

Introduction & Project Objective

Bitx is designed by Mr Farhan VU2ESE, and it is most popular rigs among radio amateurs around the world.

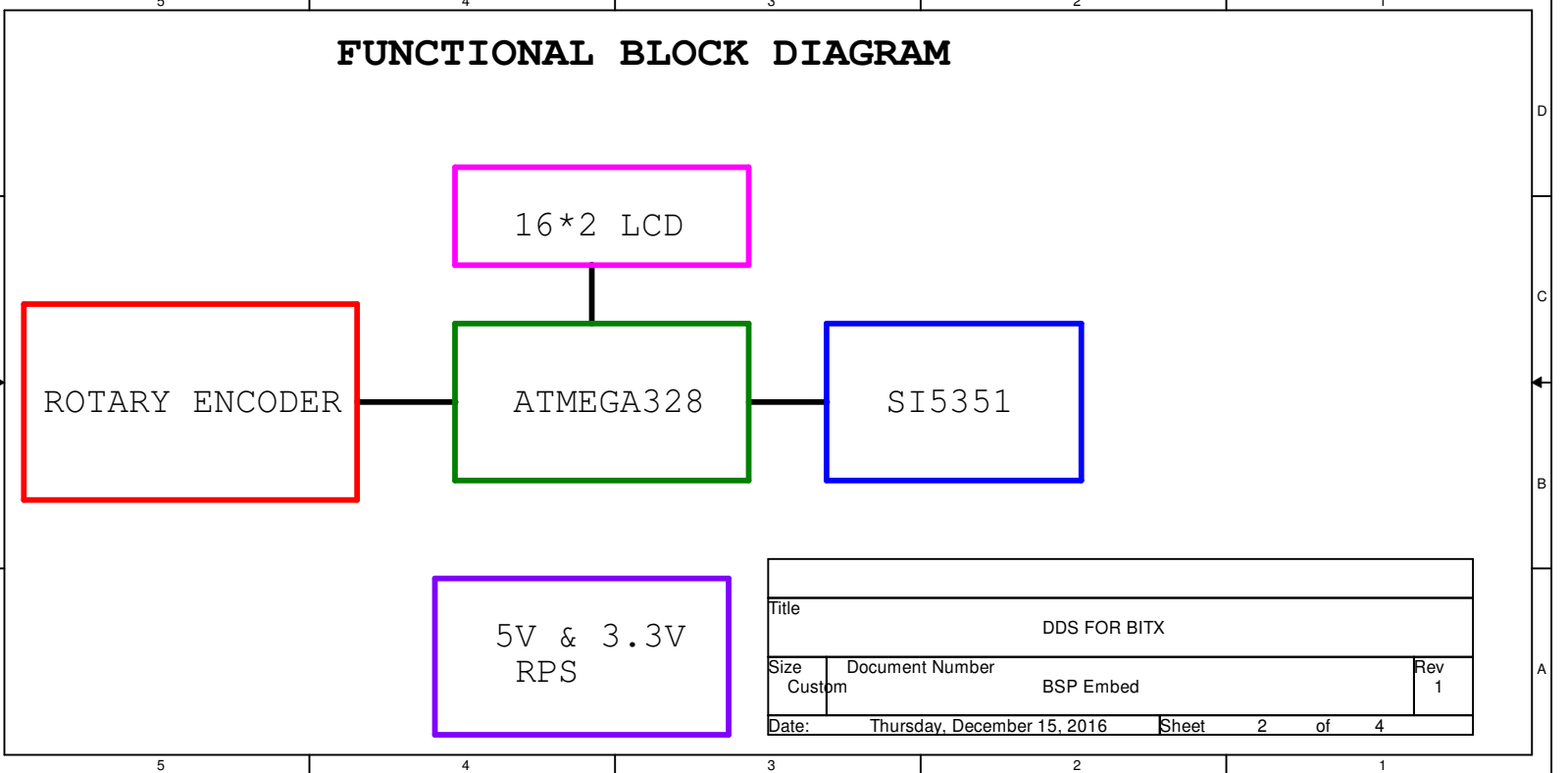
It Provides excellent audio clarity.

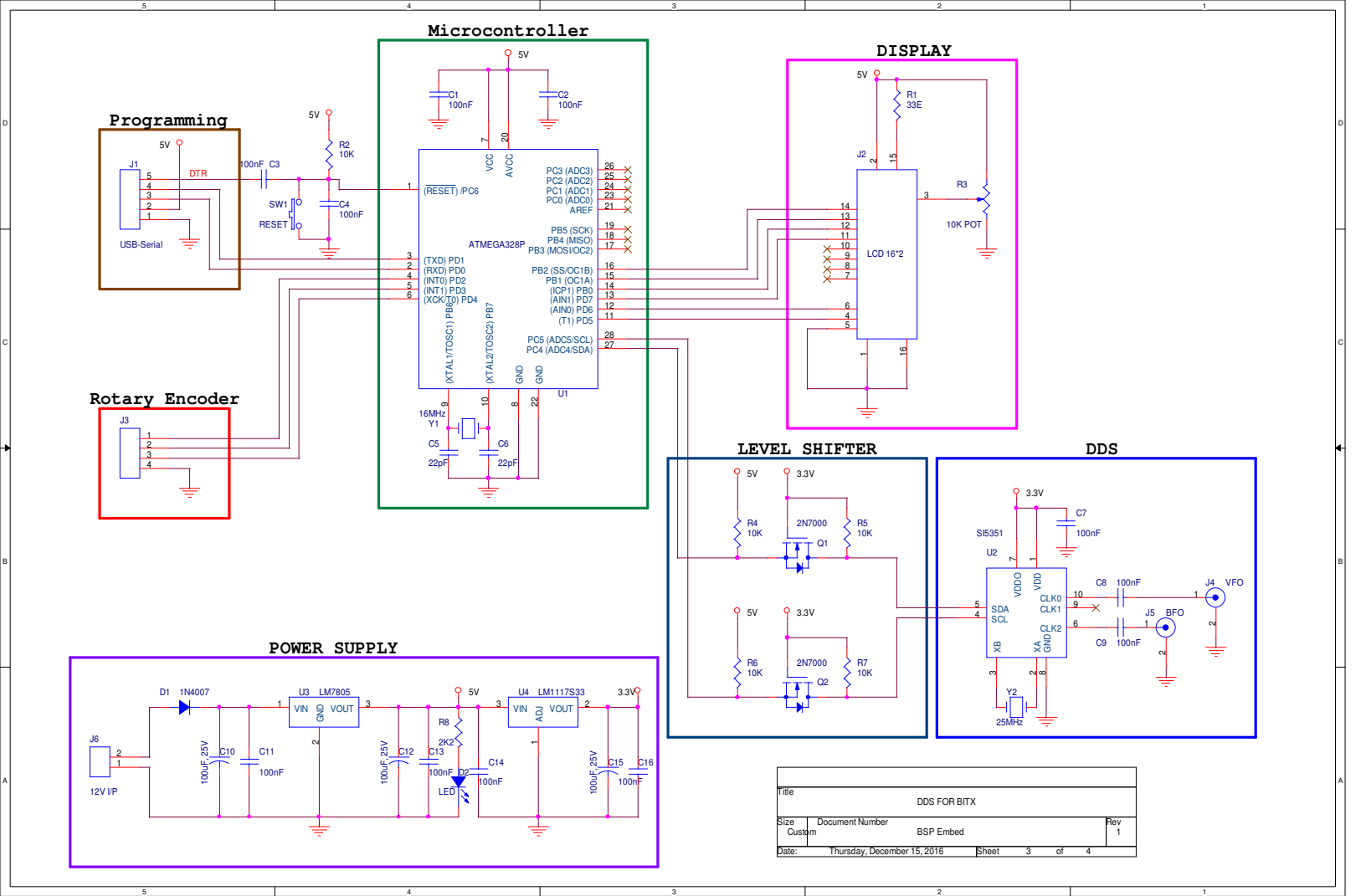
The frequency drifting is only the drawback in this home brewing kit.

Now because of the technological advancements, we can rectify this problem. That is by using the DDS, a digital frequency generator.

And by adding my "girl friend" i.e Arduino we can have some more features.

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DDS FOR BITX			
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Operating Procedure

Model1: VFO Mode
If you rotate the encoder clockwise, the VFO will increase. If you rotate it in counterclockwise , the VFO will decrease. The change in the VFO will be corresponding to the step size. The step size can be varied by short press of a encoder. Step size can be adjusted from 1HZ, 10Hz, 100Hz, 1Khz, 10KHz, 100Hz, and 1MHz.

Mode2: Channel Mode
There will be a nets running during morning hours. You can change to the net frequencies by using the encoder. This is tedious a process. Hence the channel mode will be helpful. The channel mode will be entered by press & Holding the encoder for about 1 seconds. Channel will be displayed. Now by using the encoder, you can easily change to frequency or the channels. Now you can enjoy the nets. you can return into VFO mode by a short press of a encoder switch.

Mode3: Store Channel
You found some interesting frequency for Rag chewing and you want to save this frequency to the channel. You can do this by press & Hold the encoder for about 2 seconds in VFO Mode. and the system (sexy arduino) will ask for which memory location(Channel Number)you want to store. Select the appropriate channel number using encoder. After selecting the channel. Store it by a short press of a encoder switch. Congrats!! Now your favorite channel is stored.

Mode4:
There will be slightly error in IF(AKA Intermediate frequency). In this case you need to tune your BFO frequency. This can be done by press & Holding the encoder for about 4 seconds in VFO Mode. BFO frequency will be display. Tune it with the encoder. Once you satisfied with the tuning. Save it press and Hold for encoder for 4 Seconds. Nice, Your BFO will be tuned. and you will be VFO Mode.

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