



## Product / Process Change Notification (PCN)

909 N Pacific Coast Highway, Suite 230, El Segundo, CA 90245

**Notification Date:** July 10, 2025

**PCN Number:** PCN250402

**PCN Title:** Manufacturing Site, Wafer Size and Process Flow Change

**Product Identification:**

EPC2619

**Description of Change:**

EPC announces the qualification EPC2619 from 6-inch platform at Episil to the 8-inch platform at Vanguard (VIS). This change includes a manufacturing site and process flow change. There will be no change to the package dimensions. Changes to the datasheet are as noted below.

Successful qualification testing was performed to ensure product quality and reliability requirements are met or exceeded.

EPC will begin production of devices using substrates from VIS for the EPC2619 starting with date code DC 2529

**Process Flow Comparison:**

Stage	6 inch Vendor	6 inch Process	8 inch Vendor	8 inch Process
Fab	Episil	Epi Episil Precision Platform 2 PCM Grind/stress relief etch Sample probe 025C/150C	VIS	Epi Episil Precision, different recipe Platform 2 VIS flow PCM
Bump	Raytek	6 inch bump	Raytek	8 inch bump
Final Probe	MSEC	6 inch probe	MSEC	8 inch probe
WLCSP TNR	ADT	Laser mark WLCSP/TNR 6 inch	ADT	Grind (no stress relief etch) Laser mark WLCSP/TNR 8 inch

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## Datasheet Comparison:

■ 8-inch EPC2619 has lower capacitance and charge than 6-inch EPC2619.

➤  $C_{ISS}$  : 1106 pF vs 1180 pF

➤  $C_{RSS}$  : 4 pF vs 3 pF

➤  $C_{OSS}$  : 338 pF vs 350 pF

➤  $Q_G$  : 8 nC vs 8.5 nC

EPC2619 8-inch						EPC2619 6-inch					
Dynamic Characteristics (VIS)						Dynamic Characteristics <sup>1</sup> ( $T_J = 25^\circ\text{C}$ unless otherwise stated)					
PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT	PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
$C_{ISS}$	Input Capacitance		1106	1234	pF	$C_{ISS}$	Input Capacitance		1180	1570	pF
$C_{RSS}$	Reverse Transfer Capacitance		4			$C_{RSS}$	Reverse Transfer Capacitance		3.0		
$C_{OSS}$	Output Capacitance		338	410		$C_{OSS}$	Output Capacitance		350	470	
$C_{OSS(EN)}$	Effective Output Capacitance, Energy Related (Note 1)		400			$C_{OSS(EN)}$	Effective Output Capacitance, Energy Related (Note 2)		400		
$C_{OSS(TR)}$	Effective Output Capacitance, Time Related (Note 2)		530			$C_{OSS(TR)}$	Effective Output Capacitance, Time Related (Note 3)		530		
$R_G$	Gate Resistance		0.4		$\Omega$	$R_G$	Gate Resistance		0.4		$\Omega$
$Q_G$	Total Gate Charge	$V_{DS} = 50\text{ V}, V_{GS} = 5\text{ V}, I_D = 16\text{ A}$	8	9.2	nC	$Q_G$	Total Gate Charge	$V_{DS} = 50\text{ V}, V_{GS} = 5\text{ V}, I_D = 16\text{ A}$	8.5	10.3	nC
$Q_{GS}$	Gate to Source Charge		2.1			$Q_{GS}$	Gate-to-Source Charge		2.2		
$Q_{GD}$	Gate to Drain Charge	$V_{DS} = 50\text{ V}, I_D = 16\text{ A}$	1			$Q_{GD}$	Gate-to-Drain Charge	$V_{DS} = 50\text{ V}, I_D = 16\text{ A}$	1.0		
$Q_{G(TH)}$	Gate Charge at Threshold		1.4			$Q_{G(TH)}$	Gate Charge at Threshold		1.6		
$Q_{OSS}$	Output Charge	$V_{DS} = 50\text{ V}, V_{GS} = 0\text{ V}$	28	33		$Q_{OSS}$	Output Charge	$V_{DS} = 50\text{ V}, V_{GS} = 0\text{ V}$	27	31	
$Q_{RR}$	Source-Drain Recovery Charge		0			$Q_{RR}$	Source-Drain Recovery Charge		0		

## Qualification Report

Available upon request.

## Last Time Buy:

N/A

## Samples

Contact EPC if samples or additional information is required.

## Information Request

If there are any questions, comments or information required regarding this PCN please contact your local EPC Sales Representative

EPC CONSIDERS THIS CHANGE APPROVED IF WE DO NOT RECEIVE ANY WRITTEN OBJECTION WITHIN 30 DAYS FROM NOTIFICATION DATE OF THIS PCN LETTER.

## EPC Approval:

This PCN has been reviewed and approved by EPC's Quality & Reliability department:

Quality Vice President: Yanping Ma

Date: July 10, 2025