

Status Report

Group 13

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1 Achieved Results

During the last week the time and phase synchronization were fully implemented on software. Also the system as whole were tested and worked theoretically with the pseudo channel which adds delay, AWGN noise and phase shifts the symbols, all of these problems were addressed and solved.

2 Expected Results

It is expected to have a fully working system in hardware that is integrated with the required points and the given code blocks as follows:

1. The data is transmitted correctly
2. The bandpass data is received correctly.
3. The bandpass data is demodulated correctly.
4. The baseband data is timed correctly using preamble.
5. The resultant data is filtered correctly with the matched filter.
6. The resultant data's phase is fixed correctly.

3 Identified Problems

- The buffer of the received signal keeps on getting bigger on each callback which makes the memory of the PC full without doing any transmission.
- The base-band signal failed to correlate with the pre-defined preamble signal.