PRODUCT / PROCESS CHANGE NOTIFICATION

PCN-001078

Date: OCT-29-2026

Change Details	
Part Number(s) Affected: Refer to next page.	**Customer Part Number(s) Affected:** ☒ N/A

Description, Purpose and Effect of Change:

ADDITIONAL QUALIFIED BACKEND SOURCE

The affected products are currently assembled at one or more of Semtech's qualified backend sources, KYEC and GREATEK. Semtech has qualified CHIPBOND as an additional backend source for these products, to expand production capacity.

The process sequence is unchanged across all sources. Inspection coverage and equipment used across the qualified sources may vary by source. Packaging specifications remain unchanged, including waffle tray part numbers across all affected devices.

Qualification testing passed. Detailed results are included on the following pages.

Change Classification	☒ **Major** ☐ **Minor**	**Impact to Form, Fit, Function**	☐ **Yes** ☒ **No**
Impact to Data Sheet	☐ **Yes** ☒ **No**	**New Revision or Date**	☒ **N/A**

Impact to Performance, Characteristics or Reliability:

No impact to form, fit, function, performance, characteristics, or reliability. Semtech has successfully completed reliability qualification of Chipbond as a die sales backend source, demonstrating equivalent product quality and performance.

Implementation Date	**JAN-29-2027**	**Work Week**	**WW 05**
Last Time Ship (LTS) **Of unchanged product**	N/A	**Affecting Lot No. / Serial No. (SN)**	N/A
Sample Availability	GN1812-CHIP, GN1814-CHIP, GN1848-CHIP, GN1817-CHIP, GN1858P-CHIP	**Qualification Report Availability**	**Included in this PCN**

Supporting Documents for Change Validation/Attachments:

- PRODDOC037580 Reliability Qualification Report

PRODUCT / PROCESS CHANGE NOTIFICATION

PCN-001078

Date: OCT-29-2026

- **Part Number(s) Affected:**

Part Number	Current		Additional
	KYEC	GREATEK	CHIPBOND
GN1069-CHIP	✓		✓
GN1185-CHIP	✓	✓	✓
GN1300-CHIP	✓		✓
GN1400-CHIP	✓		✓
GN1700-CHIP	✓		✓
GN1810-CHIP	✓	✓	✓
GN1810SC2-CHIP	✓	✓	✓
GN1812-CHIP	✓	✓	✓
GN1814-CHIP	✓	✓	✓
GN1816-CHIP	✓	✓	✓
GN1817-CHIP	✓	✓	✓
GN1832-CHIP	✓		✓
GN1848-CHIP	✓	✓	✓
GN1856-CHIP	✓	✓	✓
GN1856P-CHIP	✓	✓	✓
GN1857-CHIP	✓	✓	✓
GN1857P-CHIP	✓	✓	✓
GN1858-CHIP	✓		✓
GN1858P-CHIP	✓		✓
GN2148-CHIP	✓	✓	✓
GN2149-CHIP	✓	✓	✓
GN7055B-CHIP	✓	✓	✓
GN7060-CHIP	✓	✓	✓
GN7069A3-CHIP	✓		✓
GN7069E3-CHIP	✓		✓
NT24L50-WP	✓	✓	✓

PRODUCT / PROCESS CHANGE NOTIFICATION

PCN-001078

Date: OCT-29-2026

Quality Assurance		
Semtech Business Unit	Signal Integrity Product Group (SIP)	
Semtech Contact Info:	Pedro Jr. Bernas Senior Quality Management Systems Engineer pbernas@semtech.com +1 289-856-9326 x1162	
FOR FURTHER INFORMATION & WORLDWIDE SALES COVERAGE: http://www.semtech.com/contact/index.html#support		

PCN-001078 Add Chipbond as backend source Reliability Qualification Report

Revision History

Version	ECO	Date	Modifications / Changes
0	ECO-080795	August 2026	New document

Contents

1 Device Specifics 3
1.1 Manufacturing Summary 3
1.2 Product (PCN) Information 4
1.3 Product Qualification Approach 4
2 Reliability Qualification Stresses 6
2.1 Package Level Tests 6
3 Conclusion 7

1 Device Specifics

1.1 Manufacturing Summary

Table 1. Manufacturing Summary

Semtech Device Codes	GN1848-CHIP
Qualification Vehicle Package Type	7x7 84L Dual Row QFN
Silicon Fab Technology	SBC18S5J
Silicon Fab	Tower Jazz
Die Size	2.47mm x 1.675 mm
Suppliers:	
BGBM Supplier	Chipbond
Packaging Supplier	Azimuth
Production Wafer Probe vendors	Greatek/Giga
Wafer BE Process (die saw, AOI, pick & place, waffle pack)	Greatek/KYEC/Chipbond

Semtech Device Codes	GN1812-CHIP
Qualification Vehicle Package Type	9x9 mm 64L QFN
Silicon Fab Technology	0.18 µm SBC18S5JZ
Silicon Fab	Tower Semiconductor
Die Size	3.169mm x 1.069mm
Suppliers:	
BGBM Supplier	Chipbond
Packaging Supplier	Azimuth (qualification vehicle)
Production Wafer Probe vendors	Giga
Wafer BE Process (die saw, AOI, pick & place, waffle pack)	Greatek/KYEC/Chipbond

Semtech Device Codes	GN1814-CHIP
Qualification Vehicle Package Type	9x9 64L QFN
Silicon Fab Technology	SBC18S5J
Silicon Fab	Tower Semiconductor
Die Size	2.398mm x 1.398mm
Suppliers:	
BGBM Supplier	Chipbond
Packaging Supplier	Azimuth
Production Wafer Probe vendors	Greatek/Giga
Wafer BE Process (die saw, AOI, pick & place, waffle pack)	Greatek/KYEC/Chipbond

1.2 Product (PCN) Information

Semtech has qualified Chipbond as an additional backend source for die processing to expand production capacity. The affected products are currently assembled at KYEC. Going forward, both KYEC and Chipbond will serve as qualified backend sources.

Both execute the same process sequence with no material changes. Equipment and inspection differences are detailed in PCN-001078, with Chipbond employing enhanced 100% inspection. Package/assembly (PnP, waffle pack, etc) specifications remain unchanged.

1.3 Product Qualification Approach

Affected Semtech FG part numbers for this PCN is listed in Table 2. The qualification plan is to complete 1 lot of TC and 1 lot of UHAST of selected qualification devices of GN1848, GN1812 and GN1814 (Table 3, Table 4).

Table 2. List of devices under PCN-001078

Device Name	
GN1069-CHIP	GN1848-CHIP
GN1185-CHIP	GN1848-CHIP-A0
GN1300-CHIP	GN1856-CHIP
GN1400-CHIP	GN1856P-CHIP
GN1700-CHIP	GN1857-CHIP
GN1810-CHIP	GN1857P-CHIP
GN1810SC2-CHIP	GN1858-CHIP
GN1812-CHIP	GN1858P-CHIP
GN1812-CHIP-A1	GN2148-CHIP
GN1812-CHIP-A2	GN2149-CHIP
GN1814-CHIP	NT24L50-WP
GN1814-CHIP-A2	GN7055B-CHIP
GN1816-CHIP	GN7060-CHIP
GN1817-CHIP	GN7069E3-CHIP
GN1817-CHIP-A1	GN7069A3-CHIP
GN1832-CHIP	

Table 3. Qualification Devices and Package Types

Qualification Vehicle	Package Type	Remarks
GN1848-CHIP	7x7 mm 84Lead Dual Row QFN	Qualification device
GN1812-CHIP	9x9 mm 64Lead QFN	Qualification device
GN1814-CHIP	9x9 mm 64Lead QFN	Qualification device

2 Reliability Qualification Stresses

2.1 Package Level Tests

Table 4. Package Level Tests

Stress	Conditions	Duration	Vehicle	Sample Size	Result
Unbiased HAST*	JESD22-A118		GN1848 QFN	1 lot x 25 parts	Pass
	130°C / 85% RH	96 hours	GN1812 QFN	1 lot x 25 parts	Pass
			GN1814 QFN	1 lot x 25 parts	Pass
Temperature Cycling*	JESD22-A104		GN1848 QFN	1 lot x 25 parts	Pass
	Condition G	850 cycles	GN1812 QFN	1 lot x 25 parts	Pass
	-40°C to +125°C		GN1814 QFN	1 lot x 25 parts	Pass

Note: *No preconditioning

3 Conclusion

The PCN-001078 has successfully completed testing package-level reliability stresses as in Section 2 and demonstrated satisfactory performance. This can be considered as qualified product(s) and process based on Semtech's and industry's standards.