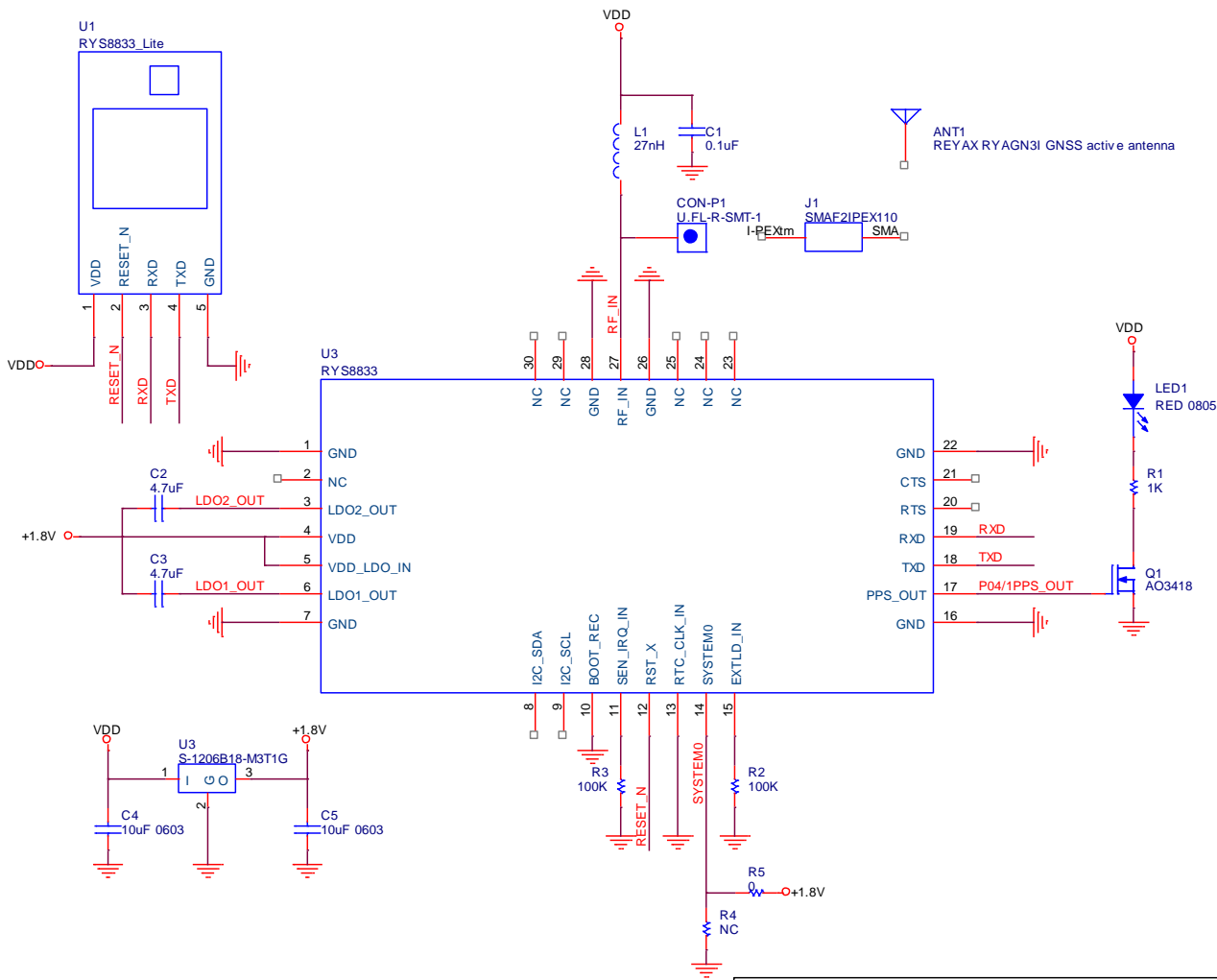


# PIN DESCRIPTION



Pin	Name	I/O	Condition
1	VDD	I	Power Supply +3.3V
2	RESET_N	I	Low Reset
3	RXD	I	Serial interface Input (+1.8V)
4	TXD	O	Serial interface Output (+1.8V)
5	GND	-	Ground

# APPLICATION SCHEMATIC (UART Interface)



Title		
<b>RYS8833_Lite</b>		
Size	Document Number	Rev
Custom>Doc>		1.1
Date:	Tuesday, December 20, 2022	Sheet 1 of 1

## GNSS Monitor software

Download Link

<https://drive.google.com/file/d/1nluDFLB5JQwXYTwC0edl8C3y3Zu4ysTv/view?usp=sharing>

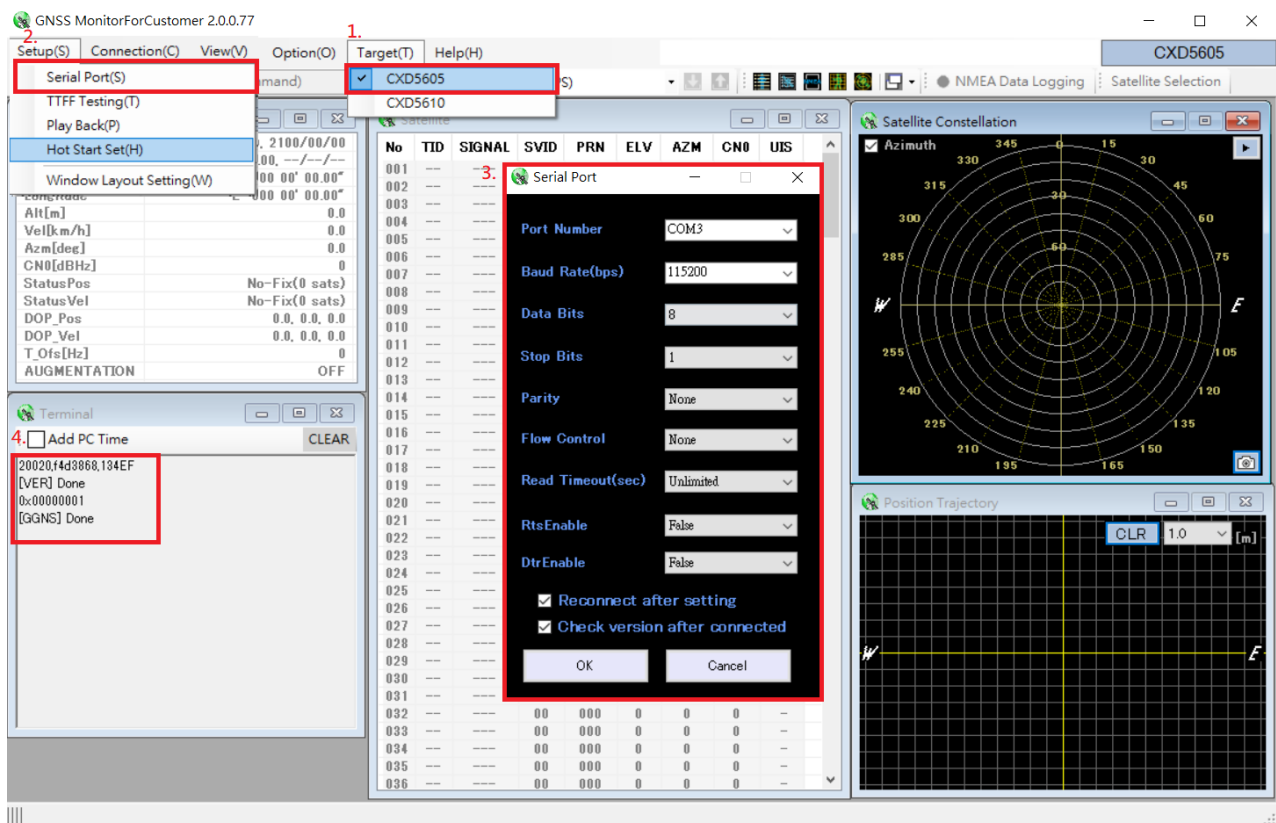
### STEP 1. INSTALL THE SOFTWARES

1.) Download the GNSS\_Monitor2\_ForCustomer\_Setup(contact REYAX sales)

### STEP 2. CONNECTION SETTING

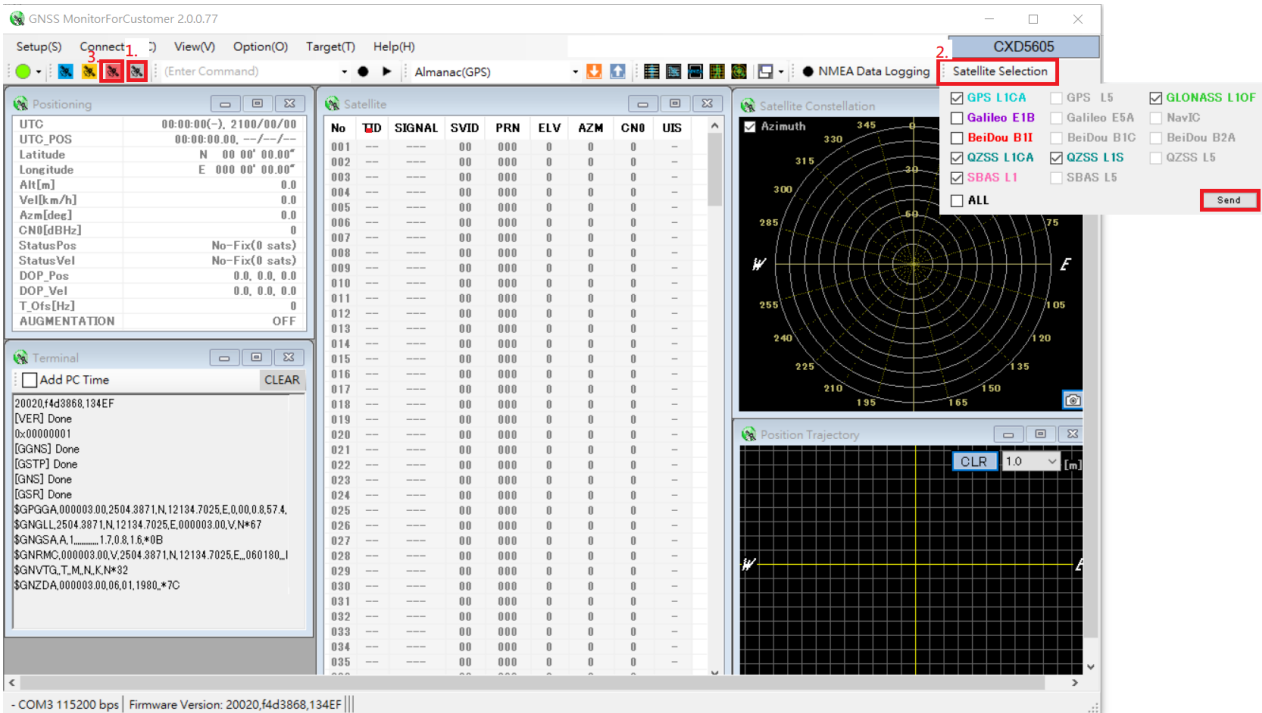
Plug USB to TTL cable to connect the RYS8833\_lite and the PC.

- 1.) Open the software GNSS\_Monitor2\_ForCustomer Target →RYS8833 select CXD5605
- 2.) Open the Serial Port setting
- 3.) Set the COM port number and the baud rate (Default is 115200bps).
- 4.) If connection successful, will show FW version message.



### STEP 3. Command input setting

- 1.) Click "IDLE" button, Terminal window will show [GSTP]Done.
- 2.) Click "Satellite Selection" button, after select Satellite and click "Send". Terminal window will show [GNS]Done.
- 3.) Click "Hot start" button, Terminal window will show [GSR]Done. Module start output NMEA log.
- 4.) If want to stop tracking, click "IDLE" button.



\*For detailed command user guide, please refer to RYS8830\_RYS8833\_Software\_Guide

## QUICK START GUIDE

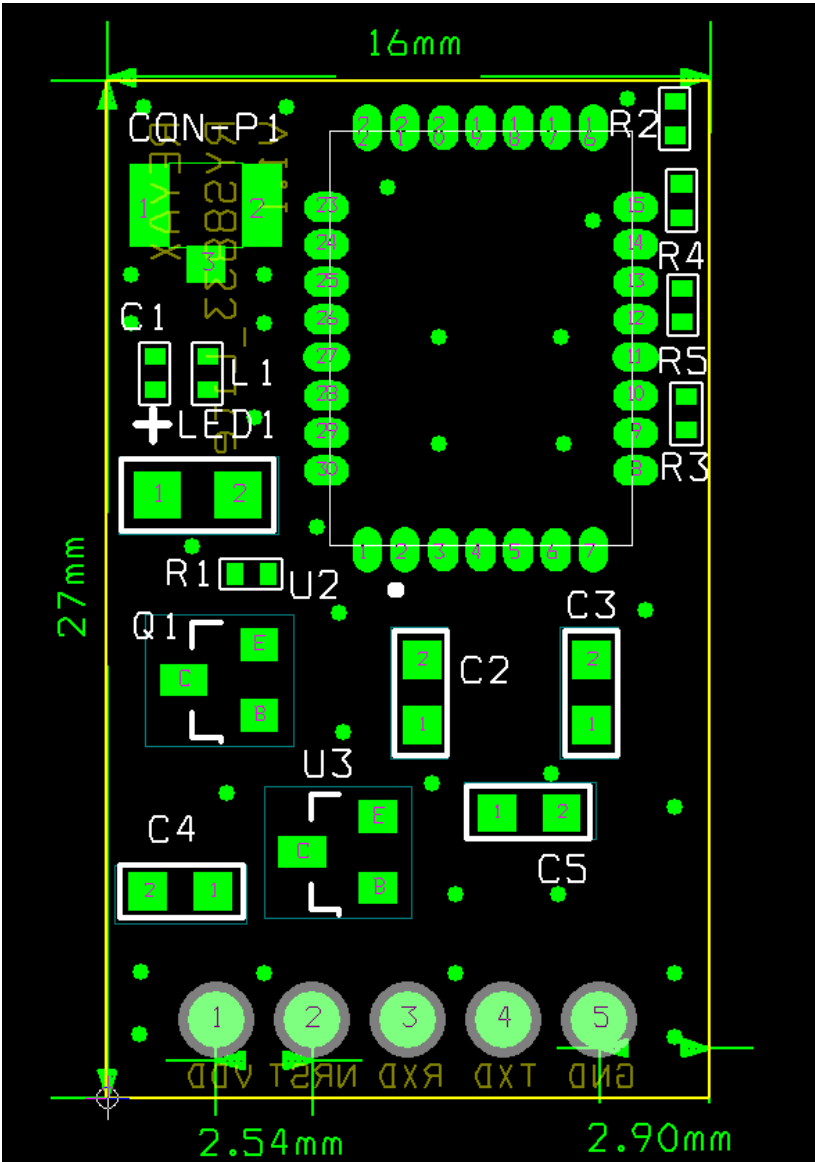
### STEP 1. Power on module

### STEP 2. Issue command

- 1.) @GSTP // Positioning stop
- 2.) @GNS 47 // Positioning-use satellite use GPS + GLONASS + SBAS + QZSS L1-CA + QZSS L1-S
- 3.) @GTIM 2022 12 20 00 00 00 // inject UTC time
- 4.) @GPPS 1 // enable 1PPS function
- 5.) @GSR // hot start

\*For detailed command user guide, please refer to RYS8830\_RYS8833\_Software\_Guide

# DIMENSIONS

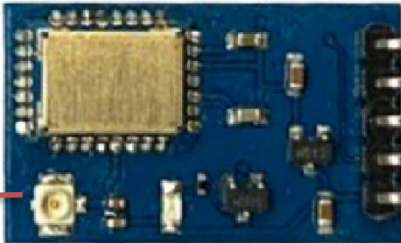


# RYS8833\_Lite test connection diagram

REYAX RYLS135



REYAX RYS8833\_Lite



SMAF2IPEX110 Cable



REYAX RYAGN31 Antenna



E-mail: [sales@reyax.com](mailto:sales@reyax.com)  
Website: <http://reyax.com>