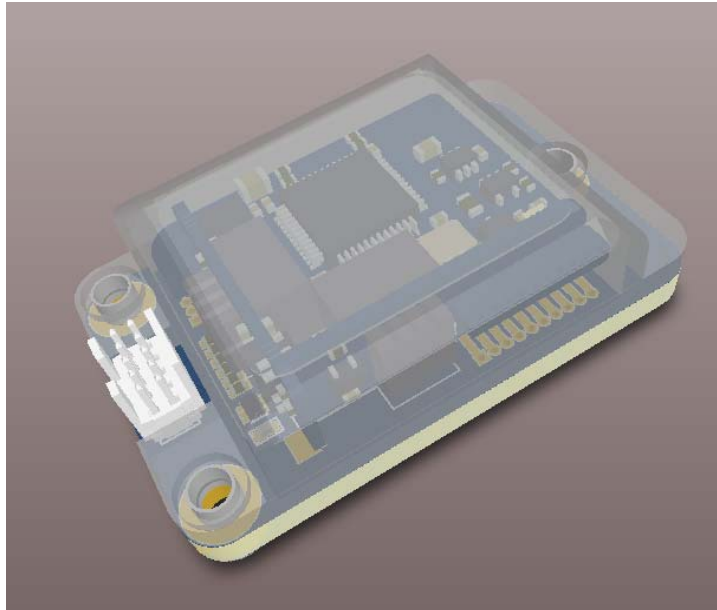# 3DM-GX3-25 OEM Mounting Information

Preliminary 4/20/2009



## *Connector:*

The connector used on the 3DM-GX3-25 OEM module is a Samtec fine pitch (0.050") 5 x 2 (10 pin) keyed header connector. Cables are IDC ribbon cables. Connectors and cables in any length can be ordered directly from Samtec. Refer to the Samtec website for specific order information.
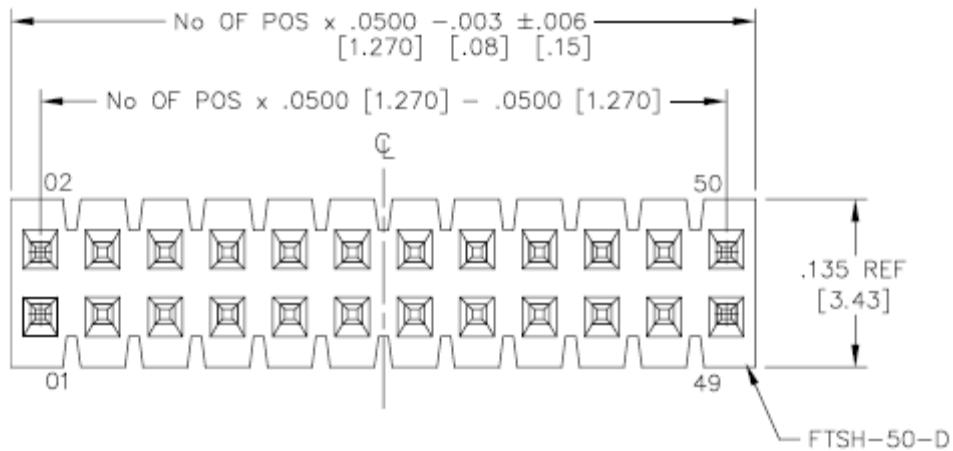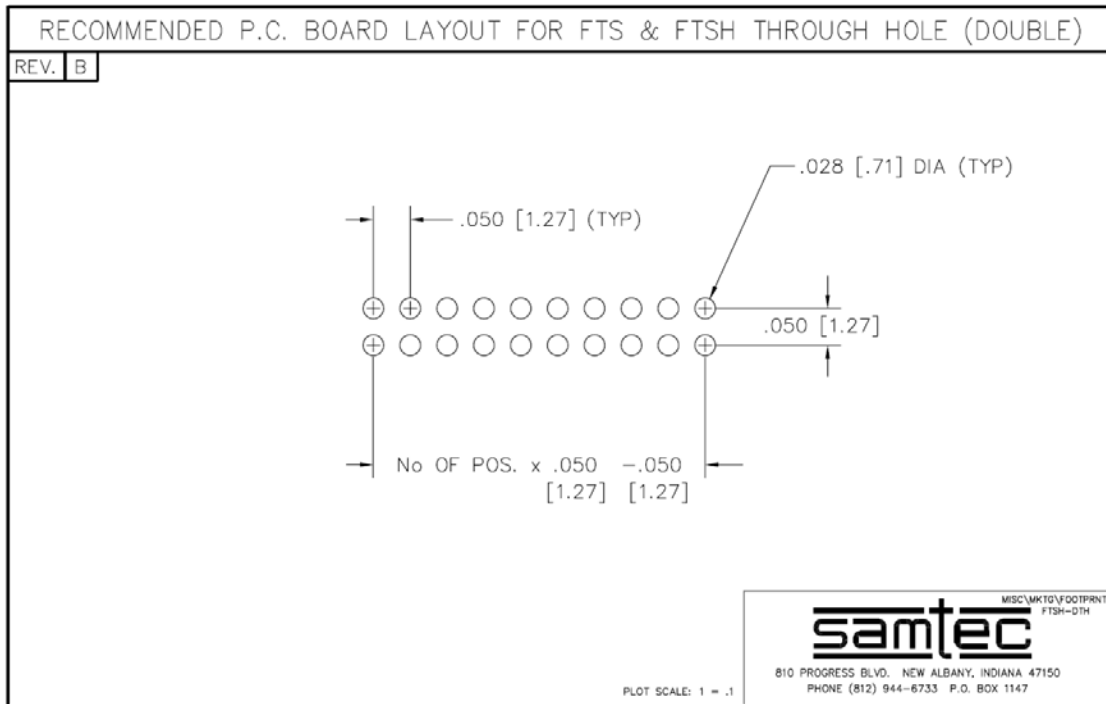
**Connector**:  Samtec       FTSH-105-01-F-D-K.
**Mates with**   Samtec       FFSD-05-D-xx.xx-01-N  (where xx.xx is length of cable in inches)

## *Pinout:*

| Pin | Name | Type | Description |
|-----|------|------|-------------|
| 1 | USBDM | BiDir | USB D- Signal |
| 2 | USBDP | BiDir | USB D+ Signal |
| 3 | VBUS | Power | Power – Minimum 3.1 volts, Maximum 5.5 volts DC |
| 4 | UARTRX | Input | LVTTL (5V Tolerant) Serial UART receive (connect to host Transmit) |
| 5 | UARTTX | Output | LVTTL (5V Tolerant) Serial UART transmit (connect to host Receive) |
| 6 | NC | | not connected |
| 7 | GPIO1 | I/O | General purpose I/O |
| 8 | GND | Ground | Power and signal ground |
| 9 | GPIO2 | I/O | General purpose I/O |
| 10 | nENABLE | Input | Module enable.  LVTTL low enables.  LVTTL high disables |

## *FTSH Connector Footprint:*

This information is provided to assist layout of an interface connector on the host printed circuit board.

RECOMMENDED P.C. BOARD LAYOUT FOR FTS & FTSH THROUGH HOLE (DOUBLE)

REV. B

.028 [.71] DIA (TYP)

.050 [1.27] (TYP)

.050 [1.27]

No OF POS. x .050   −.050
[1.27]   [1.27]

MISC\MKTG\FOOTPRNT
FTSH−DTH

**samtec**

810 PROGRESS BLVD.   NEW ALBANY, INDIANA 47150
PHONE (812) 944−6733  P.O. BOX 1147

PLOT SCALE: 1 = .1

No OF POS x .0500 −.003 ±.006
[1.270]  [.08]  [.15]

No OF POS x .0500 [1.270] − .0500 [1.270]

02

50

.135 REF
[3.43]

01

49

FTSH−50−D

# Module Mounting information:

The overall dimensions of the module will not exceed 24mm x 38mm x 12mm +/-0.20.   Three mounting holes are required.  These should be drilled and tapped for #2-56 screws or drilled for #2-56 screws and nuts.  Brass, aluminum, nylon, or 300 series stainless should be used for all mounting hardware to avoid magnetic field interference.  Magnetometer is located in the upper left corner – opposite the connector end.



| DRAWN Fritz Martin | 12/18/2008 | MicroStrain, Inc. | | |
|---|---|---|---|---|
| CHECKED | | | | |
| QA | | TITLE | | |
| MFG | | 3DM-GX3-25 OEM | | |
| APPROVED | | | | |
| | | SIZE A | DWG NO 3065-0015 [Footprint] | REV |
| | | SCALE 2:1 | | SHEET 1 OF 1 |

Dimensions in drawing: 24.00, 21.25, 12.00, 2.75, 38.00, 35.25, 2.75, 2.50, 12.00

Tap or drill for #2-56 screw (3 places)

Approximate Magnetometer location

Top

Samtec PN: FTSH-105-01-F-D-K

Overall height of device 12mm

Pin 1