

Product Change Notification (PCN) Number: PCN-2303-001 Rev.1 Issue Date: 31-March-2023

# Substrate Change for Titanium<sup>™</sup> Devices

Dear Efinix Customer,

Efinix Inc. is announcing substrate change for Titanium<sup>™</sup> devices.

## **Change Description:**

Titanium<sup>M</sup> devices are found to have excessive output jitter on HVIOs during switching due to insufficient decoupling capacitance on an internal LDO circuitry that controls an I/O biasing voltage. In order to improve and eliminate the extra output jitter, additional decoupling capacitors have been added on the substrate in the packages. This results in package thickness increased from 1.0mm max to 1.1mm max. The rest of the Bill of Materials (BOM) remains unchanged.

Affected devices are identified by alphabet "C" in the 1<sup>st</sup> digit of the lot number marked on top of the devices (Figure 1).



Figure 1 – Identifier for Device Manufactured using Substrate with Decoupling Capacitors

## **Affected Products:**

This change affects the following devices from the Titanium<sup>™</sup> product family.

Ti35F225I3L	Ti35F225I3	Ti60F225Q3	Ti60F225C3L	Ti60F225C3
Ti35F225C4L	Ti35F225C4	Ti60F225I3L	Ti60F225I3	
Ti35F225C3L	Ti35F225C3	Ti60F225C4L	Ti60F225C4	

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#### **Reason for Change:**

The reason for this change is to improve and eliminate extra I/O jitter on HVIOs caused by insufficient decoupling capacitance on an internal I/O bias voltage.

## **Date of Implementation:**

Samples for customer evaluation are available starting from March 2023. Order for customer samples can be placed now.

Upon receipt of PCN: If a written request for additional information or rejection is not provided to Efinix Inc. prior to 30-April-2023, the PCN will be considered accepted.

## **Contact:**

For more information, please contact Sales & Marketing or Quality Assurance Engineering in your region.

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