Design and implement a second order notch filter that has the following specifications:

- Sample Frequency: 11025 Hz
- Center frequency: 500 Hz
- Bandwidth: 20 Hz

Implement this filter on the ARM Discovery board.

Turn in the following:
1. Cover sheet with the assignment number, your name, the date turned in, and your filter order.
2. A signed verification sheet showing that you implemented this filter correctly. The sheet must be signed by Blandford, Randall, or Cron.
3. Your complete commented C code which implements the filter.
4. The frequency vs. amplitude plot for the filter over the whole frequency band.
5. Blow up plots of frequency vs. amplitude that show that your filter meets the specifications.
6. The MATLAB code used to design the filter.
I verify that ___________________________ implemented a notch filter that meets the following specifications:

Sample Frequency : 11025
Center frequency : 500 Hz
Bandwidth: 20 Hz

______________________________
Signed by Blandford, Randall, or Cron

Note any exceptions:

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