

Description of Files

DDS FINAL PARTS LIST.PDF/XLS

This file was created from the final version of the schematics, Figures 8 and 11. It most accurately corresponds to the final revised design.

DDSPORDER.PDF/XLS

This file is from the original schematic prior to the final revisions. It has been modified to reflect those revisions, however, the file derived from the latest schematic is more likely the most accurate. This file is included because the vendor part numbers are included for many of the parts.

FIGURE 8 DDS SECTION B SIZE SCHEMATIC.PDF

FIGURE 11 PLL SECTION B SIZE SCHEMATIC.PDF

Original 11 by 17 size drawings.

IM6402UART0001.PDF

The impossible to find complete data sheet for the UART.

DDS.EXE

The DDS control program. Runs under MS-DOS and many versions of Windows, but best under MS-DOS

DDS.BAS

QB-45 Source code for above. File is in text format and may be read with any ASCII editor like Notepad or Wordpad. Be sure not to save it back in some other text format if you intend to compile it with QuickBasic.

DDSSIMUL.EXE and DDSSIMUL.BAS

The source and exe files for the DDS simulator. Run it on a second PC connected to the one hosting DDS by a null modem cable from Com1 on one machine to the other. Start it before starting DDS.EXE. Verifies serial link and software are working OK. Displays each byte received and echoed.

PREFREQ.BAS and PREFREQ.EXE

The source and exe files for the frequency prediction program. This program takes the 4 tuning word bytes read from the screen when running DDS.EXE and reverse computes the predicted frequency. This should agree exactly with the frequency predicted by my DDS control program or any other. Useful if making or modifying the control program

DDS ROUND OFF ERROR.xls.

Spreadsheet that computes DDS predicted frequency and round-off error for a range of frequencies. Used to create Figures 4 and 5. Other clock frequencies, requested frequencies, and frequency steps may be entered – so it is general purpose.

MEASURED FREQUENCY ACCURACY.xls

Spreadsheet used to collect and calculate the measured frequency error data in Table 4.

Other files, information, artwork etc are available from the author; johncroos@aol.com