

PRODUCT / PROCESS CHANGE NOTIFICATION

PCN-000864

Date: NOV-08-2022

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Semtech Corporation, 200 Flynn Road, Camarillo CA 93012

Change Details

Part Number(s) Affected:

Please see affected part numbers on the following page.

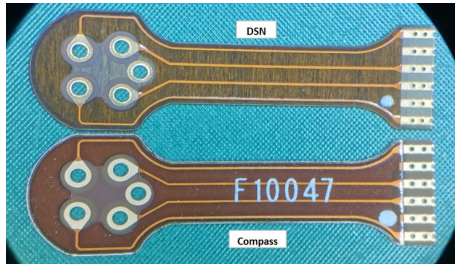
Customer Part Number(s) Affected: N/A

Description, Purpose and Effect of Change:

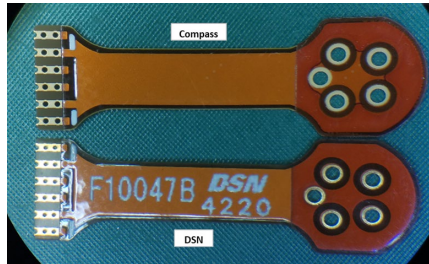
Alternate flex cable supplier DSN (LongZee Electronic Ltd.) has been qualified for multiple Semtech ROSA products, listed on page 2 of this PCN. This supplier is already qualified for multiple other ROSA products.

	Current Supplier	Alternate Supplier
<i>Name</i>	Compass Technology Ltd.	DSN (LongZee Electronic Ltd.)
<i>Location</i>	Hongkong, China	Dongguan, China

The purpose of change is to address supply chain constrains with the currently single sourced supply. Following flex cable part numbers will now have dual source: F10026, F10036, F10037, F10047, F10059, F10068, F10069.



F10047 – Compass Flex part number



F10047 – Flex Part Number
B – Revision of DSN Flex (only applied for F10047 & F10048)
DSN – Flex Supplier
4220 – Manufacturing Date Code

NOTES:

- The B marking on DSN flex will be removed beginning January 15, 2023, or until current stocks are depleted.
- DSN flex will retain the DSN and Manufacturing Date Code markings.
- There will be no changes to the Compass flex marking.

Change Classification	<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	Impact to Form, Fit, Function	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Impact to Data Sheet	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	New Revision or Date	<input checked="" type="checkbox"/> N/A

Impact to Performance, Characteristics or Reliability:

- There is no impact to form, fit, function, performance, characteristics, or reliability.
- No changes in ROSA assembly process flow.



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Implementation Date	DEC-08-2022	Work Week	50
Last Time Ship (LTS) <small>Of unchanged product</small>	N/A	Affecting Lot No. / Serial No. (SN)	N/A
Sample Availability	GN3357-3EB9AW3E3, GN3358-3EF8AW3E3	Qualification Report Availability	N/A

Supporting Documents for Change Validation/Attachments:

Please see the following pages.

Issuing Authority	
Semtech Business Unit:	Signal Integrity Product Group (SIP)
Semtech Contact Info:	<div style="display: flex; justify-content: space-between;"> <div> <p>Pedro Jr. Bernas pbernas@semtech.com (289) 856-9326 x1162</p> </div> <div style="text-align: right;"> </div> </div>
FOR FURTHER INFORMATION & WORLDWIDE SALES COVERAGE: http://www.semtech.com/contact/index.html#support	

• **Part Number(s) Affected:**

No.	ROSA Part Number	Flex Part Number
1	GN3257-3EB9AT5E3	F10026
2	GN3257-3EB9AU2E3	F10047
3	GN3257-3EB9BA6E3	F10047
4	GN3270-3EC7AV3E3	F10059
5	GN3289-3ED7BC2E3	F10068
6	GN3357-3EB8AW4E3	F10069
7	GN3357-3EB9AS6E3	F10036
8	GN3357-3EB9AT6E3	F10026
9	GN3357-3EB9AU2E3	F10047

No.	ROSA Part Number	Flex Part Number
10	GN3357-3EB9AW3E3	F10047
11	GN3357-3ED9AU2E3	F10047
12	GN3357-3ED9AW3E3	F10047
13	GN3358-3EF8AT9E3	F10037
14	GN3358-3EF8AU2E3	F10047
15	GN3358-3EF8AW3E3	F10047
16	GN3358-3EF9AU2E3	F10047
17	GN3368-3EC8AT6E3	F10026

NOTE: Semtech has been using DSN as a supplier of flex used on the following ROSA products.

ROSA Part Number	Flex Part Number	Implementation Date
GN3368-3EC8AU8E3	F10048	December 2020
GN3362-3EJ2AX2E3	F10048	March 2020
GN3361-3EJ3AY2E3	F10047	March 2021

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- **Qualification data:**

- **Dimension Measurement**

Processing method: <input type="checkbox"/> mould <input checked="" type="checkbox"/> laser <input type="checkbox"/> other											
< Abbreviation of measuring tool > M Micrometer; MS Microscope; PG Plug gauge; C calipers; H Height gauge; 2D pixiv											
No.	Inspection items			#1	#2	#3	#4	#5	determine		Measuring tools
	Specification value (mm)	Negative tolerance	Positive tolerance						OK	NG	
1	5.40	0.10	0.10	5.4534	5.445	5.4618	5.4366	5.4435	OK		2D
2	16.52	0.10	0.10	16.5578	16.5494	16.5662	16.541	16.5479	OK		2D
3	2.83	0.10	0.10	2.843	2.8346	2.8514	2.8262	2.8331	OK		2D
4	4.83	0.10	0.10	4.8206	4.8122	4.829	4.8038	4.8107	OK		2D
5	0.60	0.05	0.05	0.5977	0.5893	0.6061	0.5809	0.5878	OK		2D
6	0.60	0.05	0.05	0.5929	0.5845	0.6013	0.5761	0.583	OK		2D
7	0.60	0.05	0.05	0.5996	0.5912	0.608	0.5828	0.5897	OK		2D
8	0.60	0.05	0.05	0.5975	0.5891	0.6059	0.5807	0.5876	OK		2D
9	0.60	0.05	0.05	0.5983	0.5899	0.6067	0.5815	0.5884	OK		2D
10	1.30	0.15	0.15	1.3037	1.2953	1.3121	1.2869	1.2938	OK		2D
11	1.40	0.15	0.15	1.4237	1.4153	1.4321	1.4069	1.4138	OK		2D
12	0.79	0.079	0.079	0.7879	0.7795	0.7963	0.7711	0.778	OK		2D
13	5.32	0.20	0.20	5.3804	5.372	5.3888	5.3636	5.3705	OK		2D
14	1.10	0.15	0.15	1.0759	1.0675	1.0843	1.0591	1.066	OK		2D
15	0.15	0.05	0.05	0.15	0.154	0.148	0.146	0.152	OK		M
16	0.22	0.05	0.05	0.214	0.209	0.211	0.208	0.206	OK		M

- **Solderability Test**

Test standard	JIS-C-5016-10.4		
Sample Size	5 pcs		
Test Condition	Soldering temperature: 235 ± 5 °C Immersion: 25 ± 5mm per minute vertically, soldering time: 5 ± 0.5S		
Inspection content	Measured results	determine	remarks
Wetted area > 95%	98%	OK	/
Whether there is explosion hole	No blast hole	OK	
Warpage	No warping	OK	
Substrate condition	No layering	OK	
Cover film condition	No bubble	OK	
Final judgment: ACC <input checked="" type="checkbox"/> UAI <input type="checkbox"/> REJ <input type="checkbox"/>			

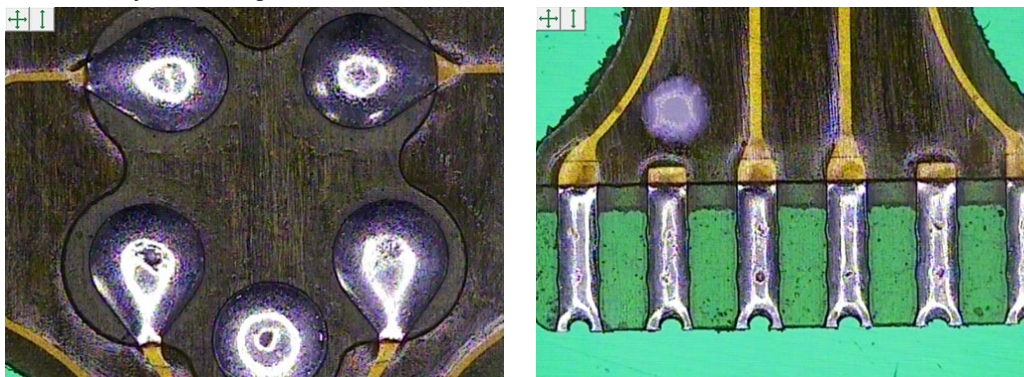
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Solderability Test Diagram:



○ **Flex Pull Test**

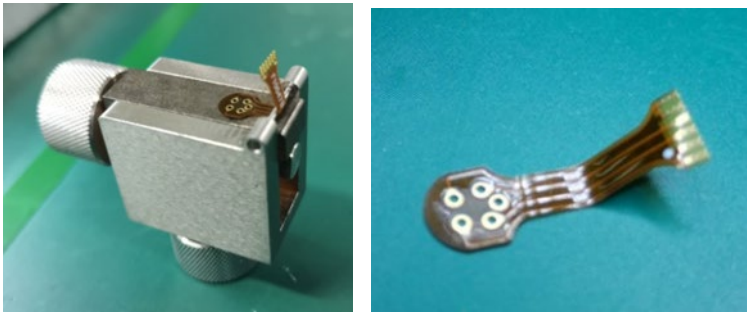
Test condition	Pull flex after soldering																									
Test requirement	Pull force large than 2kg																									
Test tooling	Tension meter																									
Sample Size	11 pcs																									
Item	Test data	Result																								
Pull test	 <table border="1" style="margin-left: 20px; border-collapse: collapse;"> <thead> <tr> <th>sample</th> <th>force(kg)</th> </tr> </thead> <tbody> <tr><td>1</td><td>5.12</td></tr> <tr><td>2</td><td>4.98</td></tr> <tr><td>3</td><td>5.42</td></tr> <tr><td>4</td><td>5.18</td></tr> <tr><td>5</td><td>4.99</td></tr> <tr><td>6</td><td>4.86</td></tr> <tr><td>7</td><td>5.52</td></tr> <tr><td>8</td><td>4.76</td></tr> <tr><td>9</td><td>5.43</td></tr> <tr><td>10</td><td>5.21</td></tr> <tr><td>11</td><td>5.05</td></tr> </tbody> </table>	sample	force(kg)	1	5.12	2	4.98	3	5.42	4	5.18	5	4.99	6	4.86	7	5.52	8	4.76	9	5.43	10	5.21	11	5.05	Pass
sample	force(kg)																									
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9	5.43																									
10	5.21																									
11	5.05																									

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○ **Flex Bend Test**



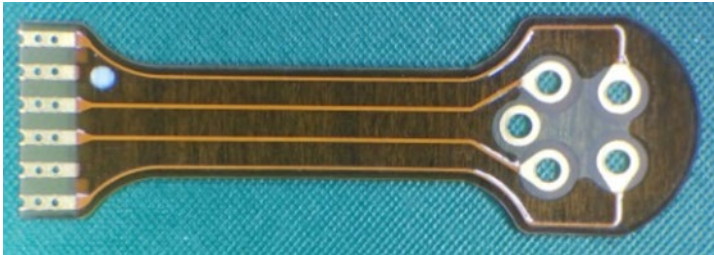
Test condition	Bending condition: R=0.8mm, 180°, 25times	
Test requirement	Flex no peeling/delamination and no open circuit after bending	
Test tooling	Bending tool, Multimeter, Microscope	
Sample Size	11 pcs	
Item	Test data	Result
Bend test		Passed visual inspection criteria
Open short test		No open circuit Pass

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○ **Visual Inspection**

Test condition	TCT : -40°C~100°C, -40°C and 100°C dwell time 20mins, 100cycles	
Test requirement	Flex no peeling or delamination	
Test tooling	Microscope	
Sample Size	50 pcs	
Item	Test data	Result
Before TCT		Pass
		
After TCT		Pass
	