PCN – Product Change Notification

MTi 1-series: Components placement change

Author: Product Manager Date: February 27, 2018



1 Type of Change

- ☐ Interface
- □ Performance
- Supply chain and purchasing

2 Description of Change

To ensure the continuity of the MTi 1-series, the End Of Life components are being replaced and a hardware Version 2.0 is being released. Due to this change in design, component placement has changed, which may require a change to assembly reflow processes previously designed for the 1-series, especially automatic pick and place machine programs. See Figure 1 for component placement details. In addition, the MTi 1-series' part number naming is changing to a new format, which is covered further in Section 3.

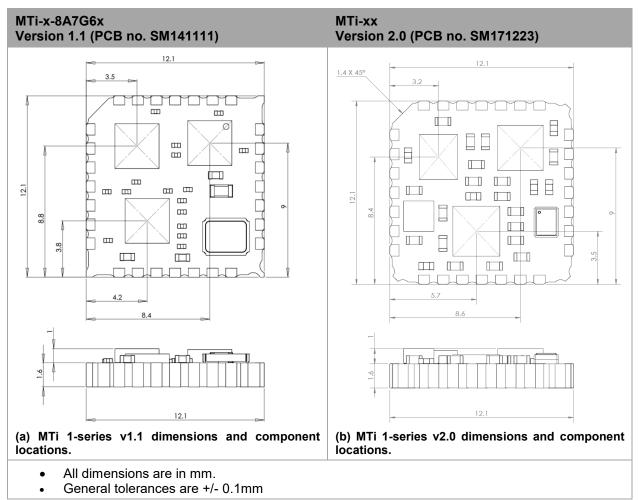


Figure 1: Components placement for the MTi 1-series v1.1 and v2.0 hardware versions.

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3 Affected Products

	Current		New		
Series	Part Number	HW version	Part Number	HW version	Remarks
MTi-1	MTi-1-8A7G6x*	≤ 1.1	MTi-1x*	≥ 2.0	Components placement change
MTi-2	MTi-2-8A7G6x*	≤ 1.1	MTi-2x*	≥ 2.0	Components placement change
MTi-3	MTi-3-8A7G6x*	≤ 1.1	MTi-3x*	≥ 2.0	Components placement change
DK	MTi-3-8A7G6-DK	≤ 1.1	MTi-3-DK	≥ 2.0	Shield, Arduino compatible interface

Table 1: Current and new part numbering

4 Product Identification

The hardware version number is labeled SPEC REV on the TNR Label, see Figure 2.

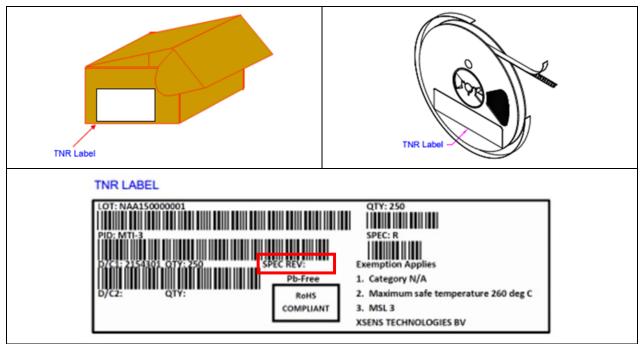


Figure 2: TNR Label specification

^{* &}quot;x" type of packaging, T = tray of 20pcs, R= reel of 250

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5 Customer Impact

5.1 Purchasing

Please update purchasing systems with the new part number as described in Section 3.

If MTi-x-8A7G6x part is ordered, Xsens will deliver the ordered MTi-x-8A7G6x part until the stock runs out, after which Xsens will deliver the 1-series part with the new part number (MTi-xx).

5.2 Assemble Process

For hardware versions, SPEC REV ≥2.0, check pick and place program to see if it requires adaptation. For component placement change information, see Section 2.

5.3 Interface

N/A, no change.

5.4 Performance

The MTi 1-series v2.0 performance is equal or better with respect to the MTi 1-series v1.1 hardware. The components change will lead to an increased performance with respect to

- Increased robustness to mechanical stress, the v2.0 hardware and its sensor components are less susceptible to torsional stress induced errors on the boards.
- Increased consistency and repeatability among parts with the v2.0 hardware and its sensor components.

The maximum output rate for the XDI_AccelerationHR and XDI_RateOfTurnHR quantities will differ from the current 1KHz. The new output data rate for the XDI_Acceleration HR and XDI_RateOfTurnHR messages will not be lower than 800Hz.

6 Schedule

Samples:	May 2018	
Estimated First Shipment date:	June 2018	
Last Time Buy Date:	N/A	
Last Ship Date:	N/A	