

TiMax FTS/FR125

Eval Board Quick Start Guide

**CONNOR
WINFIELD**

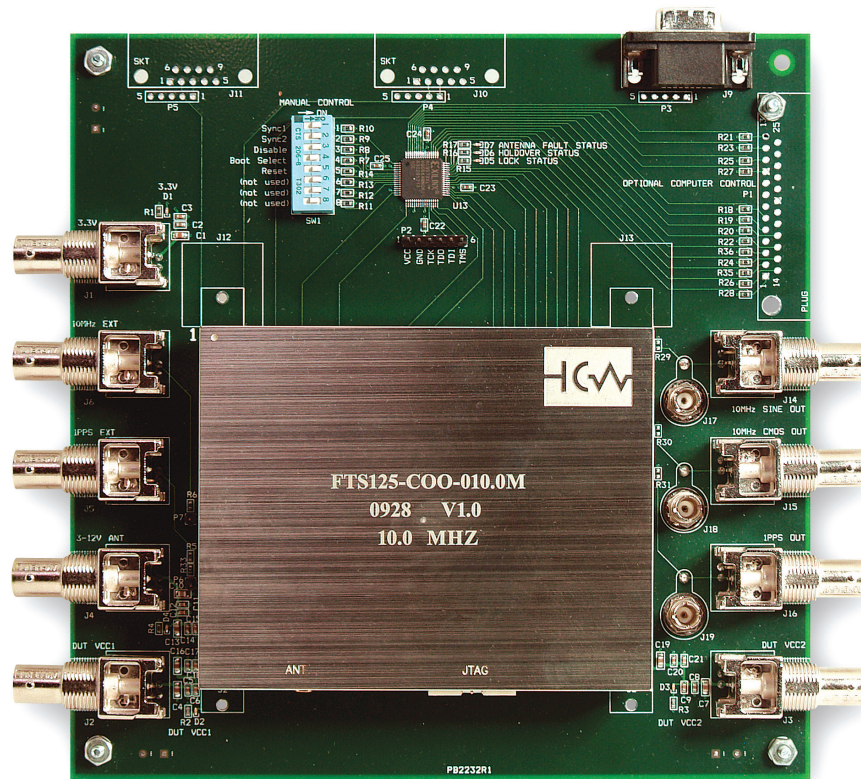


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General Instructions

- 1) Insert the unit into the eval board LIF sockets
 - Pin 1 of the unit will be placed in the topmost position of LIF receptacle J12
 - Pin 1 is indicated on the evaluation board with a large silkscreen "1"
 - Press the unit down firmly- there should be no metal pins exposed.
- 2) 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 19 "SYNC1 Control"
Sync2	Controls DUT pin 20 "SYNC2 Control"
Disable	Controls DUT pin 21 (/Disable)
Boot Select	Controls DUT pin 8 (/Bootsel)- Only used for CW25 software updates/revisions
Reset	Controls DUT pin 10 (/Reset)

- 3) Connect the BNCs (center positive)
 - Do not apply voltages higher than indicated below or the DUT and/or Evaluation board could be damaged
 - Use separate supplies for "DUT Vcc1" and "DUT Vcc2" otherwise phase noise performance will be degraded.

General Instructions continued

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 9
J5: "1PPS Ext"	Input	LVC MOS/LVTTL	External 1PPS reference signal to DUT Pin 12
J4: "3-12V ANT"	Input	Between 3-12V	Antenna supply voltage for DUT Pin 14
J2: "DUT VCC1"	Input	3.3V +/- 5%	Supply Voltage for DUT Pin 16
J3: "DUT VCC2"	Input	3.3V +/- 5%	Supply Voltage for DUT Pin 17
J16: "1PPS Out" or Probe Jack J19	Output	LVC MOS	1PPS signal from DUT Pin 26
J15: "10MHz CMOS Out" or Probe Jack J18	Output	LVC MOS	10MHz CMOS signal from DUT Pin 28
J14: "10MHz SINE Out" or Probe Jack J17	Output	SINE	10MHz SINE signal from DUT Pin 32

- 4) 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.
- 5) Connect a full sky view GPS antenna to the DUT's female MCX connector
- 6) Power the unit on
- 7) LED Function:
 - Antenna Fault Status** (D7) asserts high [Red] if a fault condition (Pin 25 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 23 "Holdover Status")
 - Lock Status** (D5) asserts high [Green] if the unit is tightly locked to the selected input (from DUT pin 24 "Lock Status")

