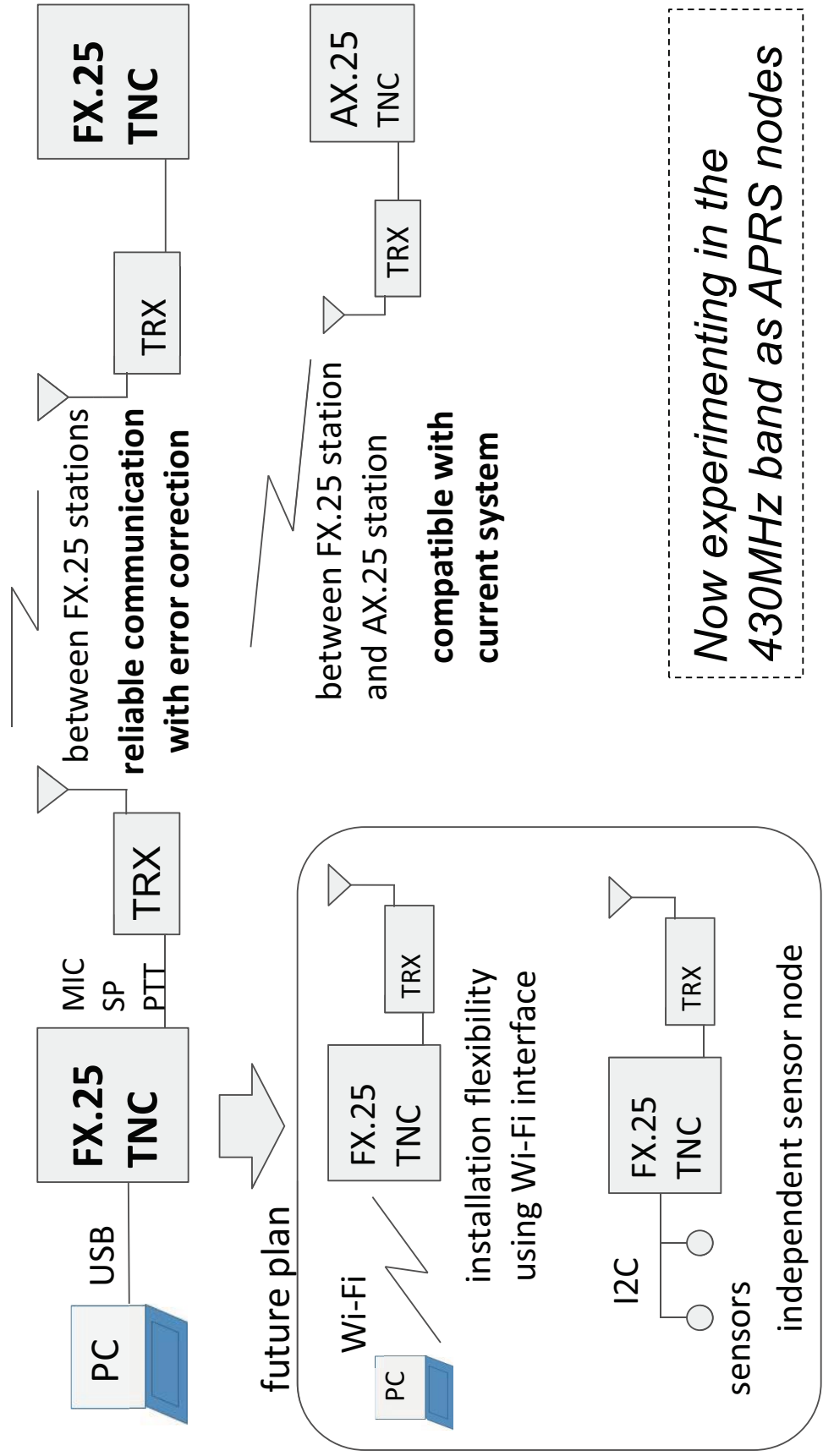


# Current status report of FX.25 KISS TNC development

Kazuhisa Yokota, JN1DFF  
Masaaki Yonezawa, JE1WAZ

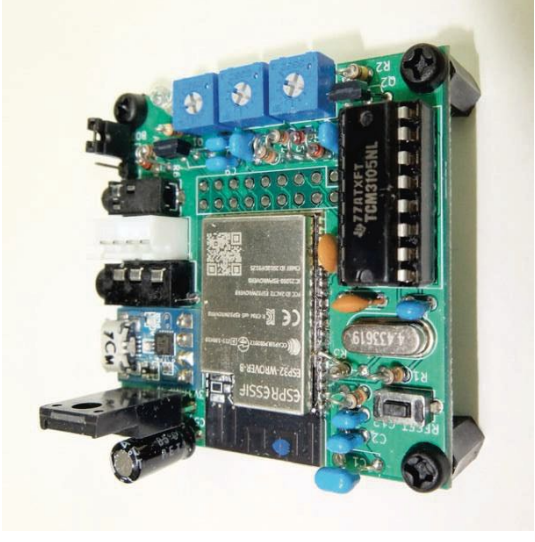
Packet Radio Users' Group  
Aug.12, 2020

# Use of FX.25 KISS TNC and future plan

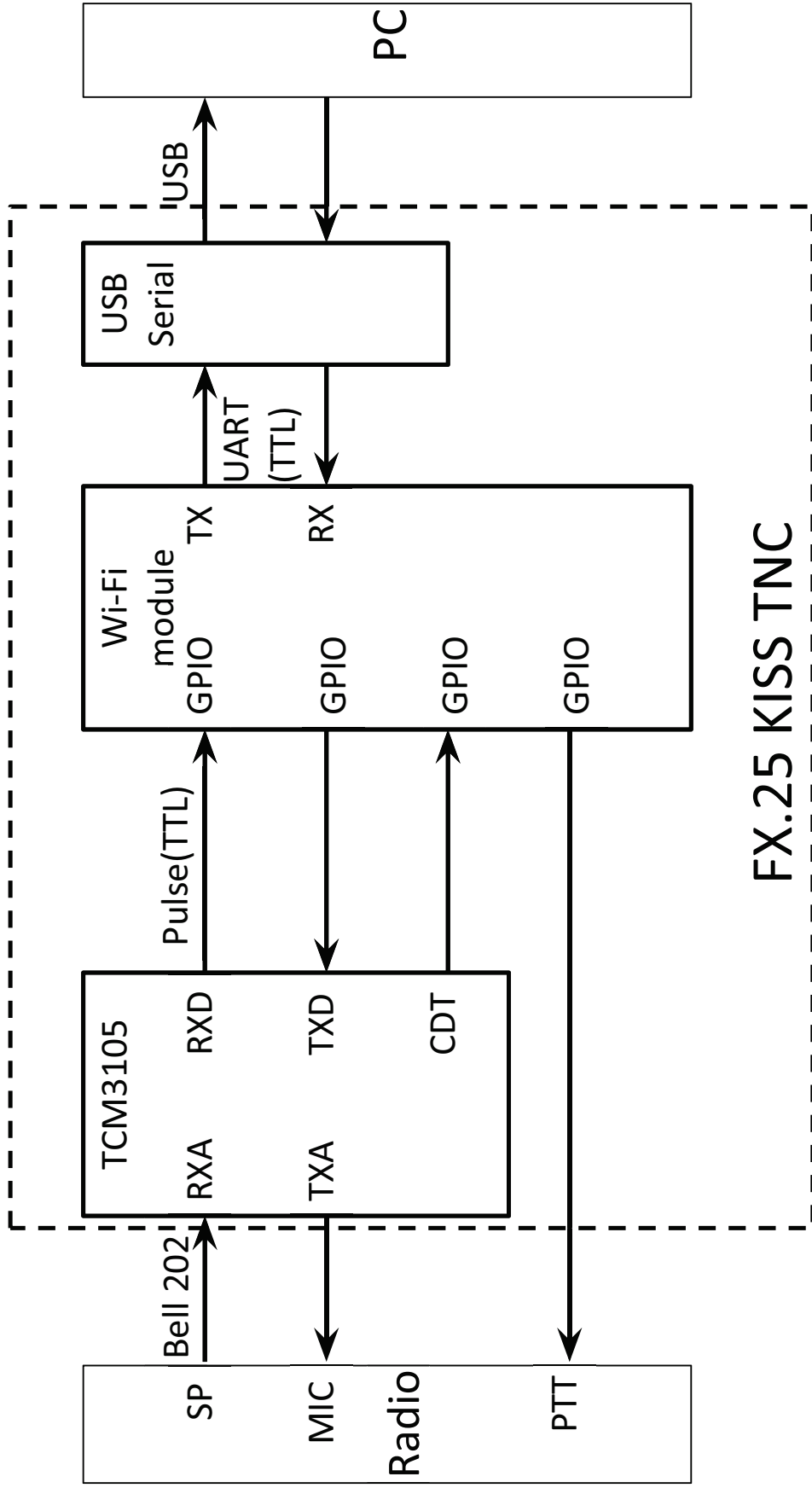


# Features of FX.25 KISS TNC

- Using TI TCM3105 Bell 202 modem chip
  - Implements software modem on next version
- Using ESP-WROOM-32 Wi-Fi module
  - Dual core 32bit RISC CPU, clock 80-240MHz
  - RAM 520kB, flash ROM 4MB
- Host interface is USB serial and TCP/IP on Wi-Fi
- KISS mode only
- supports full FX.25 draft spec.
  - [http://www.stensat.org/docs/FX-25\\_01\\_06.pdf](http://www.stensat.org/docs/FX-25_01_06.pdf)
- can receive AX.25 packet, too



# FX.25 KISS TNC hardware



FX.25 KISS TNC

# Features of TNC software

- Implemented by C language
- Running on FreeRTOS
- Each functions implemented as tasks of OS
- Using queues inter task communication
- Using interrupt to read RXD signal of modem
- Using infra red I/F to send the data to modem
- Implements software modem on next version
  - The TNC software is available on GitHub
    - <https://github.com/amedes/fx25-kiss-tnc>