145 Adams Avenue, Hauppauge, NY 11788, USA
Tel: 1.631.435.1110 Fax: 1.631.435.1824
www.centralsemi.com
mailto:processchange@centralsemi.com
https://www.centralsemi.com/process-change-notices

PCN # 183
Notification Date:
18 May 2020

Product / Process Change Notice

Parts Affected:

Chip process CP390, N-channel MOSFETs, wafers and bare die

Extent of Change:

The CP390 wafer process is being replaced by the CP401 wafer process. See Figures 1 and 2 for details.

Reason for Change:

The CP390 wafer process is being replaced by the CP401 wafer process to enhance the manufacturing process controls and performance. This change will help ensure an undisrupted supply of product. The wafer size has increased from 6 inch to 8 inches in order to improve throughput.

Effect of Change:

The CP401 wafer process meets all electrical specifications of the individual devices listed on the following page.

Qualification:

P/N: CP401 Chip Process Package: DPAK

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

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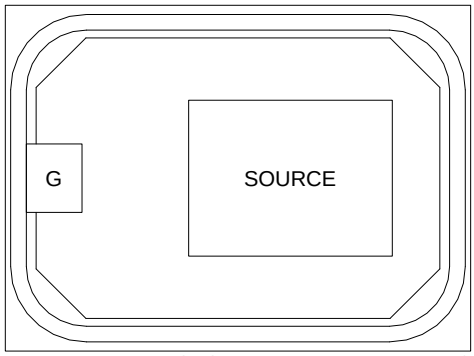
Effective Date of Change:

Existing inventory of chip process CP390 will be shipped until depleted.

Sample Availability:

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

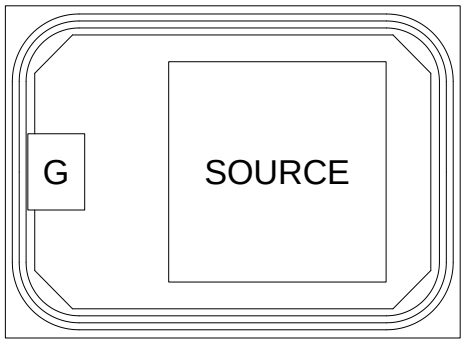
Figure 1: CP390 Chip Geometry



BACKSIDE DRAIN R0

Wafer Diameter:	6 inch
Die Size:	117.0 x 87.4 mils
Die Thickness:	9.1 mils
Bond Pad Size (Gate):	14.0 x 17.3 mils
Bond Pad Size (Source):	51.2 x 39.4 mils
Topside Metal:	Al (43,000Å)
Backside Metal:	Ag (8,000Å)

Figure 2: CP401 Chip Geometry



BACKSIDE DRAIN

Wafer Diameter:	8 inch
Die Size:	107.1 x 77.2 mils
Die Thickness:	9.1 mils
Bond Pad Size (Gate):	13.4 x 17.7 mils
Bond Pad Size (Source):	51.2 x 51.2 mils
Topside Metal:	Al-Si (43,000Å)
Backside Metal:	Ag (8,000Å)

Part Numbers Affected:

CDM4-600LR	CP390-CDM4-600LR-CT
	CP390-CDM4-600LR-WN

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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:	