

P1/4

Semtech Corporation, 200 Flynn Road, Camarillo CA 93012			
Change Details			
Part Number(s) Affected: Customer Part Number(s) Affected: N/A			
GN1068-GRP6			
GN7068-GRP6			
GN1068-GRP6			
GN7052-GRP6			

### **Description, Purpose and Effect of Change:**

To ensure continuous supply of the affected part numbers listed above, Semtech is introducing an alternative inking tool with a new ink tube that is used in the quarter wafer process. Its purpose is to distinguish between good and bad die. The ink supplier, ink type, and ink color remain unchanged. As per the Ink Tube table on page 3, the characteristics are different.

Current	Alternative	
Pneumatic inking tool and ink tube 8103A5	Electronic inking tool and ink tube 6993	

More information can be found 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:

This change does not impact performance, characteristics or reliability.

Implementation Date	NOV-30-2021	Work Week	WW48
Last Time Ship (LTS) Of unchanged product	N/A	Affecting Lot No. / Serial No. (SN)	N/A
Sample Availability	NOV-09-2021	Qualification Report Availability	N/A

#### Supporting Documents for Change Validation/Attachments:

N/A



P2/4

Issuing Authority			
Semtech Business Unit:	Signal Integrity Product Group (SIP)		
Semtech Contact Info:	Pedro Jr. Bernas Quality Assurance pbernas@semtech.com (289) 856-9326 x1162	g	
FOR FURTHER INFORMATION & WORLDWIDE SALES COVERAGE: <u>http://www.semtech.com/contact/index.html#support</u>			

## Comparison of the current and alternative inking tool and ink tube

Current	Alternative
Pneumatic inking tool and ink tube 8103A5	Electronic inking tool and ink tube 6993

## **Inking Tool**

Туре	Pneumatic inking tool	Electronic inking tool
Inking method	<ul> <li>Use air to push ink out from the tube</li> <li>Pneumatically adjusted the size of ink dot by the controller of inking tool</li> </ul>	<ul> <li>Use electronic to push ink out from the tube</li> <li>Pneumatically adjusted the size of ink dot by the prober</li> <li>The parameter is controlled by prober, it is better than inking controller</li> </ul>
Image		



P3/4

Туре	Pneumatic inking tool	Electronic inking tool	
Ink number	8103A5 (XANDEX)	6993 (XANDEX)	
Ink type	Phenoxy with dye coloring agent	Phenoxy with dye coloring agent	
Ink color	Black	Black	
Characteristics	Premium ink with sodium and chloride levels certified less than 10 PPM. Opaque and highly resistant to most post-probe processes. Air dry or heat set. Acetone soluble prior to drying.	Premium ink - sodium and chloride levels certified less than 25 PPM. Requires heat curing. Alcohol/acetone soluble prior to cure	
Shelf life	Four months	Four months	
Image			

#### Ink Tube

### Ink Dot Size

Туре	Pneumatic inking tool	Electronic inking tool
Ink number	8103A5 (XANDEX)	6993 (XANDEX)
Ink type	Phenoxy with dye coloring agent	Phenoxy with dye coloring agent
		•
Image	0.449mm	0.466mm
	0.462mm	0.470mm

\* There is no significant difference.



P4/4

Туре	Pneumatic inking tool	Electronic inking tool
Ink number	8103A5 (XANDEX)	6993 (XANDEX)
Ink type	Phenoxy with dye coloring agent	Phenoxy with dye coloring agent
	29.8	30.9
Thickness	31.4	32.0
measurement data (unit : um) Measurement by manually	30.3	31.4
	32.2	31.0
	31.6	32.3
	30.6	31.1

### **Ink Dot Thickness**

\* There is no significant difference.