

Development of BPS amplifiers for TBL

Gabriel Montoro*, Yuri Koubychine, Antoni Gelonch
Universitat Politècnica de Catalunya (UPC)

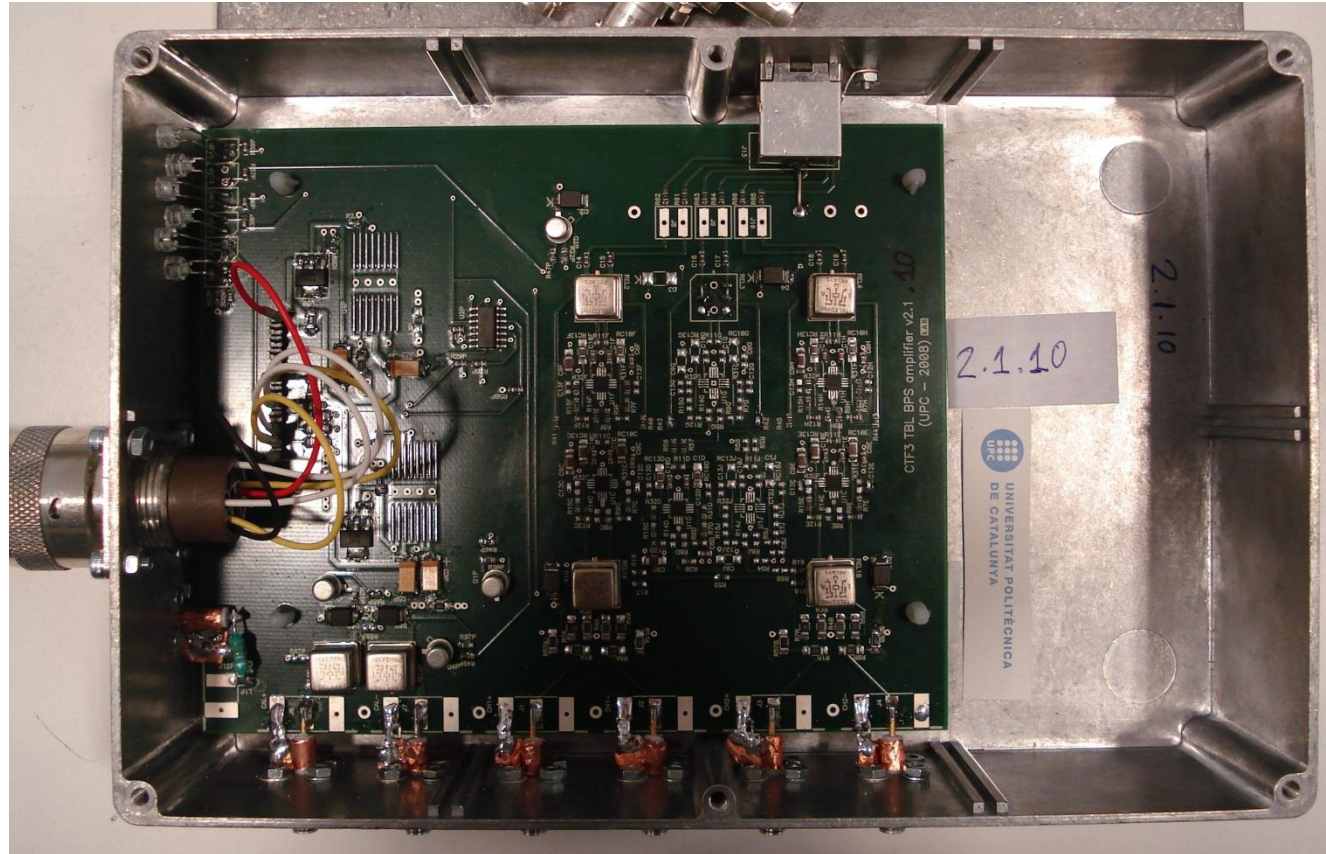
*E-mail: montoro@tsc.upc.edu

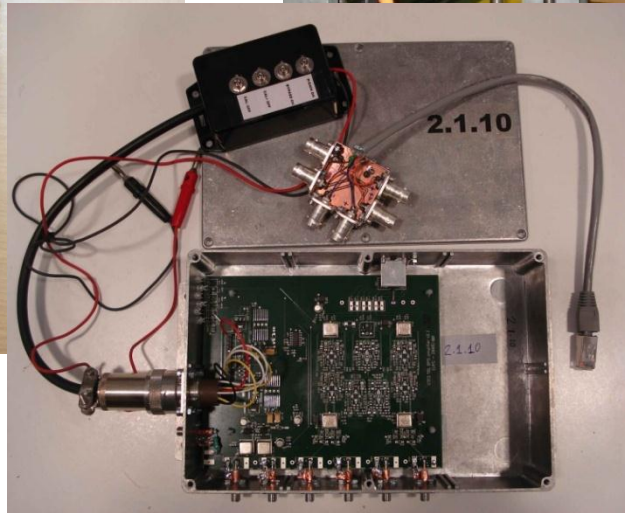
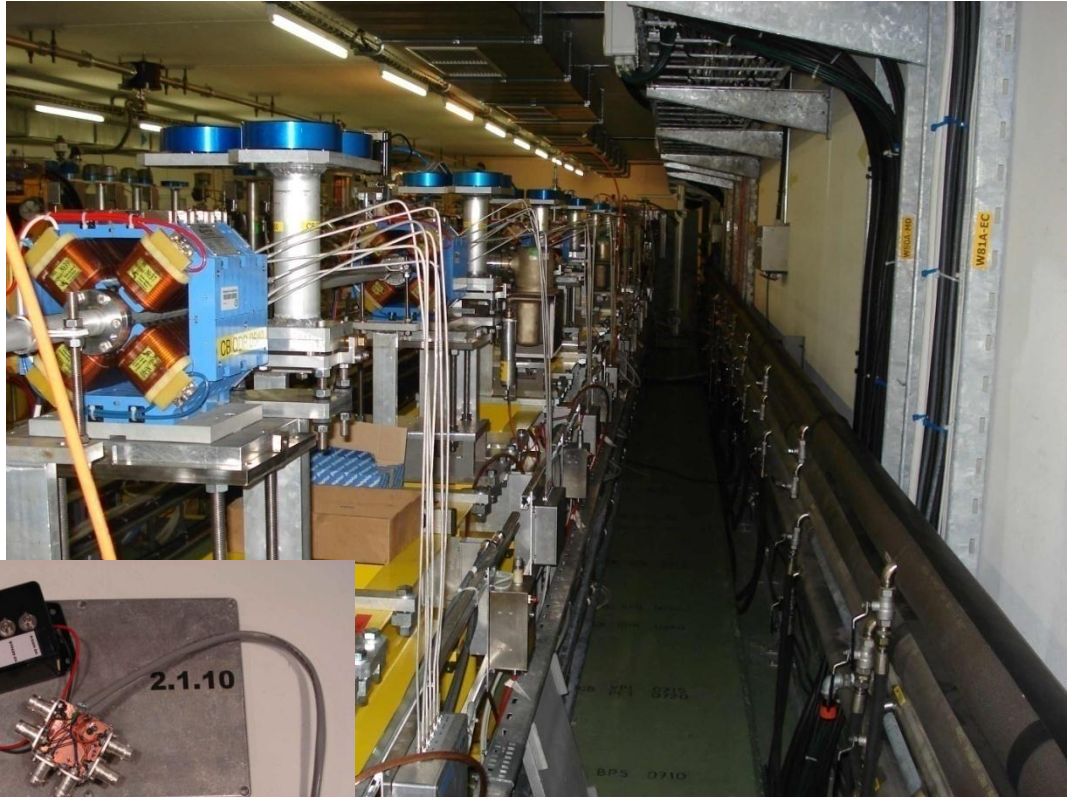
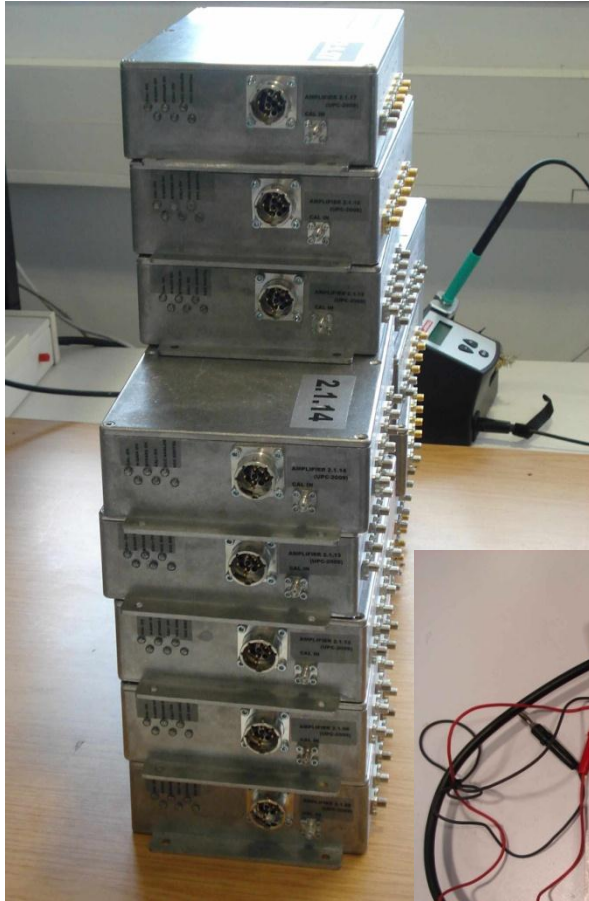


Most important amplifier specifications

- BPS-Amplifier interconnection: according to IFIC specifications and measurements (signal levels, droop compensation, ...).
- Amplifier-Digitizer interconnection: according to LAPP specifications (cable type, signal levels, differential signals, control signals, ...).
- 100 MHz BW (200 MHz if possible).
- Rad-hard tolerant IC amplifier (100 Krads):
wideband amplifier: TI THS4508.

**A prototype of the amplifier final version was build on
January-09**





Amplifier series evolution/reworks

- A first differential to single ended (diff_to_se) version was done for adapting the amplifier to the new digitizers and cabling system. It was detected the presence of glitches in amplifier outputs.
- A second version (on January 2011) of diff_to_se was done and applied to only 1 installed amplifier unit for testing.
- On July 2011 it was verified the elimination of the ringing and part of the noise, but it was evidenced the need of changing the gain.
- On November 2011: a new unit with modified gains is ready to be tested.

Thanks !

Gabriel Montoro
montoro@tsc.upc.edu

