

ATD028 SUPPLEMENTARY PROGRAMS

WSPRMSG (by W3PM)

This is a command line (DOS box) program used to generate the 162-byte WSPR symbol table (various formats) and writes results to a plain text (ASCII) file.

<http://www.knology.net/~gmarcus/>

QRSS + WSPR + RTC + DDS30 08M2 (by VA3ROM et al)

PICAXE 08M2 open source code program to generate various forms of QRSS and WSPR using a AD9850 or AD9850 DDS module (DDS30 and DDS60) with DS3231 RTC (real-time clock) control in lieu of using a GPS module. You must read the code and make required changes for your own use. The BASIC code is very easy to port over to other MCU platforms.

DS3231 RTC + Temperature (by VA3ROM et al)

This is a PICAXE BASIC source code program to set, read and display DS3231 RTC values as well as read and display the current ambient air temperature (in degrees Celsius). I've also included the code to enable the DS3231 SQW (square wave) output. This feature is enabled and used in the QRSS + WSPR program to provide a 1 PPS timing pulse. The DS3231 uses a TCXO and is extremely time stable to within +/- 1 second per month.

Note 1: The AD9851 uses a different byte load value but is otherwise code compatible with the AD9850.

Note 2: The DS3231 is a drop-in replacement for the non-TCXO DS1307 (also lacks onboard digital thermometer).

Note 3: The free PICAXE 6 Editor by Revolution Education is used to edit, compile and burn the code to a PICAXE 08M2 (or 08M2+) MCU.

<http://www.picaxe.com/Software/PICAXE/PICAXE-Editor-6/>