

TiMax FTS250

Eval Board Quick Start Guide

**CONNOR
WINFIELD**

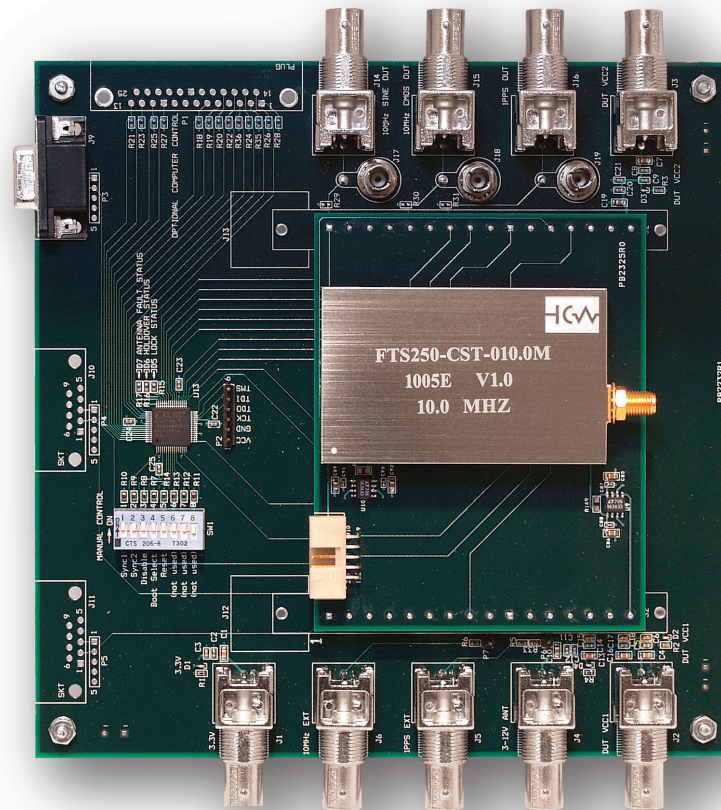


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General Instructions

- 1) Insert the FTS250 unit into the FTS250-Adaptor LIF receptacles
 - The orientation should match the photo shown above
 - Press the unit down firmly – there should be no metal pins exposed
- 2) Insert the FTS250-Adaptor into the PB2232R1 test board receptacles
 - The orientation should match the photo shown above
 - Press the unit down firmly – there should be no metal pins exposed
- 3) DIP Switch Manual Control Using SW1
 - Verify that all the DIP switches are turned “On” (rightmost position)
 - “Off” position applies a logic low to the unit, “On” position applies a logic high

Switch Label	Function
Sync1	Controls DUT pin 20 “SYNC1 Control”
Sync2	Controls DUT pin 19 “SYNC2 Control”
Disable	Controls DUT pin 4 (/Disable)
Boot Select	Controls DUT pin 12 (/Bootsel)- Only used for CW25 software updates/revisions
Reset	Controls DUT pin 3 (/Reset)

General Instructions continued

- 4) Connect the BNCs (center positive)
- Do not apply voltages higher than indicated or the DUT and/or test board could be damaged
 - The FTS250-Adaptor has two LDO Regulators (U9, U10), which supply 3.3V to the FTS250 unit. Because of these LDO regulators, J2 "DUT Vcc1" and J3 "DUT Vcc2" may be connected to the same supply without performance degradation

Designator/Label	Input / Output	Voltage / Logic Type	Function
J1: "3.3V"	Input	3.3V +/- 5%	Eval Board Power
J6: "10MHz Ext"	Input	LVC MOS/LVTTL	External 10MHz reference signal to DUT Pin 7
J5: "1PPS Ext"	Input	LVC MOS/LVTTL	External 1PPS reference signal to DUT Pin 5
J4: "3-12V ANT"	Input	Between 3-12V	Antenna supply voltage for DUT Pin 15
J2: "DUT VCC1"	Input	5.0V +/- 5%	Supply Voltage for DUT Pin 14
J3: "DUT VCC2"	Input	5.0V +/- 5%	Supply Voltage for DUT Pin 1
J16: "1PPS Out" or Probe Jack J19	Output	LVC MOS	1PPS signal from DUT Pin 24
J15: "10MHz CMOS Out" or Probe Jack J18	Output	LVC MOS	10MHz CMOS signal from DUT Pin 26
J14: "10MHz SINE Out" or Probe Jack J17	Output	SINE	10MHz SINE signal from DUT Pin 28

- 5) Connect the female DB9 connector "P3" to a computer serial port (optional).
- Used to monitor NMEA 0183 data stream
 - NS3kView software is recommended for use and can be provided per request
 - Baud Rate: 38400
 - Refer to the CW25 GPS Receiver User Manual for more information on NMEA and the proprietary messages and commands.

6) Connect a full sky view GPS antenna to the DUT's female SMA Bulkhead connector

7) Power the unit on

8) LED Function:

Antenna Fault Status (D7) asserts high [Red] if a fault condition (Pin 23 of the DUT) is found on DUT pin 15 (Antenna Supply Voltage). This fault status is self-clearing once the fault condition goes away.

Holdover Status (D6) asserts high [Amber] if the unit is in automatic or forced holdover (from DUT pin 22 "Holdover Status")

Lock Status (D5) asserts high [Green] if the unit is tightly locked to the selected input (from DUT pin 21 "Lock Status")

