Central Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centralsemi.com
mailto:processchange@centralsemi.com
http://www.centralsemi.com/processchange

PCN #171
Notification Date:
22 April 2019

Product / Process Change Notice

Parts Affected:

Chip process CP391, N-Channel MOSFETs, wafers and bare die

Extent of Change:

The CP391 wafer process has been discontinued and replaced with the CP399 wafer process. See figures 1 and 2 for details.

Reason for Change:

The CP391 wafer process has been replaced to the CP399 wafer process in order to enhance the manufacturing process controls and performance. The wafer size has increased from 6 inch to 8 inch in order to improve throughput. In addition, this change is being made to ensure undisrupted supply of product, moving forward.

Effect of Change:

The wafer process meets all electrical specifications of the individual devices listed on the following page.

Qualification:

P/N: CP399 Chip Process Package: TO-220FP

No.		Test	Conditions (Reference standards are in bold)	Qty	Pass/Fail	Test Results
1		**Device Life Tests**				
	a	**High Temperature Gate Reverse Bias (HTGB)**	T=150°C, t = 1000 hours 100% VGS=30V **JESD22-A110**	45	Pass	45/45
	b	**High Temperature Reverse Bias (HTRB)**	T=150°C, t = 1000 hours VDS=600V **JESD22-A108**	45	Pass	45/45
	C	**High Accelerated Temperature and Humidity Stress Test (HAST)**	T=130°C, t = 96 hours, 85%RH, 230kPA, VDS=42V **JESD22-A108**	45	Pass	45/45
	D	**Temperature Cycling (TC)**	-65°C -+150°C, Tdwell ≥10min, 500 cycles	45	Pass	45/45

Effective Date of Change:

Existing inventory of chip process CP391 will be shipped until depleted.

Central Semiconductor Corp.
145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centralsemi.com
mailto:processchange@centralsemi.com
http://www.centralsemi.com/processchange

PCN #171
Notification Date:
22 April 2019

Sample Availability:

Please contact your salesperson or manufacturer's representative for samples.

Figure 1: CP391 Chip Geometry (Discontinued)

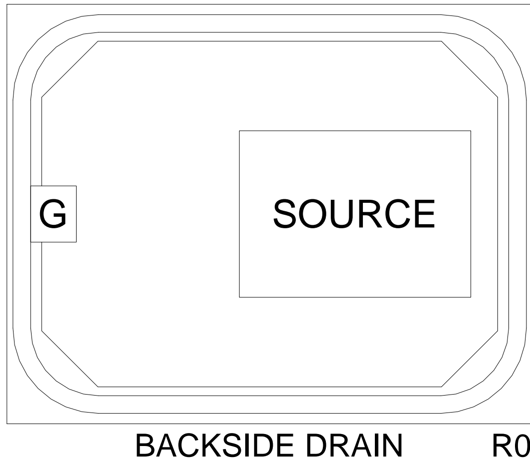
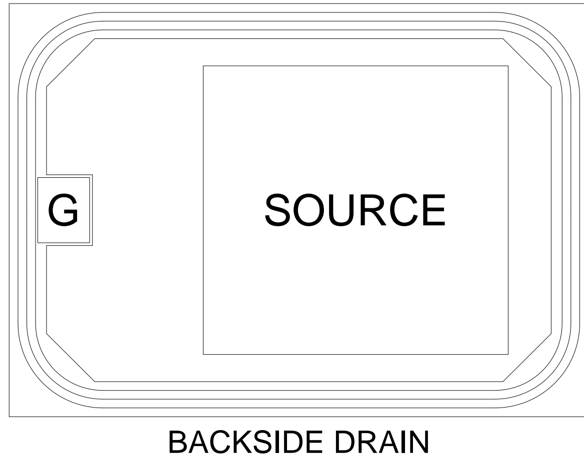


Figure 2: CP399 Chip Geometry



CP391	
Wafer Diameter:	6 inch
Die Size:	161 x 129 mils
Die Thickness:	9.1 mils
Bond Pad Size (Gate):	14 x 17.3 mils
Bond Pad Size (Source):	70.9 x 51.2 mils
Topside Metal:	Al (43,000Å)
Backside Metal:	Ag (8000Å)

CP399	
Wafer Diameter:	8 inch
Die Size:	149.6 x 107.1 mils
Die Thickness:	9.1 mils
Bond Pad Size (Gate):	13.4 x 16.9 mils
Bond Pad Size (Source):	78.7 x 74.8 mils
Topside Metal:	Al (43,000Å)
Backside Metal:	Ag (8000Å)

Part Numbers Affected:

CDM22011-600LRFP	CP391-CDM11-600L-WN
	CP391-CDM11-600L-CT

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centralsemi.com
mailto:processchange@centralsemi.com
http://www.centralsemi.com/processchange

PCN #171
Notification Date:
22 April 2019

As per JEDEC standard JESD46, Customer Notification of Product/Process Changes by Solid-State Suppliers, a lack of acknowledgement of a PCN within thirty (30) days constitutes acceptance of the change.

The undersigned acknowledges and accepts Central Semiconductor's Product/Process Change Notification (PCN).

Company Name:	
Address:	
Printed Name:	
Title:	
Signature:	
Date:	