Function Module SDx

Model: SDx
Description: Synchro/Resolver Measurement

Specifications

Number of Channels:	4 Channels
Resolution:	24-bit
Input Format:	Synchro to Digital (S/D), Resolver to Digital (R/D), Programmable
Input Voltage:	2 - 90 Vrms
Excitation Voltage:	2 - 115 Vrms
Accuracy:	±1 arc-minute for single-speed inputs
Frequency Range:	SD1 and SD5 - 47 Hz - 1 kHz, SD2: 1 kHz-5 kHz, SD3: 5 kHz-10 kHz, SD4: 10 kHz-20 kHz
Phase Shift:	Up to ±60°.
Self-Test:	Built-in wraparound self-test.
Power:	5 VDC @ 1 A
Weight:	2.7 oz. (75 g)

Programmable Features:

- Bandwidth (Hz)
- Single, two or multi-speed configuration
- Angle change alert
- Signal Loss Threshold
- Reference Loss Threshold
- Configure each channel for Synchro or Resolver measurement

Measured signals:

- Individual channel input Reference and Signal voltages
- Individual channel input Reference Frequency

Additional Features

Available data in the FIFO buffer can be retrieved, one word at a time (32-bits).

Built-In Test (BIT) / Diagnostic Capability

SD1-SD5 incorporate major diagnostics that ensure that the user is alerted to channel malfunction. This approach reduces bus traffic, because the Status Registers need not be constantly polled. Three different tests (one on-line and two off-line) can be selected.

For more information contact ティー・ピー・ティー株式会社 (TPT K.K.)

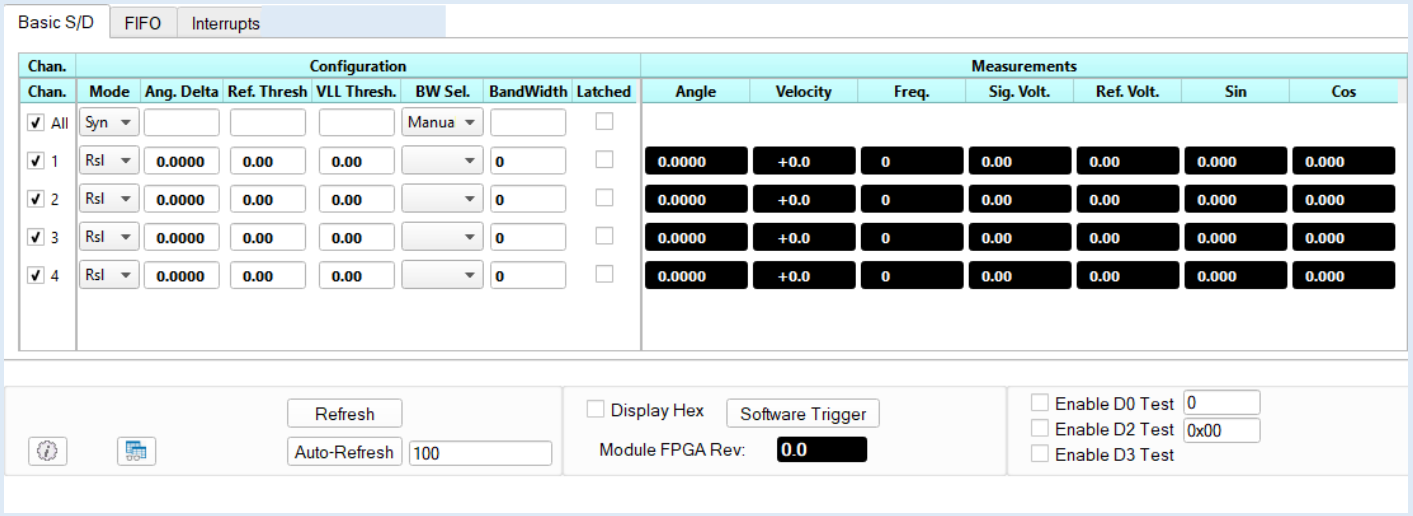
Telephone: 81-3-5832-7350
TPT KK: Contact

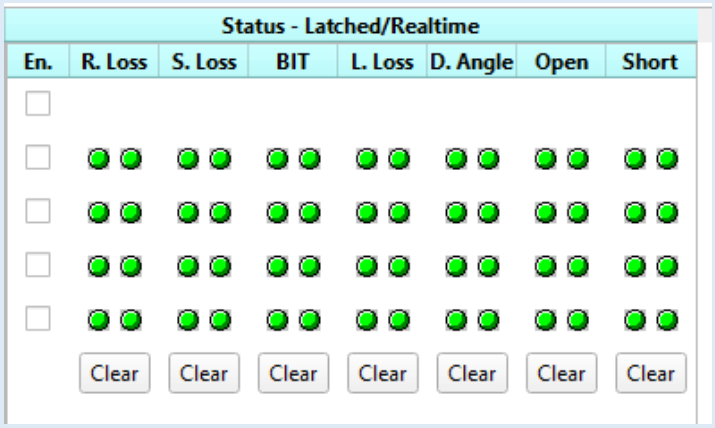
The **Online (D2)** Test initiates automatic background BIT testing. Each channel is checked every 5° to a testing accuracy of 0.05° and each Signal and Reference is always monitored. Any failure triggers an Interrupt (if enabled) and the results are available in status registers. The testing is totally transparent to the user.

The **Offline (D3)** Test initiates a BIT test that disconnects all channels from the outside world and connects them across an internal stimulus that generates and tests 36 different angles to a test accuracy of 0.1°. Results can be read from registers and external reference is not required. Any failure triggers an Interrupt (if enabled

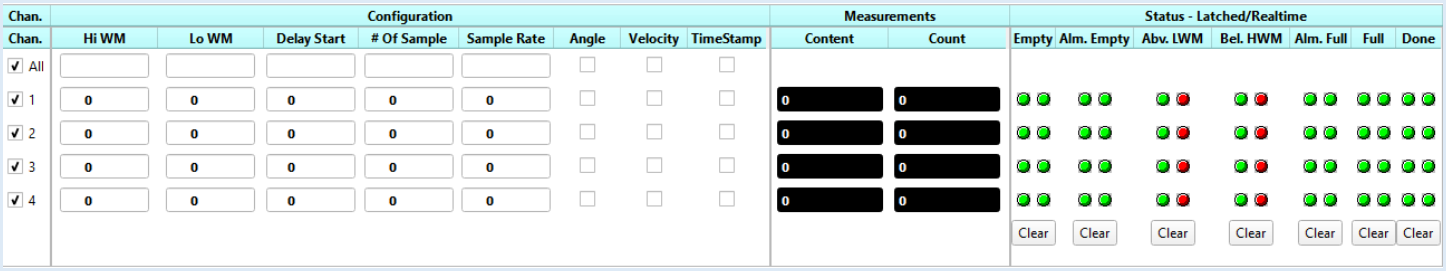
The **Offline (D0)** Test is used to check the card and the system interface. All channels are disconnected from the outside world, allowing the user to write any angle

Embedded Soft Panel (ESP) allows easy access to each channel information





FIFO



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Rev. A