

## Product Change Notice (PCN)

**Subject:** Change PCB Supplier for Flow Sensors Products

**Publication Date:** 7/1/2021

**Effective Date:** 10/1/2021

**Revision Description:**

Initial Release

**Description of Change:**

Renesas is changing to a new PCB supplier as a result of the current PCB supplier had discontinued the business for flow sensors products. Refer below table for the comparison of the current supplier versus the new supplier as well as the comparison of the current solder mask versus the new solder mask.

Customer may expect to receive shipment from the existing PCB supplier and the new PCB supplier during the transition period or until the old inventory has been depleted.

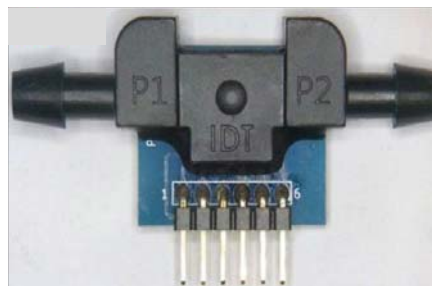
Descriptions	Existing PCB Supplier	New PCB Supplier
PCB Material	FR4	FR4
Cu Thickness	1/1 OZ	1/1 OZ
Solder Mask	RS-2000 BL-5	H-8100
Solder Mask Color	Dark Blue	Blue
Finished PCB Thickness	0.55mm – 0.65mm	0.58mm – 0.62mm
Ni Thickness	3um – 4um	3.26um – 4.15um
Pd Thickness	0.1um – 0.12um	0.12um – 0.1275um
Au Thickness	0.1um – 0.12um	0.12um – 0.1275um

Descriptions	Existing Solder Mask RS-2000 BL-5	New Solder Mask H-8100
Color	Dark Blue	Blue
Viscosity	180 +/- 30dpa.s	160 +/- 20dpa.s
Mixing ratio	Main agent : Hardener = 3:1	Main agent : Hardener = 3:1
Exposure energy	300 ~ 500 mJ/cm <sup>2</sup>	500 ~ 800 mJ/cm <sup>2</sup>
Pot life	24 hours (stored in dark place at less than 25°C)	24 hours (stored in dark place at less than 25°C)
Storage	6 months (<= 25°C under dark place)	6 months (<= 25°C under dark place)

Current PCB



New PCB



**Affected Product List:** Refer Appendix B.

**Reason for Change:**

The current PCB supplier had discontinued the business for flow sensor products.

**Impact on Fit, Form, Function, Quality & Reliability:**

The change will have no impact on the function, quality, reliability and environmental compliance of the products. However, the form and fit are changed as depicted in page 1.

**Product Identification:**

Solder mask color where blue denotes new PCB whereas dark blue denotes old PCB.

**Qualification Status:** Completed. Refer Appendix A

**Sample Availability Date:** 10/1/2021

**Device Material Declaration:** Available upon request

**Note:**

1. Acknowledgement must be received by Renesas within 30 days or Renesas will consider the change as approved.
2. If timely acknowledgement is provided by Customer, then Customer shall have 90 days from the date of receipt of this PCN to make any objections to this PCN. If Customer fails to make objections to this PCN within 90 days of the receipt of the PCN then Renesas will consider the PCN changes as approved.
3. If customer cannot accept the PCN then customer must provide Renesas with a last time buy demand and purchase order.

**For additional information regarding this notice, please contact [idt-pcn@lm.renesas.com](mailto:idt-pcn@lm.renesas.com)**

**Appendix A - Qualification Results**

**Affected Package:** Refer Appendix B

**Qual Vehicle:** FS1012-1100-NG

**Qual Plan & Results:** Tests are in accordance with JEDEC47 recommended tests.

Test Descriptions	Test Method	Test Results (Rej/SS)		
		Lot 1	Lot 2	Lot 3
* Temperature Cycling (0°C to 100°C, 180 cycles)	JESD22-A104	0/25	0/25	0/25
* Temperature Humidity Bias (85°C/85% RH, 535 Hrs)	JESD22-A101	0/25	-	-
* HAST - unbiased (85°C/85% RH, 700 Hrs)	JESD22-A118	0/25	0/25	0/25
High Temperature Storage Bake (105°C, 1661 Hrs)	JESD22-A103	0/25	0/25	0/25

*\*Tests were subjected to Preconditioning per JESD22-A113 prior to stress test*

**Appendix B – Affected Product List**

FS1012-1001-LQ	FS1012-1100-NG	FS2012-1020-NG	FS2012-1100A-NG
FS1012-1002-LQ	FS2012-1001-LQ	FS2012-1020A-NG	
FS1012-1020-NG	FS2012-1002-LQ	FS2012-1100-NG	