



**Subject: PCN: VC-710 and VC-501 internal component  
change for product with frequency  $\geq$  155MHz  
PCN #: VI-CN-061220**

**Date: December 20, 2006  
From: Mr. Joseph Beauchemin  
603-577-6811**

***NOTE: This PCN is intended to be a general PCN for all customers. Key customers will be notified through direct communication. VI will also post a copy on the VI Web-site (<http://www.vectron.com>) for the benefit of customers with small orders/infrequent order history or those that indirectly procure affected VI product through distribution channels.***

**To:  
All VC-710 and VC-501 VCXO Customers:**

This PCN affects VC-710 and VC-501 oscillator products with frequencies equal to and greater than 155 MHz built in the Hudson, NH facility. Vectron is changing the varactor in these designs to improve manufacturing yields and meet customer delivery schedules. The component change is an internal change only with no effect on product form, fit or function and therefore is being communicated for notification only.

The varactor change will improve oscillator yields by increasing the product total pull. The replacement varactor is from an existing approved supplier and is used in other Vectron VCXO products. Vectron has qualified the use of this component in the VCXO products per its standard qualification/reliability tests. Vectron's qualification tests (electrical characterization) for these products with the new varactor show the products fully meet all Product Datasheet requirements. However because of the increased pull at both the low and high control voltage limits, there could be a minor difference in the Vc slope (control voltage vs. pull curve) when compared with product with the current varactor. Refer to Appendix A for details. In most customer applications where the product data sheet does not stipulate a pull slope specification, this difference should not affect its function in use. Please contact Vectron for more details.

In order to improve yields and meet customer delivery, Vectron has introduced this change for a few product codes where the pull slope is not a specified requirement and therefore product function is not expected to be affected. Vectron expects to fully implement the varactor change across the entire VC-710 and VC-501 families with frequency  $\geq$  155MHz by the end of Y2006.

This PCN is being sent as a notification only. If you need any additional information regarding this change, please contact your VI Marketing & Sales Representative or contact:

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**CUSTOMER NOTIFICATION OF PROPOSED PRODUCT/PROCESS CHANGE**

CPN Number: VI-CN-061220      VI Location Requesting  
 Date: Dec. 20, 2006      Change:  
 Customer Approval:       MHS       NBH       TFT       PDG       HUD  
    Required:      \_\_\_\_\_      Information Only      \_\_\_\_\_

Product Code(s)/Families: VC710 with frequency  $\geq$  155MHz  
 Part Numbers: various

Project/Application: various

Customer (s)/Location(s): \_\_\_\_\_  
 Description of Change: Replaced internal Varactor to improve product pull.

**Effects of Change to:**

Appearance: No change

Product Identification: None.

Test Specification: None. There could be a minor change in pull slope but not expected to affect customer application.

Performance Parameters: None.

Reliability: None. Component has a proven reliability history based on VI qualification tests.

Sample Availability Date: N/A

Estimated Shipment Date: Production ramp-up starting in 4Q2006

Requested Customer Response Date: N/A

Product Manager: J. Fortune      Tel.: 603-578-3051      Fax.: 603-598-0075

Respond to: J. Beauchemin      Tel.: 603-577-6811      Fax.: 603-598-0075

CPN No.: <b>VI-CN-061220</b>	Change Description Changing an internal Varactor to improve product total pull	Issue: 1	Date: 12/20/06
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## Appendix A

Comparison of old and new Varactor Vc slope

Vc Slope Curve when Comparing New and Old Varactor

