



Basic ChatterBox Mesh Node - DIY

What it Can Do

- Store / forward packets securely
- Display broadcast messages
- Propagate locations & connectivity securely
- GPS tracker (if GPS installed)
- Accurate cluster time source



T3S3 Node



T3S3 E-Paper Node

Required Components

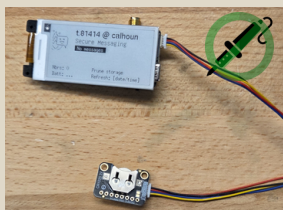
One of the Following Time or GPS Sources, along with a Qwiic wire to connect it:

- [Adafruit DS3231 RTC](#)
- [SparkFun RV-8803 RTC](#)
- [DFRobot 1103 GNSS](#)
- [DFRobot TEL0157 GNSS](#)
- [SparkFun SAM-M8Q GNSS](#)

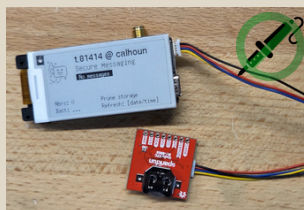
**SF SAM-M8Q not compatible with paper*

1. Choose one of the following 7 node options:

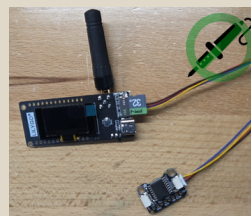
Time Node Options - Less power consumption than GPS nodes - *No Soldering*



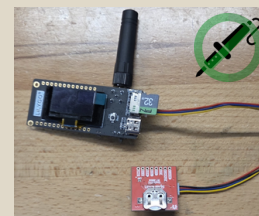
T3S3 Paper + Adafruit DS3231



T3S3 Paper + SparkFun RV8803



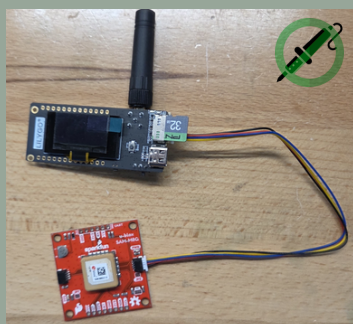
T3S3 + Adafruit DS3231



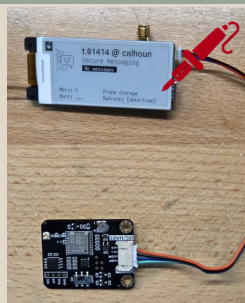
T3S3 + SparkFun RV8803

Connect a supported RTC to the T3S3 using a standard Qwiic/Stemma QT cable

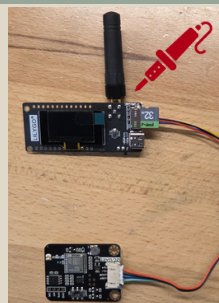
GPS Options - Use more power, but securely broadcast location regularly



T3S3 + SparkFun GNSS (uBlox)



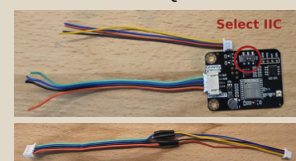
T3S3 Paper + DFRobot GNSS



T3S3 + DFRobot GNSS

If you choose a DFRobot option, you'll need to create a Qwiic adapter:

- DFR Green → Qwiic Blue
- DFR Blue → Qwiic Yellow
- DFR Red → Qwiic Red
- DFR Black → Qwiic Black



2. Add Compatible SD Card

See [firmware download page](#) for list



3. Install Firmware

<https://chatters.io/firmware>

4. Onboard the Node

- Power up the node
- On your Root communicator, select "Settings / Cluster / Onboard New Device"
- Wait a minute or two, it should automatically join



3D Printable Case Options can be found on [the firmware download page](#)